

Chapter One: Introduction

1.1 Background

"Discourse" is one term that can be used to describe all meaningful forms of semiotic human activity particularly its social, cultural and historical patterns. By "semiotic" I mean activity that includes behaviours that can be interpreted as having meaning. Language is one form, however other forms that can be described as "language in action", such as objects, attributes and activities that can be seen as having semiotic meaning, can construct the discourses that, in turn, construct postmodern realities. In seeking support for this view, I turn to Foucault's seminal work, *The Archaeology of Knowledge* (1970). His theory, as summarised by Lessa (2006, p. 283), is that: "Systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices ... systematically construct the subjects and the worlds of which they speak".

Culturally situated as such, constructed knowledge is the notion that a group that can meaningfully be labelled the "Academically Gifted" exists. In fact, the discourse often uses alternative terms to describe this group such as "gifted and talented", "intelligent" and even "bright" which are often treated as synonyms signifying intellectual capacities beyond the norm, even though careful analysis of their meanings within other discourses may suggest more specific meanings for each. Such analysis is not required in this study for reasons that will become clear.

1.2 Useful History

The discourse regarding provision of an appropriate education for a group defined as "gifted" can be said to have begun in Australia in 1920 when a point of contention arose in state-run education systems throughout Australia caused by the notion that gifted children in state schools were encountering problems that were not being experienced by other students. These problems were highlighted in *The yearbook of the national society for the study of education* (Miles, 1946, cited in Braggett, 1985, p. 6), arguably beginning the debates that underpin central ideas in this thesis. This acknowledgement of an educational issue led to an edict from six state Directors of Education the same year, which stated: "it would be sound educational policy to gather together children of mental ability much above the average" (Braggett, 1985). Later events shaped the construction "gifted and talented" to the point where it became confusing and arguably chaotic, reflecting the discourse which shaped it and continues to do so.

From 1920 on, however, despite many leading academic writers of the time urging the government to establish formalised programs for the education of the gifted and talented (Terman et al, 1925; Burks,

Jensen & Terman, 1930; Terman, 1931; Hollingworth, 1926; Witty & Lehman, 1932), little was done apart from a small number of unofficial classes being established in Western Australia known as "Terman classes" even though the rhetoric continued, which varied according to the political persuasion of the government of the day. Certainly little or nothing was done on a systemic basis. The prevailing attitude was that students with high ability would perform well in "normal" classes and, since they already had an advantage, that is their gift or talent, to devote resources to providing for them further could not be justified. Invariably, "performance" was interpreted as being high achievement in the standard curriculum and, at this stage, there were no discussions about ways of bringing this about through varied pedagogical processes and differentiated curriculum offerings matched to the distinctive needs of individuals. It is interesting to note that this argument appears to have gone in a complete circle particularly with the publication of Borland's (2005) article *Gifted Education Without Gifted Children: The Case for No Conception of Giftedness*.

Perhaps the historical view that the "gifted" will succeed by virtue of their gift alone could be explained in part by the tendency toward egalitarianism found in Australian society as a whole. A major factor must also be the difficulty in providing adequately experienced teachers. Although young teachers were familiar with theoretical frameworks for teaching the gifted and talented to which they had been exposed during training, the prescriptive and outmoded system of education in Western Australia, which was heavily regulated by inspectors, did not allow them to trial these methods in their own classrooms. Visiting academic, J Russell who was Dean of Teachers College at the University of Columbia, came to WA in 1928 and commented on how all education systems in Australia were "influenced by the nineteenth century, characterised by sameness, uniformity ... and acceptance of older methods and ideas" (Cunningham, 1972). Further, an educational conference held in Australia in 1937 revealed that the situation had not changed during the preceding nine years as is evidenced by a joint statement about the "lack of encouragement or incentive for each school and each teacher to show originality" (Cunningham, 1972, p. 120).

Little change was possible during the Second World War; however in 1955, R Freeman Butts, another leading educationalist, commented on the uniformity which underscored the Australian system (Butts, 1955) suggesting that the lack of originality evident in 1928 continued to pervade Australian education through the fifties. In 1957, the Wyndham Committee recommended that priority be given to making special provision for outstanding children, including recommending "special classes" (Wyndham Report, 1957). Again, however, it would seem that no real progress was made as, for the major part of the sixties, the policy of the Education Department of Western Australia was "to gain maximum achievement in a normal environment". This policy effectively ruled out the implementation of formalised special provision for the gifted.

In 1976, Dr D Mossenson, the Western Australian Director General of Education, formed a departmental committee to develop a policy for the education of gifted and talented students in Western Australian schools. This led to Australia's first departmental policy on the education of this group being published in 1978 (Bailey, 1994). Although there had been "rumblings" about the need to provide special education for various specially defined groups which included gifted and talented in the early seventies, in 1972 when the Whitlam Labor government came to power, such rumblings were undermined by Labor's tendency to equate giftedness with privilege. Their stated aims were to cater for those who were less privileged, therefore funds were made available to support groups perceived as less privileged and not others (Braggett, 1985), which illustrates the immense part perceptions play in influencing educational policy. A reasonable observer could easily form the impression that there is a tautological relationship between educational policy and perceptions!

In 1980, The Education Department of Western Australia adopted the position that the gifted and talented had the right to an appropriate education and the Special Secondary Placement Program (SSPP) was initiated. Beginning with a trial at Girrawheen Senior High School the program was eventually extended to nine other schools in the metropolitan area. The majority of state school students were tested in their late primary school years and a place in the SSP Program was offered to those whose results fell in the top two per cent despite the fact that many researchers had shown that testing was not a credible way of identifying gifted and talented people (Lohman, 2005; Minnema, Thurlow, Bielinski, & Scott, 2000; Stanley, 1977, 1990, 2005).

Interestingly, by 2000 the number of schools The Education Department of Western Australia designated providers of the Special Secondary Placement Program had dropped to six, all of them in the Perth metropolitan area. These schools claimed to provide educational opportunities for students identified as having an academic potential greater than 98% of the Western Australian population. The brief given to SSPP schools was that they offer enrichment in the core academic subject areas of Science, Mathematics, English, and Society and Environment although the meaning of the term "enrichment" was not made clear.

Other schools in the Western Australian government education system were designated as schools which offer the "Academically Talented Program" (ATP) catering for students who had been identified as having talents or gifts which would allow them to successfully participate in courses in specialist areas. For example, Mount Lawley and Rossmoyne Senior High Schools offered a course in Special Languages other than English (LOTE); Balcatta, Girrawheen, and Hampton Senior High Schools and John Curtin College of the Arts offered a Special Arts course focusing on dance.

Initially, before the announcement of what was then a new initiative, ten teachers from across the metropolitan area were invited to an in-service course. These teachers were then required to visit other schools and provide information to interested staff (Bragget, 1985). In this way the discourse shaping the meaning of the term "Gifted and Talented" was disseminated through the teaching profession in Western Australia. As this exercise has not been repeated since, even though there is extensive research conducted in the area of gifted education throughout the world every year, it may serve as an explanation of the reasons many teachers and administrators still hold their original views of "Gifted and Talented" and treat them as objective facts (Martin, 2004).

Upon inception of the ATP, schools were counselled to appoint co-ordinators for the program who would oversee the way the programs were run. Schools approached this task by calling for expressions of interest from staff and established interview panels to appoint them or, in some cases, the whole staff voted for a particular applicant from a list that was presented to them. The co-ordinators then applied for in-service courses offered by the various State Education Districts or the Education department's central office. It can be seen that it was possible for a co-ordinator to succeed in not completing any in-service training in their position if they felt that they knew enough to undertake the task without it as there was no requirement for them to undertake any of the training provided.

In the early years of the program, the program co-ordinators would provide their own documentation to guide the establishment of teaching/learning courses by individual teachers and, in some schools, there would be monthly meetings to discuss their progress. Beyond this, teachers were allowed to develop courses as they saw fit, the administration and the program co-ordinator leaving it up to an individual teacher's discretion as to how the course would be structured and what educational offerings would be made.

In the 1990 Memorandum of Agreement between the State School Teachers' Union and the Education Department of Western Australia it was agreed that administrators would eliminate the requirement that was previously in place that they view teachers' programs of work; therefore teachers of the gifted and talented, in common with the teachers of other students, could program entirely as they saw fit. As the need for the guidance or confirmation of anyone else in the system was removed and, given the fact that most schools adopted the position that it was not necessary for students studying gifted and talented programs to complete prescribed courses of study from the centrally designated curriculum, there appeared to be no control over what occurred in particular classrooms beyond the control of the individual classroom teacher. The classroom teacher would decide the content that was taught and the way in which this content was delivered. As I have recorded elsewhere, this was how I was able to teach Philosophy in my English class.

Of course teachers could program courses based on the prescribed curriculum however, when this did occur, it often saw teachers simply offering more advanced units to students who would not have been offered these units until later in their schooling. For example, a Year Ten unit would be offered to a Year Nine class.

The idea of the program co-ordinator still endures in schools in 2014 and early enquiry suggests that nothing has changed in the selection of staff for this position. In fact, the last school at which I held a substantive position in 2010 offers an SSP program and the co-ordinator was selected by the administration based on a short written address to criteria. The person appointed made no study of any kind into the educational needs of gifted and talented students during two years of tenure in this position or prior.

During a short secondment at Perth Modern School which styles itself "the only fully selective school for the gifted and talented in Western Australia", I noted that the program Co-Coordinator (and therefore central directing curriculum advisor in the school) was a Deputy Principal (DP) who admitted to having no formal qualifications in "gifted education". Although a federally funded program prepared by a team led by Professor Miraca Gross at GERRIC was made available online to all teachers in Western Australia, this DP did not complete her study of it due to "lack of time", which reflects the attitude towards institutional knowledge that writers such as Schön (1995) have described as being widespread in the Education profession. It is a fact, as will be shown, that the notion that "Gifted" students exist is a theoretical construct and one wonders how it is dealt with if not theoretically, that is, with close reference to theory.

In some of the schools offering the SSPP, teachers who have been teaching the program for a number of years, or the school's program co-ordinator, run short in-service courses for the teachers who are embarking on the teaching of the program during the following year. It seems as though the teachers who are chosen to teach the program and therefore, those who participate in the program, are chosen according to administrative convenience, that is, according to how well the timetabled classes "fit" on their timetables with other programs that they have been allocated to teach (Martin, 2004). It is also possible that, in the absence of any practical guidelines in structuring the program, these in-service courses, although run by well-intentioned and sometimes passionate teachers, are opportunities to pass on practices that are not informed by any theoretical framework. In light of this, if those identified as "Academically Gifted" are taught appropriately, it can be concluded that this is by accident in WA schools rather than design. The attitudes and beliefs that guide teachers in this ad hoc provision are largely the result of myths that have been formed by the discourse that have taken their place as part of the construction, whether they have research merit and/or validity or not (Martin, 2004). In view of the changes described, Borland's call for *Gifted education without gifted children; The case for no conception of*

giftedness (2005) could be considered simply another chapter in the discourse of provision for the gifted in WA which may or may not herald another change.

1.3 General Aim of the Study

This study aimed to investigate whether teachers who have limited or no background in Philosophy/Critical Thinking (CT) could present a course in Philosophy/Critical Thinking that had been prepared in enough detail to guide its delivery without further input. The study also explored: (1) whether delivering the course could provide enough professional development for teachers to allow them to design and deliver similar courses of their own and (2) whether the thinking skills described as indicators of giftedness would emerge in students who had not previously exhibited them as a consequence of their exposure to the course.

The aims of this study are contextualised by two articles which question common premises from which many complex issues in "gifted education" arise. These articles also form the conceptual framework for the study. They are: Gallagher's (2000) "Unthinkable thoughts: education of gifted students" and Borland's (2005) "Gifted education without gifted children: The case for no conception of giftedness".

Although not a research question in this study, it seems reasonable to ask whether "Academic Giftedness" as the concrete, observable concept some would treat as beyond question, exists at all. A second question more relevant to the study is, whether teachers should concern themselves with such questions; the reasons for this question are explored in more detail in Chapter Three and, in fact, the balance of this thesis.

If giftedness does exist, regardless of whether it is the consequence of differences in the brains of individuals or simply a construction made by the culture to label a trait or series of behaviours, it is clear that it is at least a theoretical concept. I explore some of the issues that complicate the debate in Chapter Two. In fact, as leading researchers in the field of gifted education, both Gallagher (2000) and Borland (2005) have acknowledged some of the problems to which I refer. For example, Gallagher (2000, p. 5) asks:

1. Is there really such an entity as a gifted child?
2. Is there such an entity as gifted education?
3. Is there such an entity as special personnel preparation for teachers of gifted students?
4. Is the application of special services for gifted students sufficient in scope and intensity to make a difference in the classroom?

Whereas Borland, in response to the question, "What is giftedness?" offers: "giftedness, in the context of the schools, is a chimera" (2005, p. 2) and concludes:

the concept of the gifted child is logically, pragmatically, and — with respect to the consequences of its application in ... education — morally untenable and ... the aims of the field of gifted education would have a greater likelihood of being realized if we were to dispense with it altogether (2005, p. 1).

He then goes on to suggest that educators:

make curriculum and instruction flexible enough to accommodate the needs of all children ... [which] would be a way to overcome all of the problems that have resulted from the construction of such concepts as giftedness. (Foucault, 1995; Gallagher, 1999, as cited in Borland, 2005, p. 5)

There are apparently many reasons why some stakeholders in education wish to ignore Borland's (2005) suggestion, however, and it is fair to say that those who wish to postulate its existence, say that certain behaviours point to an internal trait, "giftedness", that cannot be observed directly. These behaviours often result in various checklists that form part of the discourse whether or not they have any kind of objective validity or indeed, validity of any kind. Professor Peter Merrotsy of The University of Western Australia (2014, in press) has this to say about checklists:

When deciding whether to accept any list of characteristics, or indeed any individual characteristic, the first thing you should consider is its origin. Whether the characteristic is derived from research is the first question to ask, but whether that research was well conducted is also very important.

The Department of Education and Training of Western Australia (DETTWA), for example, publishes the checklist reproduced as Table 1. It is worth noting that the document "Exceptionally Able Children, 1996" provided as the reference for the source of this checklist, is a DETWA document that includes a single reference to the checklist in its own reference page, but no details of its origin or original author.

Merrotsy (in press) indicates that this checklist originates from work done by Michael Saylor. He then goes on to comment specifically on Saylor's checklist, in addition to quoting from Saylor himself on this subject:

Checklists of characteristics derived from the so-called "Saylor" scale are widely used, and they are in fact promoted by most state Departments of Education for whole-school use or for teacher use in the classroom, and recommended as the primary tool to identify giftedness. Saylor (personal communication, December 2012) has briefly provided some background information:

"We developed this originally as a service to a local school. We created reports for them and presented the data at a state conference. It was never published. ... I was able to locate the original technical report on the scale.

The technical report notes that the specific behaviours in the scale were solicited from a group of teachers and parents at the local school mentioned; no information is given about how giftedness was understood by the participants."

Table 1.

Common Behavioural Characteristics of Gifted and Talented students (DETWA checklist)

STUDENT NAME _____ **DATE** _____

Please **tick the category** you think best describes the student.

CATEGORIES (1) most of the time (2) often (3) occasionally (4) rarely

A LEARNING						
	ITEM	1	2	3	4	Don't Know
1	Is a rapid learner, who understands advanced topics easily.					
3	Shows insight and reflects on cause-effect relationships.					
4	Persists in completing tasks.					
5	Sees the problem quickly and takes the initiative.					
6	Learns basic skills quickly and with little practice.					
7	Is reluctant to practise skills already mastered, finding such practice futile.					
8	Follows complex directions easily.					
9	Constructs and handles high levels of abstraction.					
10	Can cope with more than one idea at a time.					
11	Has strong CT skills and is self-critical.					
12	Has surprising perception and deep insight.					
13	Is a keen and alert observer, notes detail and is quick to see similarities and differences.					
14	Displays intellectual and physical restlessness; once encouraged, is seldom a passive learner.					
15	Has a remarkable range of specialised knowledge (e.g. dinosaurs).					
16	Possesses extensive general knowledge (often knows more than the teacher), and finds classroom books superficial.					
17	Explores wide-ranging and special interests, frequently at great depth.					
18	Has quick mastery and recall of information, seems to need no revision and is impatient with repetition.					
19	Learns to read early and retains what is read; can recall in detail.					
20	Has advanced understanding and use of language, but sometimes hesitates as the correct word is searched for and then used.					

21	Sees greater significance in a story or film and continues the story.					
22	Demonstrates a richness of imagery in informal language and brainstorming.					
23	Can ask unusual (even awkward) questions or make unusual contributions to class discussions.					
24	Asks many provocative, searching questions which tend to be unlike those asked by other students of the same age.					
25	Has exceptional curiosity and frequently wants to know the reasons why.					
26	Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas.					
27	Often sees unusual, rather than conventional, relationships.					
28	Can produce original and imaginative work, even if defective in technical accuracy (e.g. poor spelling and/or handwriting).					
29	Wants to debate topics at greater depth.					

B PSYCHOSOCIAL

<i>ITEM</i>		1	2	3	4	Don't Know
1	Sets very high personal standards and is a perfectionist.					
2	Is success-oriented and hesitates to try something where failure is a possibility.					
3	Demonstrates a sense of humour and loves incongruities, puns and pranks.					
4	May be behind peers in manual dexterity, which can be a source of frustration.					
5	Can have a negative self-concept and suffer from poor social acceptance by age peers.					
6	Daydreams and seems lost in another world.					
7	Listens to only part of the explanation and sometimes appears to lack concentration, but always knows what is going on. When questioned usually knows the answer.					
8	Often prefers company of older students and adults.					
9	When interested, becomes absorbed for long periods and may be impatient with interference or abrupt change.					
10	Can be stubborn in own beliefs.					
11	Shows sensitivity and reacts strongly to things causing distress or injustice.					
12	Empathises with others and often takes a leadership role; very understanding and sympathetic.					
13	Shows unusual interest in adult problems such as important issues in current affairs (local and world), evolution, justice, the universe, etc.					

(Source: *Exceptionally Able Children*, DETWA, 1996)

It is clear that the DETWA checklist does not originate from research that can be considered "well conducted"; however, as it is published on the DETWA website in an emphatic way as indicated by the title, it is considered generally unproblematic, forms part of the discourse of Western Australian education, and takes its place as part of the range of cultural myths in the teaching culture.

It could be suspected that Borland would agree that this discourse and the resulting myths suit the description of "a chimera" (2005, p. 2) for this reason. In this sense it is also analogous to black holes in space; their existence is apparently confirmed by what else is present and various scientists have documented an observable set of conditions that apparently confirm their presence. It is difficult to see for me as a layperson why we need to know that black holes exist but I acknowledge this is very likely due to my ignorance of science. As an experienced teacher I see this thesis is partly a result of a similar question in regard to giftedness.

Perhaps there is less conflict in astronomy about the criteria that suggest the presence of a black hole than among researchers in the field of education about the qualities that suggest "academic giftedness". This simplified analogy of the debate on giftedness demonstrates the essence of much of the discussion in the available literature: Researchers pose questions on what constitutes giftedness and then, having attempted to define it often quite emphatically, discussion ensues on what should be done. Since many of the definitions compete, there is a variety of theories of how educators should cater for it. The end result of this process is a "labyrinth of confusion" (Richert, Alvino & McDonnel, 1982, p. 89) which is bound to frustrate those who are attempting to add something meaningful to the field as well as those who wish to cater for students they believe to be gifted.

As has been stated, Borland (2005) proposes a solution to this problem when he says:

To be clear about what I am advocating, let me state my position unequivocally. The aims of the field...of gifted education would have a greater likelihood of being realized if we were to dispense with it altogether (p. 1).

Borland (2005) is not claiming that there are *not* people who can be described as "gifted". He is simply stating a view with which I concur: that it is difficult if not impossible to identify them and entirely unnecessary to do so in order to cater for them educationally. Although Borland suggests that "the term gifted is usually used to designate an appreciable number of students in a school with a 'gifted program' who have been chosen to fill that program's annual quota" (2005, p. 2), he goes on to say, "Defining giftedness is a matter of values and policy, not empirical research" (Borland, 2005, p. 8).

In fact, although arriving at different conclusions, both Borland's (2005) and Gallagher's (2000) articles take the view that there are issues in "Gifted Education" that have not been resolved over extended periods of research and its surrounding discourse. A possible reason for this is that these issues are apparently only capable of resolution within the course of a constructed view of "giftedness". These writers may further claim that they have little merit beyond the internal consistency of the construction itself which is also a view presented in this thesis.

For example, if a researcher, invented for the purpose of this analogy, decided that a characteristic of giftedness is the possession of blonde hair, educators may well occupy themselves in attempting to identify those with blonde hair and then providing an appropriate education for those so identified. They may theorise about the reasons some of the students identified as having blonde hair do not respond to the special educational offerings, without ever challenging the notion that blonde hair is indicative of giftedness as, over time, its constant emphatic re-statement has ensured it has taken on mythic status in the culture and has become unchallengeable "fact" (Treffinger, 2009).

They may then report to other stakeholders about their efforts to cater for the gifted and receive kudos for doing so. These reports may justify education authorities spending large amounts of money to support such efforts and entire communities may be satisfied with the efforts of their schools to cater for the special needs of their children. Even others may work at reconciling themselves to the notion that their black- and brown-haired children are not gifted and have no entitlement to the special privileges accorded to their blonde-haired contemporaries even if some of them have light brown hair that looks blonde in a certain light.

Their children may, in fact, carry these labels with them throughout their lives safe in the belief that schools, teachers and education authorities should know their field. Even if parents do feel confident to challenge them, they are most often pushed back into their place by powerful bureaucracies who have embraced this construction in a similar unquestioning way to others. In this and other ways, it is easy to see that this discourse, in common with all others, empowers some while disempowering others as a direct consequence of the values, attitudes and beliefs that underpin it regardless of whether these values, attitudes and beliefs have independent merit.

It is highly unlikely that researchers could prove that there is even a correlation between giftedness and hair colour; however, as I have explored in Chapter Two, there are equally unlikely conclusions that are embedded in the actual discourse of gifted education which also serve to empower some and disempower others by creating the power relationships referred to.

Gallagher amplifies the problem when he says:

The obvious gradations in the construct of intelligence and its multiple dimensions in students cause many critics to complain about the "all-or-nothing" aspect of being in "a gifted program" and the unfairness of failing to take into account these gradations of ability or multiple abilities. ... This objection ignores the fact that many educational decisions are also of a similar all-or-nothing nature. You are either on the basketball team or you are not, despite obvious gradations in athletic ability and skill. You are either in a music program at Juilliard or you are not, despite obvious gradations in musical talent. You are either accepted into a special school of math and science or you are not, despite gradations in student interest and ability. (Pendarvis & Howley, 1996, as cited in Gallagher 2000, p. 6)

This view could be considered a summary of the basic lack of inclusivity that arises from a constructed view of giftedness. It is reasonable to suggest that the consequences of not being on the basketball team are *not* analogous to *not* being in a program that has a goal of assisting a student to achieve his or her educational and perhaps social potential, as Gallagher suggests.

Borland explains:

One way to understand how this led to the construction of such concepts as giftedness is by referring to the work of Foucault (e.g. 1995; Gallagher, 1999, as cited in Borland, 2005). Foucault believed that control in modern society is not exerted through raw displays of state power (public executions, regal processions, and so forth) but through knowledge-producing disciplines. For Foucault, knowledge and power are inseparable. He wrote that "power and knowledge directly imply one another; ... there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations". (1995, p. 27 as cited in Borland, 2005)

1.4 Government Policy

As a central stakeholder in Western Australian education and a key player in the resultant power relations, it is clear that The Department of Education and Training of Western Australia (DETTWA) does not acknowledge any of the complex issues mentioned involving the education of "Gifted and Talented" students in their published documents. The evidence of this claim comes from scrutiny of the way it has mandated by policy the need for Western Australian schools to identify and cater appropriately for such students in WA schools. Although a centrally run program is overseen by DETWA for which students are

selected by testing, the policies also encompass all schools that come under the auspices of DETWA including those who have no special curriculum offering. The policies also apply to independent state schools and those in the private sector.

The two main policies of DETWA that govern this area of education are:

1. The Policy for Students at Educational Risk (PSE) (2001)
2. The policy on Gifted and Talented Education (PGT) (2010)

While the PSE was not necessarily written with gifted students in mind and writers such as Sternberg (1996) have noted that, when most educators use terms such as *special education* and *exceptional children*, they are referring to students at the lower end of the abilities continuum, documents such as the Senate Employment, Workplace Relations, Small Business and Education Committee (Commonwealth of Australia, 2001) that investigated the Education of Gifted and Talented children in Australia have foregrounded the notion that high intelligence, which is essentially the "gift" alluded to in the term "gifted", can be treated as something other than an asset and its possession can render a student as much at educational and social risk as other differences that can be noted and catered for by Western Australian Schools (Chapter 2: 2.9). For this reason, in line with earlier trends in US schools (Mitchell, 1994) and somewhat grudgingly perhaps, DETWA now includes "Gifted and Talented" students as being at educational risk as can be seen by a close scrutiny of this policy especially in comparison to the similarities with PGT.

Each policy makes intersecting statements and, as a result, gives similar direction to DETWA personnel and each claims these directions to be "lawful orders for the purposes of section 80(a) of the Public Sector Management Act 1994 (WA) and are therefore to be observed by all Department of Education employees". For example, PSE states:

Students at educational risk may be characterised as students:

- who are at risk of not achieving the outcomes described in the Curriculum Framework
- whose achievement level, rate of progress or behaviour differs noticeably from past performances and/or that of his/her peers
- who are under-performing
- who are not engaged in their schooling

Whereas, on the other hand, PGT states:

Gifted and talented students are represented in all socio-economic and cultural groups and are part of the population of almost all schools. For varied reasons many of these students are at risk of not achieving to their full potential.

For example:

- student abilities are not fostered through appropriate educational provision;
- other identified students clearly do not achieve to their potential due to physical, emotional, motivational and social factors or specific learning difficulties;
- some students are not identified;
- gifts and talents may be masked by cultural or other background factors; and child prodigies belong to a very small percentage of the gifted population.

Both policies mandate the need for Principals of schools to put in place procedures to identify the groups covered by the policies, however, and even though the policies claim a priori knowledge of the characteristics of these groups, as has been seen in the quoted references as well as extensive material on the department's website (DETTWA, 2014).

Neither provides any instructions or other means of carrying out such identification. While it may be felt that knowledge of the fields of education covered by the policies possessed by staff involved in administering them would be a pre-requisite to meet the mandated policy objectives, it has been noted by the Senate Employment, Workplace Relations, Small Business and Education References Committee (Commonwealth of Australia, 2001, Chapter 4: 4.2) that courses that provide instruction to teachers on how to identify and cater for Gifted and Talented students are notably lacking in Australia. The result of this was confirmed by my 2004 Master's study (Martin, 2004) which investigated the knowledge and personal qualities of the staff appointed to the special programs that then operated in WA schools and the administrators who were appointed to select such staff. It was shown in this study that staff neither claimed any special understandings of Gifted and Talented students nor any great awareness of publications generated by DETWA to guide identification and provision for these students. Certainly, the policies do not stipulate that specialists in these fields be employed in individual schools to oversee their attempts to meet the policy objectives even though it has been claimed (Pfeiffer, 2002) that this is an important component of accurate identification. A common belief in "gifted education" is that that training teachers is at the heart of successfully supporting students who may have a potential that could be described as gifted, even though it has been shown that little is actually done in this regard (Martin, 2004). Gibson (2001) suggests the issue is more complex than teachers just needing a few insights into the nature of giftedness:

When knowledge and understanding are missing, a number of associated problems exist ... educators cannot identify gifted students when they do not have an adequate understanding of what giftedness is and how it may be demonstrated in the education setting. In addition to a reluctance and inability to refer students for assessment and possible placement in gifted programs, educators who lack this knowledge are unable to provide an appropriate differentiated curriculum for gifted learners (Cooper, 1999, p.17).

In the 2004 study previously referred to (Martin, 2004) it was shown that neither staff nor administrators of the selective schools offering programs for the "Academically Gifted" claimed to have any specialised knowledge of the needs of "Gifted" students as described by any kind of research or of guiding publications from the Gifted and Talented Education (GATE) branch of DETWA that were designed to inform their efforts in the classroom. The conclusion that must follow is that, apart from failing to engage with the issues that complicate gifted education as they will be explored in Chapter Two, teachers also do not have any specific knowledge of giftedness within its cultural discourse in WA education.

As has been argued, if an individual or institution wishes to posit the existence of students who can be described as "Gifted", this can only be done in a way that can be claimed to have meaning if their existence is treated as a theoretical construct. To do otherwise would mean DETWA's policy objectives are unachievable.

It is reasonable to assume that, if those directly responsible for teaching identified students in selective programs do not possess qualifications or information necessary to cater for gifted students appropriately within the context of any construction, it is even less likely that mainstream classroom teachers will possess this combination of skills and knowledge. Instead they are likely to subscribe to many of the constructed beliefs in the discourse surrounding education of the "Gifted" in Australia. Without the support necessary to implement policies it is evident that this renders policies that mandate the way teachers and administrators deal with gifted children, irrelevant.

In citing a way of apparently overcoming this problem Gallagher points out:

Renzulli & Reis (1997, as cited in Gallagher, 2000 p. 6) prefer, for example, to discuss "gifted behaviors" rather than gifted individuals. Their *Schoolwide Enrichment Model* is designed to stimulate the problem solving and thinking skills of all students, and they reject "giftedness as a state of being". (p. 140 as cited in Gallagher, 2000, p. 6)

On the face of it, this approach seems to suggest a more pragmatic, fairer and workable solution to some of the problems described. Gallagher fails to mention however that Renzulli and Gagné, who proposes a similar approach, begin from the standpoint that those who have "gifted behaviors" are a discrete group who need to be identified before their behaviours can be developed. In order to assist this identification, checklists or behavioural descriptors (in the case of Gagné) are published which often include various descriptions of "thinking behaviours" rendering them among the few areas of agreement in the field of education of the gifted.

For example, in an article entitled *A Practical System for Identifying Gifted and Talented Students* on his website, Renzulli states that "fluency, flexibility, and originality of thought" characterise the gifted as well as "high levels of abstract thinking", whereas Gagné's statement presupposes a means of identifying "superior natural abilities" namely:

Giftedness designates the possession and use of untrained and spontaneously expressed superior natural abilities (called aptitudes or gifts), in at least one ability domain, to a degree that places an individual at least among the top 10% of his or her age peers. (Gagné, 2000, p. 1)

This identification comes not through the use of a specific checklist, however, but through observation of a set of qualities which, although less specific, amounts to the same thing as a checklist, namely:

the intellectual abilities needed to learn to read, speak a foreign language, or understand new mathematical concepts, the creative abilities needed to solve many different kinds of problems and produce original work in science, literature and art, the physical abilities involved in sport, music or woodwork, or the social abilities that children use daily in interactions with classmates, teachers, and parents (2000, p. 1).

Other writers such as Silverman (1993) list the following "intellectual traits": "exceptional reasoning ability", "complex thought processes", "analytical thinking", and "capacity for reflection". Clark (2002, pp. 436–437) includes the ability to "think logically, given appropriate data", "use stored knowledge to solve problems", and "reason by analogy". There is considerable overlap in these descriptors which arguably amounts to agreement. The items mentioned have certainly found currency in the discourse on this subject in the culture of Western Australian education and, in fact, parallels can be found with the DETWA checklist mentioned earlier. The conclusion that can be supported is that the thinking behaviours that may be elicited from a course in Philosophy/Critical Thinking (CT) are desirable educational outcomes regardless of who is defining the key terms and there is common belief among many researchers and writers in the field of "gifted education" that such behaviours demonstrate the existence of "giftedness" in those exhibiting them.

In arguing for instruction that will cause the emergence of "giftedness" without the need for testing, it is obvious that Borland (2005) is consciously rebutting the many theories that attempt to assist identification of "gifted" individuals. In addition to rebutting Renzulli's approach, he also rebuts theories such as Gagné's Differentiated Model of Giftedness and Talent (1993, 2000, 2003, 2008) which, apart from offering apparently pragmatic approaches that are attractive to accountable bureaucracies such as DETWA, also attempt to define the central terms such as "giftedness" and "talent"; in semiotic terms, it can be said they attempt to clarify the sign to which these signifiers point. For example, Gagné uses the term "giftedness" to describe something innate and proposes that giftedness should be considered as the development of natural abilities (aptitude domains) into high performance talent areas (Gagné, 1993). He further suggests that pre-existing "gifts" can be developed into "talents" by exposure and interaction with a range of internal

and external catalysts. The fact that writers such as Gagné felt the need to do this as late as 1993, sheds light on how arbitrary the use of these terms had been up until this point and the question might reasonably be asked, "If researchers could not agree on the meanings of the terms being employed, did each new theory participate in a new discourse rather than contribute to one that was ongoing?"

Many state education authorities, including DETWA, claim Gagné's (1993, 1999, 2000, 2003, 2008) theories as being the philosophical underpinnings of any special provision made for the "gifted" regardless of these problems with definition. The suggestion that government provision can "make a difference" that is quantifiable, is appealing to bureaucracies in these days of economic rationalism and appears to be a way they can be accountable to their stakeholders for the expenditure entailed.

In fact, it may be more likely that the observation of Heller (1989, as cited in Heller, Mönks, & Passow, 1993, p. 842) is more accurate when he states: "Giftedness belongs to the class of so-called hypothetical 'construct' terms whose definition is dependent on the chosen theoretical frame of reference".

Arguably, giftedness has become, and probably always was, what Hall (e.g., 1997, as cited in Borland, 2005, p. 7), writing about race, calls a "floating signifier". As Chandler (2007, p. 33) explains:

a semiotic term "variously defined as a signifier with a vague, highly variable, unspecifiable or non-existent signified. Such signifiers mean different things to different people: they may stand for many or even *any* signifieds; they may mean whatever their interpreters want them to mean".

Borland's call for "Gifted Education without Gifted Children" (2005) seems to be a way to resolve these issues in favour of the more obvious construct that comes from labelling high achievement in tasks valued by the culture after it has occurred!

Neither Western Australian private schools nor DETWA is clear about any legal requirement for private schools to adhere to the policies of DETWA, even though it is acknowledged by all that the State Government Minister for Education is responsible for the education delivered in private schools and the accountability branch of DETWA conducts annual evaluations of private schools. Private schools tend to adopt DETWA policies as a matter of convenience, therefore a discussion of DETWA policies by implication includes a discussion of the policies of private schools also. In this thesis, it can be assumed that reference to DETWA policies includes the policies of Western Australian private schools unless stated otherwise. This is worth mentioning as teachers from private schools will be participants in this study.

It has been seen (Martin, 2004) that the development that Gagné and others describe is unlikely to take place in Western Australian schools as the teachers involved in staffing programs that make provision for gifted students are unaware of any theories including Gagné's. It is reasonable to conclude that teachers in "mainstream" classrooms have no reason to engage in the literature surrounding education of the "gifted" as DETWA's approach in running a discrete program for the gifted implies that other students are also a discrete group found in classrooms that are not participating in the special program (Gallagher, 2000 p. 9).

1.5 Research significance

This study will determine whether a single, appropriately written guiding publication and related syllabus documentation will skill teachers in mainstream classrooms to deliver a course during subject English that will cause the thinking processes described by some as indicators of Giftedness to emerge in students who have not been identified as "Gifted". If successful, such a course could avoid the need for identification of students prior to designing an appropriate course which is acknowledgement of a central problem in gifted education and tacit acceptance of the pragmatic solution offered by Borland (2005), albeit in a less radical way. This being the case, arguably it is not necessary to identify the gifted in order to cater for students educationally.

The "appropriate courses" that follow the less formal identification method involved in teaching Philosophy/CT and observing behaviours emerge in students that are considered indicative of giftedness will be beneficial to all students in ways that will be discussed later, but will be designed to promote critical thought by teachers who have acquired an understanding of how this can be achieved through delivering the course.

In addition to this, it can be noted that The Australian Curriculum will be implemented in all Australian schools by 2017 and of course many schools have already taken this path. In an introduction to the new curriculum on the Australian Curriculum Assessment and Reporting Authority's website (2014) *The Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) is quoted as stating that *critical* and *creative thinking* are fundamental to students becoming successful learners (emphasis added). Later in this introductory section, it is explained that The Australian Curriculum will enable students to develop capability in critical and creative thinking. According to researchers such as Lipman (1969, 1974, 1995, 1998, 2003), critical and creative thinking are the consequences of engaging in a course in Philosophy such as that found in the course that is an instrument for this study.

If teachers can acquire an understanding of Critical Thinking by engaging in a Philosophy/CT course in collaboration with their students, the need for professional development in order to meet the stated aims of The Australian Curriculum is greatly reduced as are the costs involved in providing it. The course that is

described in Chapter Six is meant to provide some essential ideas in the area of Philosophy/CT from which teachers can extrapolate and construct their own teaching/learning programs that have CT embedded which both meet the requirements of the Australian Curriculum and have many benefits for their students.

1.6 Research questions

The research instrument in this study is the course in Philosophy/CT described in Chapter Six. Accordingly, the following research question is investigated in the study:

How do teachers of English describe the value of the course in Philosophy/CT in relation to its success in achieving its goals, specifically:

- (i) How do they perceive their own development of skills to teach Philosophy/CT thinking in a mainstream classroom?
- (ii) How do they perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

Even though the education of gifted students has been noted as an issue in Australia for many years, the discourse that has been constructed around this issue has done nothing to ensure that students have been appropriately identified and catered for. In fact, it is easy to believe that identification and appropriate provision are simple procedures and arguably DETWA, as the central education authority, behaves as if this were the case. The perception that issues of identification, differentiation and underachievement for example, are complex, will be more fully explored in Chapter Two by reviewing the literature and through discussion of organisational culture in the context of Western Australia.

Chapter Two: Literature on Gifted Education

2.1 Introduction

The literature review for this thesis spans three chapters, that is:

Chapter Two: Literature on gifted education

Chapter Three: Literature on Philosophy and Critical Thinking (CT)

Chapter Four: Teaching Philosophy and Critical Thinking (CT)

This chapter explores the theoretical and often problematic issues that surround the notion of education of the gifted thereby expanding on the issues already raised in Chapter One. Chapter Three will contextualise the course used as the instrument for this study within literature that defines Philosophy/CT and Chapter Four will review literature about the teaching of this subject.

This chapter will explore first the notion believed by some that there are students who can be identified and labelled as "academically gifted" before going on to examine literature related to identification and to achievement within this context and the parameters of the organisational culture of Western Australian Educational systems.

2.2 Surrounding Issues in Gifted Education

As has already been noted, there is a common belief subscribed to by many people including those involved in education at various levels, that there is a group in existence that can meaningfully and objectively be identified as "academically gifted". This study in no way challenges this view. It does not claim that the group does not exist and, even though it may critique the means currently used for identification, nor does it claim that accurate identification of "academic giftedness" will never be possible.

As the study has a relationship with the issues raised by "Gifted and Talented Education", the issues need to be explored in order to contextualise the study's central thesis which is that teaching Critical Thinking (CT) through a Philosophy-based course to all high school students during their courses in English, will cause the desirable behaviours often associated with the "Academically Gifted" to emerge. The behaviours I refer to appear on many checklists as noted, which are apparently designed to facilitate the identification of the "gifted". The significance of this study is derived from the fact that the behaviours in themselves are educationally desirable whether or not there is agreement that they are indicators of "giftedness". As has

been argued previously, the suggestion is it is not necessary to identify the gifted in order to cater for students educationally.

Some of the ways teachers may have formed views about the nature of "academic giftedness" noted earlier are explored in greater detail in later chapters. These cultural views are often deeply entrenched and this is a reason I have phrased the second part of the research question as: How do they [teachers] perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

This phrasing allows teachers' *perceptions* of such thinking skills to be explored which they may *possibly* believe to be indicative of academic giftedness. It is argued that both perceptions and belief play major parts in the culture of Western Australian teaching and these are significant determinants of teacher pedagogic behaviours owing to the nature of the "knowledge in action" that springs from them (Schön, 1995) in ways that will be demonstrated.

The thinking behaviours to which I am referring and which appear on the checklists mentioned may occur in students from whom this may not have been expected if they engage with Philosophy/CT. As there are implications for "gifted education" in this study, I will attempt to place it within this context through a brief review of the literature that concerns the most pertinent issues in gifted education as they contribute to a discourse which constructs the various terms that describe it. These terms include: "Gifted and Talented", "Giftedness", "High intelligence", or even "smart", "bright", and other apparently synonymous terms, particularly in the Western Australian context.

The discourse referred to also constructs the myths that attach themselves to these terms (Treffinger, 2009, p. 230) which, although often having no basis in anything that could be considered fact in the way this word is usually construed, underpin the beliefs and practices of the cultural groups to which the terms are important. In relation to providing an education for the Academically Gifted, for example, perhaps the practice of providing much more homework than is provided for a non-gifted student in the same year group is an example, even though there has been much debate about whether there is a connection or even a correlation between homework and achievement (Cooper & Valentine, 2001). This practice demonstrates the power of myth in education.

This study does not rely on the postulate that there are individuals in existence who have intellectual "gifts". Although it is worthwhile to explore the issues that arise in the literature, I do not make a case for the identification of gifted students either achieving or underachieving. I do, however, suggest ways in which the problems that have been created by the construction and manipulation of the term

"Academically Gifted" can be resolved in ways that are beneficial to all.

2.2.1 Identification

As was made clear in the introduction to this thesis, Borland's article "Gifted education without gifted children; the case for no conception of giftedness" (2005) is a framework for this study. According to Borland (2005, p. 2) the term "gifted" is "usually used to designate an appreciable number of students in a school with a gifted program who have been chosen to fill that program's annual quota", rather than as a description of individuals with outstanding ability. He claims that this is due to the same political concerns that are noted elsewhere in this thesis namely, "Defining giftedness is a matter of values and policy, not empirical research" (Borland, 2005 p. 8). He then goes on to argue for instruction that will cause the emergence of "giftedness" without the need for testing, which is the premise of this thesis. In the Western Australian context especially, the notion that teaching Philosophy/CT will resolve the problems of identification of the gifted and providing appropriate educational provision is a central reason for its importance.

Elsewhere, Borland (1989, 2004) could be seen to sum up some of the central issues in the field of gifted education when he argues that the distinction between natural and systematically developed abilities has no practical application, before going on to question the value of attempting to reach consensus on the meanings of these key terms. While researchers, such as Gardner (1983) and Sternberg (1997), have challenged traditionally held concepts of intelligence and these have extended the early theories and concerns about identification that were proposed and supported by Baldwin (1984), Bernal and Reyna (1975), Frasier (1989), Guilford (1967), Passow (1978), and Torrance (1971, as cited in Baldwin, 2005, p. 106), little agreement has been reached. For example, Baldwin (1984, p. 3) proposed "the Baldwin Identification Matrix" based on several assumptions, such as:

1. Giftedness can be expressed through a variety of behaviours and the expression of giftedness in one dimension is just as important as giftedness in another.
2. Intelligence is a broad concept that goes beyond language and logic; it encompasses a wide range of human abilities.
3. Carefully planned subjective assessment techniques can be used effectively, along with objective measures.
4. Giftedness in an area can be a clue to the presence of potential giftedness in another area or a catalyst for the development of giftedness in another area.

5. All cultures have individuals who exhibit behaviours that are indicative of giftedness.

As Borland has argued in relation to other models of giftedness in other places, it is equally hard to see how this "Matrix" could contribute anything to the provision of education for the gifted in Western Australia. This is due to the lack of engagement in educational theory or guiding documents among the stakeholders in WA gifted education noted earlier (Martin, 2004). As the identification procedures established by Western Australian education systems are entrenched in their culture and, as a result, not available for change for reasons expressed earlier, this situation also holds true for other models.

For example, the most developed, visible European model of giftedness and talent, as described by Judith Hewton (2008, pp. 33–35), is "The Munich Model". This model seeks to demonstrate how non-cognitive personality characteristics and environmental conditions impact on talent factors, or gifts, and influence performance areas (Heller & Hany, 1986; Ziegler & Heller, 2000). The model further describes personality characteristics and environmental features in adequate combinations of being "sufficient" and "necessary" to allow the achievement of gifted potential arguing that giftedness is not a "sufficient" explanation for exceptional performance. In common with Gagné (1993), the model suggests that levels of motivation and productive and encouraging environmental factors must be present in order for potential to be realised.

Ziegler and Heller suggest that the Munich Model could be used as a framework for developing a substantive theory of giftedness that is based on empirical research. While they consider it a "meta-conceptual model" ... arguing that it should set the standards for the analysis and discussion of present conceptions of giftedness as well as for the development of future conceptions" (Ziegler & Heller, 2000, p. 5) it leaves many questions open. For instance, it could be asked exactly what is available for "empirical research"; whether it is behaviours or something else and how a causal connection between these things and "giftedness" is to be established empirically. Theories regarding means, methods, and procedures of identifying individuals who are "gifted" such as the Munich Model, necessarily tumble headlong into the same circular argument, namely, theories suggest certain observable and apparently measurable behaviours that indicate the presence of internal processes and/or physical characteristics and researchers often disagree about the nature of the internal characteristics. It is claimed, however, that the behaviours indicate the existence of internal processes and/or physical characteristics, the existence of which is proven by the behaviours ... and so on ... forever.

Schön (1995, p. 28) amplifies this problem by making a distinction between knowledge that is derived from professional practice and that which originates in research universities (1995, 24

p. 28). He constructs this distinction as being a “dilemma of rigor or relevance”, in which the word “rigor” represents knowledge generated by universities as opposed to “know how”, which he claims is found in the “actions” of teachers (1995, p. 28). His argument is that this dilemma resulted in epistemologies which were often contrasting, in which university knowledge consisted of “manageable problems” capable of being solved through “research based theory and technique”, as opposed to “school knowledge” which is the “messy and confusing” problems of daily teaching practice”, “incapable of technical solution” (1995, p. 28). Schön (1995, p. 29) concludes that the result of this is that universities have “little to say that is [sic] of value to practitioners.”

His description is analogous to the distinction already drawn between forms of knowledge including those that originate in the myths of educational discourse (Treffinger, 2009, p. 229) and that which has apparently been derived in other ways. While it should be made clear that information that has mythic status could have basis in fact, Treffinger, as a university researcher himself, calls upon other university researchers to refute myths that have developed in the teaching profession over time (Treffinger, 2009, p. 231). The myths he alludes to have arguably developed in practice as a way of allowing teachers to act upon theories that have been constructed by researchers to suggest there are people in the world who can be described as “gifted”. They stem from “school knowledge” therefore, which Schön tells us is “not knowledge per se”. In describing notions as “myths” which arose from “the confluence...of dynamic forces in society and education broadly”, Treffinger (2009, p. 229) constructs a dichotomy similar to that constructed by Schön (1995) and in which he stands in relation to professional practice in the same position as Schön.

This dichotomy does nothing to assist clarity, however, when we consider the way the meaning of the word "knowledge" is commonly constructed in our culture. For example, if university knowledge is the result of good research, how do we define "good" and how do we validate the ways in which non-university knowledge is produced, as often its origins are difficult to trace?

It is arguably the case that the conventions of "Institutional Knowledge" (Schön, 1987, 1995), namely, the requirement such as demonstrated in this thesis for researchers to study the "literature" and contextualise their own research within it, ensures that a dominant view of knowledge in any field will be privileged to the extent that it finally becomes unquestioned and, within the culture that constructed it, generally unquestionable. In this instance, the notion that there exists in reality individuals who bear "gifts" of intellect has been created, examined and, although apparently not well understood, sustained. It will continue to be argued that this conception is primarily maintained for political reasons and actually

impedes the delivery of appropriate curriculum to individuals who have a capacity to think in ways that would benefit themselves and society at large (Borland, 2005). If the term "identification" is to be used in a way that has meaning in the discourse surrounding education of the gifted in the way it is used in other discourses, namely, to recognise something or someone being observed as belonging to a group that is known such as attending an identification parade or categorising an animal within a known sub-category, it would have to be argued that the group is, in fact, known. Since, as has been shown, this claim cannot reasonably be made in relation to the gifted outside of particular constructions, discussing the validity of the term and the process it signifies are one and the same thing.

2.2.2 Underachievement

It has often been argued that there are individuals who can be considered "gifted" who do not reveal this fact through performance (Gross, 2000, p. 7). The literature describes these individuals as "underachieving". In fact, the term "gifted underachievement" appears to be contradictory for many reasons not the least of which is the difficulty in identifying a person as "gifted" even when they do achieve as discussed earlier. Davis and Rimm (2004, p. 306), however, in common with many other researchers, employ this term and attempt to describe it. "Underachievement" is described for example as: "A discrepancy between the child's school performance and some index of his or her actual ability such as intelligence, achievement or creativity scores on observational data". Although others such as Gross (2000, p. 7) agree with this view, they apparently fail to see the irony in their descriptions of "underachievement": it is apparent that a child's actual performance at school is most likely to be indicative of their "actual ability" to perform on the tasks which they are required to undertake if all the factors that govern the performance of students are taken into account, of which their possible "giftedness" is only one.

For example, a student who makes no attempt to complete any set work at all, is demonstrating an inability to perform due to boredom, lack of motivation or myriad other possible reasons. Low performance is indicative of a student's actual ability in their current circumstances and it makes no sense to believe that their potential performance can be measured in any meaningful way as it is obvious that all the methods mentioned and, perhaps all possible methods of identifying high potential in students, rely on some kind of achievement. Even "observational data" rely on an observation being made of something observable, such as behaviour that is then quantified. If the observer concludes that the observed behaviour indicates high potential then the child has achieved something that by some measure has been valued.

To suggest a concept such as "gifted underachievement" in the manner of Davis and Rimm (2004), a researcher must show that the means by which they are measuring both the individual's potential and his or her current achievement are objective and accurate. This can only be at best a tenuous claim since it is dependent on a priori knowledge of the exact concept that is being examined, which is clearly tautological.

Even Renzulli and Reis (1997) claim that "IQ can be measured precisely" (p. 3) without offering valid evidence to justify this claim. In fact, if "giftedness" is seen as a theoretical construct then any quantifiable measures that are taken to assess the degree to which this concept exists in individuals can only have validity inside the theories. In a practical sense however, the results of these attempts are treated by the culture of education as if they have material existence, a central reason being that the responsibilities government education authorities impose on themselves for inclusive education can then be measurably discharged. For example, in reference to the previous example, if a theorist states the premise: all people who have blonde hair are gifted, the conclusion that must follow by syllogistic inference is that a person who has blonde hair is gifted even if the premise is untrue.

The discourse that surrounds "gifted underachievement" demonstrates this itself. For example Peterson and Colangelo (1996, p. 400) argue that the term can be applied to individuals who have "lower than expected achievement over a long period of time", as do Reis and McCoach, (2000, pp. 155–156). It seems obvious that finding an objective yardstick to define "expected achievement" is problematic.

Interestingly, while many researchers agree that there are "gifted underachievers" (Bélanger & Gagné, 2006; Reis & McCoach, 2000; Peterson & Colangelo, 1996, Moon et al., 2002a) and recount various possible reasons for the phenomenon they claim to be observing, few if any go to any lengths to investigate the achievements that *are* being made by the individuals thus labelled. They prefer, instead, to focus on their lack of educational achievement. In fact, it is reasonable to state that the cultural values, attitudes and beliefs that privilege the construction "Education" in its current form, would also push achievements into the background that are not considered "education" as they do not fit the current paradigm. This may be the case even though many of the "checklists" which are intended to assist interested persons to identify "gifted" individuals recommend observing behaviours such as "fantasising" and "focusing on one subject of interest to the detriment of others" as indicators even though the product of such behaviours is not often seen as "achievement" (DETTWA, 1996).

Researchers such as Davis and Rimm (2004), Rimm (1997), Smutny (2004), Delisle and Berger (1990), Gross (1989, 2000), Colangelo et al. (2004), and Butler-Por (1987) have published "indicators" of underachievement. These indicators include behaviours such as "rebellion", "procrastination", "aggression towards peers, teachers and family", "lethargy", "inactivity" and DETWA has developed checklists which include these "indicators" which they claim can help teachers involved in both special programs and mainstream classes to identify the "underachieving gifted", that is, to identify *potentially* high achieving students (Whiteman, 1980 as cited in DETWA, 2013).

Even the most cursory study of such lists, however, reveals that there is no sufficiency to these behaviours since they can be observed in many young people. It is reasonable to believe that DETWA et al. are

unlikely to be claiming that all students exhibiting these behaviours have any degree of "giftedness". It would therefore appear to be the case that the checklists hold the same syllogistic relationship with the "underachieving gifted" as blonde hair does with the gifted in my earlier example.

It is difficult to make sense of the statement made by Gross (1999, pp. 87–93) that "underachievers usually have a very high IQ ... [but] may be adept at masking their true potential" since, if they are adept at masking it, how is anyone to know it?

Viewed from a semiotic perspective, it is clearly the case that the sign "gifted underachiever" is being constructed according to the meanings posited by the researchers mentioned, and embraced by education authorities including DETWA. It is unclear and destined to remain so how this serves the needs of young people in Western Australian schools. If a course such as that used for this study was presented to all students in high schools and, if the behaviours that constitute "achievement" in the current discourse about education emerge, problems with identification and underachievement would be resolved.

Gallagher (1996, p. 235, cited in Borland, 2005, p. 9), in applying pragmatic rather than ontological concerns to the problem, writes:

We should admit that "gifted" is a constructed concept ... But "opera singer" is a constructed concept, "shortstop" is a constructed concept, "boss" is a constructed concept; every concept that we use to describe human beings is a constructed concept. Is giftedness an educationally useful construct? That is the important question.

This view is echoed by Borland (2005, p. 1) when he states:

I am actively advancing the idea of no conception of giftedness as a positive development for the field of gifted education ... I believe that the concept of gifted child is logically, pragmatically, and with respect to the consequences of its application in American education morally untenable and that the aims of the field of gifted education would have a greater likelihood of being realised if we were to dispense with it altogether.

It is not unreasonable to conclude that this also holds true for Australian education particularly in light of the similarities in recommendations between the two reports of the Australian Senate Select Committee on the Education of Gifted and Talented Children (Commonwealth of Australia, 1988, 2001). This thesis will attempt to follow the admonitions of these writers in relation to "Gifted Education" and underachievement and will then consider the research within the context of the discourse and the ensuing construction of "Gifted Education" as it is found in Western Australia. This construction, in itself, has problems which will be explored further in future chapters.

2.3 Discourse in Western Australian Education

It has been argued that some concepts make little sense except within the discourse through which they are constructed. As previously mentioned, Foucault added to an understanding of how discourses are constructed in his own constructed theory of discourse found in his seminal work *The Archaeology of Knowledge* (1970). His theory, as summarised by Lessa (2006, p. 283), is that "Systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices... systematically construct the subjects and the worlds of which they speak."

In light of this, it can be said that the "knowledge" that shapes and guides the practices of education authorities in Western Australia, including DETWA in common with other organisations, is constructed rather than objectively existent and, by implication, subjective. The importance of this belief for this study will be discussed in relation to its methodology in Chapter Five.

2.4 Organisational Culture

Critical discourse analysis (e.g., Hodge & Kress, 1993, p. 6) explains how power relationships form within cultures such as the culture of education in Western Australia. Undoubtedly, there is a power relationship between the bureaucracies of Education systems such as DETWA and those who have the responsibility of meeting policy objectives such as the Principals of high schools and classroom teachers which is made clear in the statement cited previously that the policies are: "lawful **orders** for the purposes of section 80(a) of the Public Sector Management Act 1994 (WA) and are therefore to be observed by all Department of Education employees." (emphasis added)

As also stated previously, policies stem from the cultural practices of DETWA and manifest "symbolic power" (Bourdieu, 2001) in addition to any actual power they may have. It would be interesting to research the extent to which classroom teachers have direct knowledge of The Public Sector Management Act (1994), for example, to ascertain whether this knowledge is superior to the lack of knowledge noted in regard to the guiding publications for DETWA's centrally run provision for the Academically Gifted (Martin, 2004). Even though it is mandated that policies are adhered to, it is reasonable to suspect that busy teachers do not have the time to read policy documents even if they may have the disposition to do so which means that their construction of "power" is related to perceptions they may have of the power relationship between themselves and the bureaucracy. They may be equally ignorant of documents that mandate the requirement for them to familiarise themselves with the policies. It is possible that the end result is that the informal discourse based on perceptions and myth that create "symbolic power" is all that exists in the "swamp" of teaching practice (Schön, 1995).

Studies of the way constructions are legitimised through discourse such as those conducted by Martín Rojo and Van Dijk (1997), Van Dijk (2005), Van Leeuwen (1996, 2007, 2008), and Van Leeuwen and Wodak (1999) suggest that behaviours of cultural participants such as teachers become justified at both a mental and physical level through language. That is, in relation to the provision of programs for the "Academically Gifted" in Western Australian schools, in the presence or absence of actual spoken policy pronouncements, guiding publications give credence to a set of views held by cultural participants which, in turn, determine their behaviours. This means that teachers who are already familiar with the "cultural paradigms" that have been formed through cultural values, attitudes and beliefs that do not necessarily include knowledge constructed by institutions such as Universities (Schön, 1995), are given licence to act through the legitimisation of their behaviours through discourse.

Schein (1992) in common with others (e.g., Hodge & Kress, 1988) posits that a basic assumption around which the cultural paradigms that contextualise an organisation's practices form, is the organisation's relationship with its environment. Although the word "environment" can have multiple meanings, it will be taken here to mean the surrounding culture which gives rise to the existence of the organisations under investigation. These organisations include DETWA, the High Schools that operate under its jurisdiction, and private high schools that often rely on Western Australian state government policies as the basis of their own.

Clearly an organisation such as DETWA exists as an embodiment of the constructed values, attitudes and beliefs of its wider culture which have meaning only within the culture, and these constructions exist only to serve the ideological and other needs of internal and external cultural participants (Schein, 1992; Kreitner, 1992). Therefore it is necessary to acknowledge the wider cultural context, the cultural context of its participants and the cultural context of those it serves, that is, its clients, as all of these contexts impact on and create the ideologies of the culture and the values, attitudes and beliefs that underscore them.

Many of the shared cultural understandings of any organisation's stakeholders, including those of DETWA, are determined by wider cultures such as those of the place in the world in which the organisation exists including its local community. An attempt to isolate the culture of DETWA from its wider culture in order to study it is destined to fail as many of the cultural assumptions embedded in government departments are derived from the wider culture and rendered invisible due to their naturalness (Schein, 1985, p. 9; Smircich, 1985). Although invisible they are powerful determinants of the nature of the organisational culture and, in these times of economic rationalism, the wider culture operates within the dominant ideology of a capitalistic society and expects to see a return capable of being quantified for the quantified resources devoted to producing it.

A simple example of this can be found in the obvious fact that schools in Australia exist because our culture values education. "Education" has a fairly definite meaning in this context which is embedded in the cultural practices of all Australian state schools. Variations are few in these practices but when they do occur they can be explained by the local cultural contexts of the stakeholders. The cultural practices in Australia relating to "education" are observably different from those in other cultures, however they appear natural to the participants. The practices are not questioned and, if they were, the questions would be treated with suspicion as they are believed to be natural, just the way things are done. There are a great many cultural practices in Western Australian high schools and some relate to the issue of "knowledge" generation and transmission. Each one of the elements that impacts on the meaning of "giftedness" and "knowledge" is constructed and is, therefore, a subjective view that shapes the cultural attitudes in a way that encourages them to be seen as having objective existence when, in fact, they have no existence outside the culture.

Deliberate attempts can be made to imply objective existence such as the presentation of apparently scientific evidence in order to construct truth which seems to originate from scientific discourse (McCann-Mortimer et al., 2004). The referencing of DETWA documents seems to be a case in point as has been discussed in Chapter One.

Like any subculture, teaching has its own empowering discourse (Hodge & Kress, 1988) which is constructed by the participants from their own cultural contexts and which constructs the "reality" they inhabit (Hodge & Kress, 1988; Schein, 1992). The "truth value" applied to the discourse itself by the cultural participants underpins the organisational culture and wider culture in ways which will be seen. In the case of state schools, the overseeing government department also attempts to shape the discourse regarding teaching/learning in the wider community and the schools under its auspices. This shaping impacts on the culture of schools as "contending parties seek to impose their own definition of what will count as "truth", "reality" and, by implication, "knowledge" (Hodge & Kress, 1988, p. 121). Clearly, if there can be contention about the meanings of these terms and they are capable of being shaped, the problem of treating them as definite terms with absolute, objective meanings is highlighted. I will refer to this as "dubious truth".

This dubious truth is evident in DETWA publications regarding "giftedness" to which I have previously referred. The existence of individuals who can be described as "gifted" or, more specifically, "academically gifted", is theoretical since, as discussed in Chapter One, it is impossible at this stage to make an empirical study of the internal processes which we would acknowledge as signifiers of "academic giftedness". Any "knowledge" about the nature of its gifted clientele and appropriate ways of dealing with them is also constructed through the discourse. As a theoretical construct, the practice of providing educational opportunities for those so described should reasonably be undertaken by the practical

application of theoretical knowledge; however, problems identified by Schön (1995) highlight the difficulty of doing so.

It can be seen intuitively that a common cultural belief is that schools exist to convey knowledge from a group who are employed because they possess it to a group who attend in order to acquire it. This traditional pedagogy, as demonstrated in many classrooms, sees the teacher as the possessor and teller holding forth before a group of less endowed "students"; it has been referred to by Freire (1970) as a "banking" model. It also has strong elements of the behaviourism described by Skinner (1974) which is still taught in many teacher education institutions to pre-service teachers.

A salient feature of this model is that few, if any, of the participants see the "knowledge" they are giving and receiving as a problematic concept as, in the world of "everyperson"¹, it is irrefutable that knowledge, truth and fact are *treated* as absolutes in general usage. When individuals claim to know how to drive, for example, it would be considered odd if they were asked, "is this something that can be known?".

No evidence is needed to support the place of "knowledge" in common usage since it can be seen intuitively as it is enshrined in various dictionary "meanings" of the word including the *Oxford English Dictionary* (Simpson & Weiner, 1989): "clear awareness or explicit information, for example of a situation or fact". In linguistic Philosophy it may be the subject of argument but, in the case of "everyperson", it is purposeless to argue whether these word/concepts actually have the semiotic value of "absolute" assumed by most of their users since to do so would culminate in a tautology, as can be seen in either of the necessary final statements: "knowledge is an absolute" or "knowledge is not an absolute" which lead to the overwhelming question: are these statements of "truth" or "fact" and so on ... forever? Lawson (1985) suggests that a scientific epistemology based on ordinary language such as that described suffers from the "Liar's paradox". He uses a similar example to those I have used when he tells the story of the Cretan prophet Epimenides who said, "All Cretans are liars." This statement, treated as an absolute claim of knowledge, demonstrates further that absolute knowledge claims falsify themselves, since a Cretan making this statement causes the claim to degenerate into a paradoxical and contradictory knowledge claim. Although some writers have challenged this argument (e.g., Smullyan, 2009), it is possible they have missed the point that Epimenides was attempting to make which is that there are statements that appear satisfyingly logical on their face but which are problematic on closer examination. Although this simple analysis may also be problematic, it is not in the scope of this document to examine ways in which it may be. By implication, if there cannot be absolute claims of knowledge, any claims must be conditional

¹ The following definition is copied from the Glossary of terms in the book in Appendix 3:

Fred and Jill Everyperson: *A convenient way of referring to people who have average intelligence and have societal beliefs etc that conform to the average.*

and the conditions that mitigate them ensure they are subjective. This is not how they are treated in our culture at large, however, nor within the subculture of DETWA, which is the point.

Participants in our culture claim they possess knowledge and this forms the basis of insights that are often characterised as intuition or beliefs without consideration of the swirling currents of challengeable assumptions that shape them. In the culture of high school Education which is shaped by its discourse, the cultural paradigm of "knowledge" is treated as unproblematic, natural and, as a result, unavailable for exploration.

2.5 Conclusion

It is difficult to see how those who wish to identify and cater appropriately for the "academically gifted" have been able to avoid resolving the problems that are revealed in the literature. Certainly, there has been much debate about the nature and extent of these problems. The next chapter will seek to explain what is meant by Philosophy/CT and Chapter Five will explore the literature about the teaching of this subject. The course central to this study is described in Chapter Six.

Chapter Three: Literature on Philosophy and Critical Thinking

Everybody liked better to conjecture how the thing was, than simply to know it; for conjecture soon became more confident than knowledge, and had a more liberal allowance for the incompatible.

George Eliot, *Middlemarch*

3.1 Introduction

The Australian Curriculum is due to be implemented fully in Western Australian by 2017. In an introduction to the new curriculum on the Australian Curriculum Assessment and Reporting Authority's website (2014) *The Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) is quoted as stating that critical and creative thinking are fundamental to students becoming successful learners. Later in this introductory section, it is explained that The Australian Curriculum will enable students to develop capability in critical and creative thinking. According to researchers such as Lipman (1969, 1974, 1995, 1998, 2003), critical and creative thinking are the consequences of engaging in a course in Philosophy. This chapter will explore this notion in order to contextualise the study reported in this thesis.

3.2 Thinking Skills

While it may be disputable whether any kind of human behaviour can point to *material* differences in the minds of individuals that can meaningfully be labelled "gifts", it is indisputable that it is desirable, both from individual perspectives and the wider societal perspective, that individuals be skilled in "thinking". By this claim, I am not using the word "thinking" in its usual pejorative way to refer to the various self-talk processes that do not need to be taught as they develop naturally in every normal individual. I am referring to the various products such as reflection, critical thinking, analysis, creativity and problem solving that have an integral link with a course in Philosophy (Lipman, 1969, 1974, 1981, 1988, 1988b, 1991, 1995, 1996, 2003, 2004). These skills have been referred to in recent times as "The basics of tomorrow" (Gisi & Forbes, 1982) in the same way skills such as reading, writing and arithmetic have historically been referred to in education as "the basics". While researchers such as Lipman (1969, 1974, 1995, 1998, 2003) have emphasised the benefits of "Philosophy for Children (P4C)", curriculum offerings that might correspond to Lipman's theories have not been introduced to schools in Western Australia owing to such things as timetabling constraints and the problems in professional development for teachers that were highlighted by critics of Lipman (Vansieleghem & Kennedy, 2011) and Lipman himself (Brandt, 1988) and which were essentially related to poor teacher preparation. Lipman's motivation to develop his theories regarding teaching reasoning to children stemmed from his own experiences of teaching university students who had poorly developed reasoning skills which was, in turn, the course's major problem (Lipman, 2003). As most teachers do not have a background in CT or Philosophy and many teacher education institutions in Western Australia do not offer a course such as that described by Lipman (1969, 1974, 1995, 1998, 2003) to prepare teachers to teach it, it is often overlooked.

An optional course in Philosophy and Ethics was introduced into Western Australian schools in 2008 for Year Eleven and Year Twelve students, however it has had a very limited uptake for reasons that can only be speculated upon. The course content, while purporting to use the "Community of Enquiry" approach advocated by Lipman, owes more to learning *about* Philosophy than actually *doing* Philosophy. There is no requirement that teachers who are chosen to deliver the course undertake professional development of any kind let alone that described by Lipman (2003) and the examinations for the course require students to label the parts of arguments rather than engage in argument.

3.2.1 Original Theoretical Background

Although the course described in Chapter Six and the accompanying book I have written (Martin & Merrotsy, 2013; Appendix 3) as the instrument for my study began life as little more than committing to paper the early work I did as a beginning High School teacher, and the refinements I, as a reflective practitioner (Schön, 1983) made over time, I realise now that a loose connection can be made with the research of Matthew Lipman (1922–2010) and many others who followed in his theoretical footsteps. When I wrote the initial course, I had recently graduated from the University of Western Australia with a Bachelor's degree that included a minor in Philosophy and was seeking ways to engage students who had been identified as "Academically Gifted" by DETWA's selection processes. Intuitively, I turned to my Philosophy background as a way of promoting the emergence of "CT", which is undoubtedly the outcome that Lipman thought possible even though he may not have used this term until later in his career (Lipman, 1991, as cited in Kuhn, 2004, p. 18).

Lipman used the term "Philosophy" in this early writing and it was his aim to create a style of Philosophy "redesigned and reconstructed so as to make it available and acceptable and enticing to children" (Lipman, 1991, p. 262). An informed reader would wonder why he would undertake this process but still term the result "Philosophy". It is obvious that since Lipman, those who have attempted to design courses that seek to achieve the positive outcomes he describes have sought to engage students in "CT", a term that is derived from the academic disciplines of Philosophy and psychology (Lewis & Smith, 1993) even though not synonymous with either. Later, Lipman claimed that Philosophy, as a discipline in its own right, also prepares those who engage in it for good thinking across disciplines. He also asserted that Philosophy is a better way to teach CT than are dedicated CT courses taught by non-philosophers:

It is only within the humanistic context of Philosophy that students can experience the cultural relevance and methodological rigor that can be lacking, when, for example, "CT" courses are offered by non-philosophers, or when thinking skills are taught in isolation (Lipman, 1988, p. 34).

In fact, it could be argued that "CT" is a skill used in engaging in Philosophy and also one that is developed through this engagement although, as it will be shown, the discourse has explored many problems in adopting this simple stance as will be discussed later in this chapter. This belief underpins the research I

have undertaken as part of the project described in this thesis; however, I will identify some of the problems to which I have alluded.

Although the Philosophy of a Platonic Socrates may have begun 2500 years ago, the tradition of CT as reflectively questioning common beliefs and expectations, and separating beliefs that are reasonable and logical from those that lack evidence or rational foundation (Cosgrove, 2009), the term "CT" to describe this process was not used in educational discourse until 1941 (Cosgrove, 2009; Paul, Elder & Bartell, 1997, as cited in Gellin, 2003). This fact alone assists in describing the connections between the various discourses that construct "CT" on the one hand and Lipman's use of the term "Philosophy" on the other. It has been assumed that the connection between Philosophy and CT is a matter of logic based on a priori grounds; that is, believed to be analytically true, true by the virtue of the meanings of the words contained in the proposition without reference to an empirical world. This argument can be demonstrated by the following statement: "Bachelors are unmarried"; that is, by definition, "being unmarried" is entailed in the concept of "bachelor" (Norris, 1992a). The argument is that the term "Philosophy" stands in relation to the term "CT" this same way; that is, CT is entailed in the concept of Philosophy and "doing" Philosophy requires engagement in CT.

Certainly, CT courses taught in Western Australian Universities are largely taught by Philosophers working within Philosophy departments. It has been suggested, in fact, that as CT requires an advanced facility in reasoning and engaging in argument which characterise the skills of a Philosophy Professor, such people are the logical choice to deliver such courses. Undoubtedly, the movement to promote "CT" or "Informal Logic" grew out of the efforts of professional philosophers to coach students in applying formal methods of reasoning to real-world reasoning problems (Fisher, 2004). The contribution of Philosophy to CT however has been noted as a central reason that the two have been viewed as synonymous (A. Fisher, 2004; R. Fisher; 2003; Lipman, 2003; Milkov; 1992; Talaska, 1992; Walters, 1994). In fact puzzlement and *critical spirit* have been said to distinguish Philosophy from all other disciplines. A central premise in Philosophy, namely, making everything available to critical challenge and scrutiny, is certainly similar to the aims of CT and also the aims of the course used as the instrument for this study. Neither the Philosopher nor the critical thinker accepts propositions without a clear and reasonable justification, a factor that is evident in Cartesian Philosophy when Descartes stated the intention:

never to accept anything as true if I did not know clearly that it was so; that is, carefully to avoid prejudice and jumping to conclusions, and to include nothing in my judgment apart from whatever appeared so clearly and distinctly to my mind that I had the opportunity to cast doubt on it (Descartes & Clarke, 1999, p.35).

Two recent meta-analyses support the claim that Philosophy for Children (P4C) has a positive influence on children's reasoning skills which seems to put the connection between Philosophy and CT beyond doubt,

namely, Garcia-Moriyon et al. (2005), and Trickey and Topping (2007). Further, Lipman acknowledges his debt to others such as G. H. Mead, C. S. Pierce and Justus Buchler but is equally transparent when acknowledging that his ideas have their basic foundations in the writings of Dewey (Lipman, 1996, pp. xi–xv).

Sternberg informs us: "Indeed, if there is a modern-day founder of the 'critical-thinking movement,' it is almost certainly John Dewey, who was simultaneously an educator, a philosopher, and a psychologist" (Sternberg, 1986, p. 4). Dewey has also been attributed with constructing the term "Reflective thinking" (Dewey, 1933). Dewey's statement below provides a useful insight to a central principle of Lipman's work and further amplifies the connection between terms that contribute to the understanding of Lipman's work and the use of courses based on Philosophy in general:

Reflection involves not simply a sequence of ideas, but a consequence — a consecutive ordering in such a way that each determines the next as its proper outcome, while each outcome in turn leans back on, or refers to, its predecessors (Dewey, 1933, p. 4).

Dewey also suggests that the "Processes of instruction are unified in the degree in which they centre on the production of good value habits of thinking" (as cited in Kennedy, Fisher & Ennis, 1991, p. 11).

Dewey maintains that the curriculum should be built on "reflective thinking", a position reinforced by Bertrand Russell (as cited in Hare, 1999). Though Russell mostly uses such terms as "critical habit of mind", "critical attitude", and "critical judgment", he emphasises that by necessity, education should provide students with lessons that build good habits of thinking (Cosgrove, 2009; Hare, 1999; Kennedy, Fisher & Ennis, 1991).

Since Lipman, the term "P4C" (Philosophy for Children) has been widely used in courses that purport to encourage the emergence of CT in children; these various courses vary from Lipman's in the way philosophical issues are explored but retain the notion of "critical thought".

3.2.2 Useful History

Lipman's interest in using Philosophy with children sprang from the educational reforms noted in the United States of America in the nineteen seventies which were characterised by a move towards attempts at making children more critically aware (Vansieleghem & Kennedy, 2011, p. 171). It is acknowledged that Lipman was not the first to posit the notion that developing a child's natural tendency to ask philosophical questions would lead to thinking that was more reflective. For example, Leonard Nelson (1882–1927), who conducted much earlier research (Nelson, 1975, 1994), had been an advocate for the use of "Socratic Method" in the classroom, claiming that the stimulation of communal CT that ensued from this led to an

improvement of thinking in the individual. This claim was analogous to the claims Lipman had made, even though their underlying epistemic assumptions differed. Lipman's research and subsequent interventional design, particularly the emphasis on children's ability to think abstractly and use their own cultural experiences and references to develop understanding, is clearly developed from the work of Vygotsky (1930–1934/1978), especially the notion that:

Every feature of a child's cultural development appears twice: first on the social level, and later, on the individual level; first between people (interpsychological), and then Inside the child (intrapsychological) (Vygotsky, 1930–1934/1978, p. 27; as cited in Cam, 2006a, p. 45).

In common with Lipman himself (Lipman, 1988b, p. 52; Lipman, 1996), later researchers such as Cam have noted the role that Vygotsky has played in the move to teach Philosophy to children when he states: "It would be a natural extension of Vygotskian psychology to suggest that children come to think for themselves through the internalisation of social practices" (Cam, 2006a, p. 45).

There have been many reports and evaluations of the basic premises upon which Lipman based his views. For example, one which is based on formal research was by Matthews, who is a particularly prominent critic of the way "traditional education" limits its focus to the transfer of knowledge while underrating the voice of the child: "Children can help us adults investigate and reflect on interesting and important questions and ... the children's contributions may be quite as valuable as any we adults have to offer" (Matthews, 1984, p. 3).

Matthews suggests treating children as equal companions in thought and does not speak about Philosophy for or with children, but rather suggests "dialogues with children", while arguing in a way that parallels Lipman, that children ask the same questions as philosophers even though they may be verbalised in different ways (Matthews, 1984).

Roger Sutcliffe, who is President of the British Society for Advancing Philosophical Enquiry and Reflection in Education [SAPERRE], made the following general observations about the research evidence on the benefits of Philosophy for Children (Sutcliffe in UNESCO, 2007a, p. 38):

[P4C] is widely noted for its ability to stimulate creative as well as CT in young minds. Teachers and schools who use P4C are unfailingly commended by the British National Schools Inspectorate (OFSTED) for incorporating it into the curriculum.

[P4C] not only extend[s] children's thinking, but also encourage[s] them to express that thinking in speech, and thus it can develop children's listening and speaking skills.

This statement, in particular, suggests a connection between a course in English and a course in CT. He further goes on to say in relation to P4C:

[it helps children to] develop both socially and emotionally at a faster rate, [making them] more patient with others, and more able to reflect upon their own feelings and behaviour.

[P4C] enables and encourages children to develop a personal value base, through hearing different values expressed and reasoned about. The reasoning ensures that the values are thought through and not simply adopted out of fashion or simplicity.

Sutcliffe argues that there is "hard evidence" that Philosophy for Children "accelerates children's learning of skills" and "Perhaps the best [evidence] came from a study of 18 primary schools in Clackmannanshire, Scotland in 2002/3". This Scottish study was conducted by Topping and Trickey (2007) of which the most compelling conclusion was the claim that a whole class of children gained an average of 6 standard points on a test of cognitive abilities after having been exposed to P4C for an hour a week over sixteen months. It is not made apparent, however, whether there was a comparative group, or how the measure of gains was made. Regardless of this, the context of the study that is reported in this thesis is firmly established.

3.3 Taxonomic Development

Sternberg's seminal article "CT: Its nature, measurement and Improvement" (1986) sheds light on other ways terms such as "Philosophy", "CT", and "reflective thinking" are related and therefore will be used here in order to situate my study in the literature. For example, he describes three "taxonomies" of CT skills which he claims have distinguishing if overlapping features namely, Philosophical, Psychological and Educational.

3.3.1 The Philosophical Tradition

Since Lipman relied on the term "Philosophy" to describe his approach and subsequent work, it is reasonable to consider his views in the context of Sternberg's (1986) "Philosophical Tradition". It has been argued that Lipman's approach constructs hypothetical "critical thinkers" and focuses on their personal characteristics rather than other approaches which describe outward behaviours or actions (Lewis & Smith, 1993; Thayer-Bacon, 2000) resulting in an idealised notion of thought which is removed from the demands of thinking that are commonly faced (Sternberg, 1986, p. 4). Such considerations do much to illuminate the discussions, arguments and debates between those seeking to define the nature of the activity.

For example, Paul (1992) describes definitions of CT stemming from this tradition as "perfections of thought" (p. 9), which further reinforces Sternberg's view regarding a theoretical distance between a "critical thinker" and a "thinker in common practice" (1986, p. 4). The American Philosophical Association's (APA) similarly idealised description of a critical thinker as someone who is "inquisitive in nature", "open-minded", "flexible", "fair-minded", with "a desire to be well-informed", and who "understands diverse viewpoints", adds to this conception as does Bailin's notion (2002) of "the act of CT as engaging in thinking of a particular quality — essentially good thinking that meets specified criteria or standards of adequacy

and accuracy" which, while reflecting Lipman's objectives (1969, 1974, 1995, 1998, 2003), provides more reasons for the criticism referred to earlier regarding the tautology that arises by defining CT as good thinking and good thinking as thinking that is critical. In addition, it has been said that the philosophical approach to CT often focuses on the application of formal rules of logic (Lewis & Smith, 1993; Sternberg, 1986), which is evident in the preamble to the Western Australian certified course in Philosophy and Ethics, namely,

We do Philosophy, for example, when we seek to define something, when we challenge assumptions, when we construct an argument, and when we think about what we are doing, how we are doing it and to what ends. (School Curriculum and Standards Authority, 2013, p. 3)

It may be that some of these processes can be described as "metacognition" even though this is not acknowledged in the syllabus.

This statement has a lot in common with the following definitions drawn from authors identified as writing about CT from "The Philosophical Tradition" (Sternberg, 1986, p. 3):

Table 2.

Definitions of CT from "The Philosophical Tradition"

<i>the propensity and skill to engage in an activity with reflective scepticism</i>	McPeck, 1981, p. 8)
<i>reflective and reasonable thinking that is focused on deciding what to believe or do</i>	Ennis, 1985, p. 45
<i>skilful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context</i>	Lipman, 1988, p. 39)
<i>purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based</i>	Facione, 1990, p. 3
<i>disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought</i>	Paul, 1992, p. 9
<i>thinking that is goal-directed and purposeful, thinking aimed at forming a judgment, "where the thinking itself meets standards of adequacy and accuracy</i>	Bailin et al., 1999b, p. 287
<i>judging in a reflective way what to do or what to believe"</i>	Facione, 2000, p. 61
<i>willing to both suspend judgment and to consider other perspectives</i>	Facione, 1990.

In this tradition, it has been argued that the inclusion of criteria to make judgments or to support decisions in order to qualify such thinking as "critical" is necessary (Case, 2005; Lipman, 1988). It has been stipulated that criteria are necessary for evaluation in every component of the "thinking" including reflectively examining personal thoughts. These criteria have been described as "standards for judging the adequacy of claims about meaning; the credibility of statements made by authorities; the strength of inductive arguments; and the adequacy of moral, legal, and aesthetic reasons" as well as "laws, regulations, norms, or ideals" (Bailin et al., 1999, p. 291).

The particular criteria that are relevant in a given situation will depend on the domain of interest (Lipman, 1988). For example, in Paul's (1992) "perfections of thought", these criteria define the qualities of thought that the thinker is striving to achieve such as: clarity, accuracy, precision, specificity, relevance, consistency, logic, depth, completeness, significance, fairness, and adequacy. Paul (1992) recommends transparently defining the criteria that will be used in the assessment of student work. Bailin et al. (1999) and Case (2005) recommend providing knowledge of criteria as one of five resources supplied to students to engender critical thought.

3.3.2 The Psychological Tradition

In describing the "Psychological Tradition" of CT, Sternberg (1986, p. 6) delineates two ways in which it contrasts with the "Philosophical Tradition", namely, an attempt to focus on how people actually think versus how they could or should think under ideal conditions, and a tendency to describe observable behaviours demonstrated by critical thinkers. This approach is clearly driven by behavioural psychology and includes lists of skills which are inferred by performance procedures engaged in by critical thinkers (Lewis & Smith, 1993). Arguably, this method is as tautological as other processes used to identify internal processes described elsewhere in this document, however I will not engage in a discussion of these at present.

Critics of the behaviourist aspects of this approach, that is, attempting to reduce a complex combination of knowledge and skills into an identifiable list of steps or procedures, describe it as resulting in "theories that oversimplify the analysis of CT" (Sternberg 1986, p. 6). In fact, this criticism could be levelled at any attempt and for any reason to describe internal processes by taking a behaviourist and positivist stance.

For example, Bailin (2002) considers attempts to view CT as a series of discrete steps or skills as a misconception which is rendered so by the need to pander to the positivist desire to make empirical observations of the world. The same argument has been explored in relation to "giftedness" elsewhere in this thesis, that is, attempting to discern the presence of unseen constructs through constructing criteria that point to their presence but are not independently verifiable. Others have shown how the possibility of

proceeding through the "steps" of CT without actually engaging in critical thought shows that confusing the activity of CT with its component skills is in error (Facione, 1990). Van Gelder (2005) supports this notion when he states that CT is more than simply the sum of its parts.

Definitions of CT that have emerged from the "Psychological Tradition" include those shown in Table 3:

Table 3.

Definitions of CT from the "Psychological Tradition"

<i>the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts"</i>	Sternberg, 1986, p. 3
<i>the use of those cognitive skills or strategies that increase the probability of a desirable outcome"</i>	Halpern, 1998, p. 450
<i>seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth</i>	Willingham, 2007, p. 8.

Many of these definitions rely on a priori claims of the value of thinking which are value judgements giving rise to tautology.

3.3.3 The Educational Tradition

Sternberg (1986, p. 6) also argues that the work of Bloom (1956 as cited in Sternberg, 1986), which is widely disseminated in Education particularly during teacher education, forms part of an "Educational Tradition" seeking to define "CT". Bloom himself said of his work that it is: "One of the most widely cited yet least read books in American education" (Anderson & Sosniak, 1994, p. vii), which arguably reflects the place of myth in the practice of education since inaccurate renditions of the content of the work become rooted in the culture.

The fact that this framework has recently been reviewed and re-written (Anderson & Krathwohl, 2001) is noted but not relevant to this literature review which does not seek to contextualise the study in relation to Bloom's work. This fact is mentioned simply so that this may be acknowledged.

The original taxonomy is often depicted as a pyramid or hierarchical list with "knowledge" and "comprehension" at the bottom and "evaluation" at the peak with headings as follows:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

This setting-out gives rise to the discussion of "lower" and "higher order thinking skills" which is oft heard in educational circles. It has been suggested that the components of "analysis", "synthesis", and "evaluation" represent CT (Kennedy et al., 1991) although it is unclear whether this is simply an attempt to force old information into a new discourse.

It has been argued that the vagueness of these concepts means they are unable to achieve their objectives in any meaningful way (Ennis, 1985; Sternberg, 1986). In an interview conducted with Lipman (Saeed, 2005), however, Lipman responded to the question "How did [P4C] arise and how was it developed?" as follows:

Philosophy for Children (P4C) didn't just emerge out of nowhere. It built upon the recommendations of John Dewey and the Russian educator, Lev Vygotsky, who emphasized the necessity to teach for thinking, not just for **memorizing**. It is not enough for children merely to **remember** what has been said to them: they must **examine** and **analyze** that material. Just as thinking is the processing of what children learn about the world through their senses, so they must think about what they learn in school. Memorizing is a relatively low-level thinking skill; children must be taught concept-formation, judgment, reasoning, etc. (emphasis added)

The words I have highlighted in Lipman's statement seem to have at least a broad correlation with some of the words used by Bloom as headings, suggesting that Lipman and Bloom were not as far apart as some may suggest; and that there was some accord in terms of the thinking skills and abilities they were seeking to cause to emerge from students. Lipman's later use of the term "CT" in relation to his own work has been noted earlier.

For example, *knowledge* is defined by Bloom as "those behaviours and test situations, which emphasize the remembering, either by recognition or recall, of ideas, material, or phenomena" (Bloom, 1956, p. 62), which equates with the sense in Lipman's mention of "memorizing" and "remembering", especially when it is borne in mind that Bloom placed these types of thinking at the bottom of his Taxonomy.

Lipman's use of "examine" and "analyse" is similar to the use of "analyse" when used by Bloom (1956, p. 144) as a heading as explained: "*analysis* is 'the breakdown of the material into its constituent parts and detection of the relationships of the parts and of the way they are organized'."

And finally in this comparison, Bloom (1956, p. 185) defines "evaluation" as:

the making of judgments about the value, for some purpose, of ideas, works, solutions, methods, material, etc. It involves the use of criteria as well as standards for appraising the extent to which particulars are accurate, effective, economical, or satisfying.

This description seems to express similar ideas to those expressed by Lipman in relation to what he believes must be taught.

In fact, researchers of CT in "The Educational Tradition" typically agree on the specific abilities encompassed by the definition of CT, which include those listed in Table 4.

Table 4.

Definitions of CT from "The Educational Tradition"

<i>analysing arguments, claims, or evidence</i>	Ennis, 1985; Facione, 1990; Halpern, 1998; Paul, 1992
<i>making inferences using inductive or deductive reasoning</i>	Ennis, 1985; Facione, 1990; Paul, 1992; Willingham, 2007
<i>judging or evaluating</i>	Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Tindal and Nolet, 1995
<i>making decisions or solving problems</i>	Ennis, 1985; Halpern, 1998; Willingham, 2007.

Other abilities or behaviours identified as relevant to CT include asking and answering questions for clarification (Ennis, 1985); defining terms (Ennis, 1985); identifying assumptions (Ennis, 1985; Paul, 1992); interpreting and explaining (Facione, 1990); reasoning verbally, especially in relation to concepts of likelihood and uncertainty (Halpern, 1998); predicting (Tindal & Nolet, 1995); and seeing both sides of an issue (Willingham, 2007).

Some researchers also agree that, in addition to skills or abilities, CT also involves "dispositions" (Facione, 1990) although it is difficult to discern clear differences between the term "disposition" when it is used in this context from the term "motivation". This lack of clarity is reinforced by Facione's (2000) attempt to

define the term: "consistent internal **motivations** to act toward or respond to persons, events, or circumstances in habitual, yet potentially malleable ways" (p. 64, emphasis added).

It is not hard to see that Facione is attempting to present "motivation" as a precursor to action that is perhaps derived from a disposition, that is, in the way that one might have "curiosity" as a disposition of personality which gives rise to a "motivation" to satisfy this dispositional characteristic.

Ennis (1985) was among the first to note the apparently obvious claim that those who are equipped through ability to think critically, may not wish to do so unless they possess a personality trait or other motivator as has been indicated, that gives rise to a tendency to exercise such ability. Of course, this observation only has merit as a function of this argument if the definition of CT he presents is accepted, as the verb "deciding" has a transformative effect to the definition of an internal event. In this way, adding another construct "disposition" ensures that the concept lacks external consistency namely, "CT is reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p. 45). And, by implication, reasonable thinking is reflective, taking the reader no further forward in understanding this concept.

"Deciding what to do" does not have a sufficient connection to this definition of "CT", as it is possible to decide what to do without engaging in critical thought. It is also logically possible to engage in reflective and reasonable thinking that is not focused on deciding anything at all unless, as may be suspected, Ennis would not consider "thinking reflectively without deciding" to be "reasonable". This leaves us with a definition of CT which is dependent for support on evidence provided by the definition itself, e.g., "CT is ... thinking that is considered reasonable because it is focused on deciding what to believe or do", which demonstrates its tautological nature. If this is used as the logical basis for suggesting another component, namely, "dispositions", it does nothing but cloud the issue although, it does create an addition to the discourse which has internal logic even though it arguably lacks external validity. Perhaps this is the reason Facione (2000) states: "The general consensus is that CT *per se* is judging in a reflective way what to do or believe" which, while resolving the tautological problem, leaves the reader wondering about the evidence that might support a claim that there is "general consensus".

In contributing the word "disposition" to the discourse to describe elements of CT the disposition for others to treat this as a construct by investigating, challenging and amplifying it as a concept was provided and it has been suggested that the notion that CT abilities and dispositions are, in fact, separate entities, can be supported by empirical research (Facione, 2000). Others have added to this construction by offering the descriptions in Table 5 as necessary components to understanding the term: a fact which makes it evident that a deliberate attempt to broaden the construct and its guiding discourse is being made when it is

considered that the proffered suggestions could equally relate to definitions of a multitude of other terms such as "gifted", as has previously been discussed.

Table 5.

Descriptions of dispositional characteristics

<i>open-mindedness</i>	Bailin et al., 1999; Ennis, 1985; Facione 1990, 2000; Halpern, 1998
<i>fair-mindedness</i>	Bailin et al., 1999; Facione, 1990
<i>the propensity to seek reason</i>	Bailin et al., 1999; Ennis, 1985; Paul, 1992
<i>inquisitiveness</i>	Bailin et al., 1999; Facione, 1990, 2000
<i>the desire to be well-informed</i>	Ennis, 1985; Facione, 1990
<i>flexibility</i>	Facione, 1990; Halpern, 1998
<i>respect for, and willingness to entertain, others' viewpoints</i>	Bailin et al., 1999; Facione, 1990.

3.4 Conclusion

It can be noted once again that "strong critical thinking skills" is one indicator of giftedness listed on the DETWA (1996) checklist found on page 22 of this document. Other writers such as Silverman (1993) list "intellectual traits": "exceptional reasoning ability", "complex thought processes", "analytical thinking", and "capacity for reflection" (Clark, 2002, pp. 436-437) as indicators of giftedness and it would be reasonable to believe that, within the discourse, the kinds of thinking that are listed on checklists of giftedness such as these are synonymous with the construct "giftedness". Regardless of whether one is tempted to adopt the apparently strong conclusion that successfully teaching CT skills is teaching students to be gifted, it is indisputable that teaching CT is desirable for a variety of reasons. The teaching of these skills is explored further in Chapter Four.

Chapter Four: Teaching Philosophy and CT

"Most people would sooner die than think, in fact they do" (Bertrand Russell as quoted in Bolander, 1987, p. 69 and cited in Halpern, 1998, p. 450).

4.1 Introduction

It would seem to be the case that, for reasons that will be seen, teaching Philosophy/CT is more problematic than teaching other subjects. In fact, central among the problems is the issue of whether CT should be taught within subject domains or, whether it can be taught within a particular subject or academic discipline which will allow a "transfer" to other subjects. The research on both sides of this debate, and from those who claim that teaching CT to be transferable is sometimes possible, will form part of the discussion in this chapter.

4.2 Dedicated CT Courses?

Most researchers in the field of "CT" have considered the issue which has been described by McPeck (1990) as "the transfer problem". In 1981, McPeck (McPeck, 1981, as cited in McPeck, 1990, p. 10) criticised the notion of "generic" CT that is, teaching a way of thinking that is not specific to any particular situation but is based on a set of skills or abilities that, having been acquired, can then be used in any situation to which they could be appropriately applied. Such a criticism could conceivably be applied to Lipman's P4C approach. This approach is summed up in his 1988 article which notes that CT facilitates good judgement because it relies on criteria that he lists as informing such judgements, which are arrived at by reasoning logically.

In fact, it has been argued that CT skills are dependent upon a range of variables such as domain, field, and subject (Ennis, 1989) and that situation-specific knowledge is essential if students are to demonstrate their CT skills (Case, 2005; Kennedy et al., 1991; Willingham, 2007). As the components that are required to define thinking as "critical" vary between domains, Bailin et al. (1999) argue that domain-specific knowledge is a necessary component. Whether Lipman could be said to have contributed "domain specific" knowledge by contextualising the philosophical ideas available for discussion in fiction texts is also open to debate.

Facione (1990) adds: "Too much of value is lost if CT is conceived of simply as a list of logical operations and domain-specific knowledge is conceived of simply as an aggregation of information" (p. 10) and stipulates the need to understand "methodological principles and competence" as inclusions in "domain-

specific knowledge" making it evident that issues surrounding the construct "CT" owe as much to the discourse as the construction of other terms that have been noted in this thesis.

Halpern (2001) appears to concur with Facione while acknowledging that: "Any assessment of student gains in the ability to think critically needs to be based upon an operational definition of CT" (p. 270). She admits that there is a great overlap in definitions however feels the need to state one, namely, "CT ... includes skills in applying, analysing, synthesizing, and evaluating information and the disposition to apply these skills" (National Centre for Excellence in CT Instruction, 1991, p. 10).

Van Gelder (2005, p. 43) argues that CT is "intrinsically general in nature", and presents a series of lessons which both illuminate its nature and demonstrate how its skills can be taught. Thus it would seem that healthy debate about the nature of CT underpins much of the disagreement that can be noted in the literature. It could also be noted that, if the debaters had followed one of the basic rules of debating, that is, finding consensus about the meaning of terms, much of this disagreement could be avoided. Clearly for many writers, the controversy generated by the debate is the central purpose of such debate as there certainly is general agreement on the meaning of the term "CT" and its place in Education.

Willingham (2007) argues that it is easier to learn to think critically within a given domain than it is to learn to think critically in a generic sense, which implies some areas of agreement. This idea however relies on notions of "easier" and, presumably, "harder" which may be answered by Van Gelder's article (2005) but which can be demonstrated through my own example: If a person has been playing golf since they were a young child, and has acquired the component skills required to play effectively, they would clearly find it easier to transfer these skills to similar activities which require "keeping one's eye on the ball", for example, than those who have not engaged in sport of any kind. Schools in Western Australia arguably have not made any dedicated effort, sincere or otherwise, to teach CT to students. It is easy to believe a proposition that may be supported by this research study that, when students are "placed on the pathway" that many didn't know existed prior to its introduction, those who have a disposition towards critical thought will often walk the path while those who did not previously have such a leaning, may acquire it.

Writers such as Bailin (2002) argue for the necessity of domain-specific knowledge for CT and explain this claim by saying "valid evidence", "arguments", and "standards" tend to vary across domains:

For example, it makes no sense to refer to a process of interpreting which remains constant regardless of subject matter. Rather, what is involved in and even meant by interpreting varies with the context, and this difference is connected with the different kinds of knowledge and understanding necessary for successful completion of a particular task (p. 366).

In making this claim, however, Bailin fails to recognise that teaching CT skills generically would allow students to identify these components themselves as this is how they would apply their skills. It is arguable that the teaching of "CT" is related to teaching students to recognise the need to gain "domain-specific" knowledge in various situations rather than providing that knowledge.

In common with Bailin's view and my criticism of it, McPeck (1990) concedes that there are a limited number of general thinking skills. He spends little time, however, explaining the reasons these should not be taught in favour of placing this concession in the context of a rebuttal of Ennis (1989). His argument makes the claim that the most useful thinking skills are domain-specific and that the more general the thinking skill, the less helpful it is. It is reasonable to wonder about his definition of "useful" and the criteria he uses to judge "usefulness" or "helpfulness" (p. 12). The similar argument constructed by Bailin (2002) that "what is common and general to the concept of CT is so generic that it is not useful" opens itself to the same question. The present study will use a general thinking approach presented to students in subject English as this subject is not only studied by all students in a high school but the skills required to study it, that is, skills related to the English language, are used to engage in every other curriculum subject in which students engage.

In designing the California CT Skills Test (Facione, 1990, 1998), Facione implies that the sub-scales "analysis", "inference", "evaluation", "inductive reasoning" and "deductive reasoning" test "CT", which appears to contradict his earlier comments about the importance of domain-specific knowledge as the skills listed are not domain-specific. In view of this it would appear that, rather than adding to the construction of the term "CT", Facione's comments reflect the confusion that surrounds it which has a direct parallel to the confusion surrounding the issues of "gifted education" noted earlier.

As has been shown, there is significant disagreement about definitions of "CT" particularly in regard to the components that would allow it to be described in a meaningful and, more importantly, useful way. For example, whether the disposition to think critically should be viewed in its normative sense in addition to its laudatory sense is a matter of debate (Facione, 1990).

In order to resolve some of the problems in this area, in 1987 (reported in Facione, 1990) the American Philosophical Association (APA) formed a panel of researchers for the purpose of supporting research efforts by reaching consensus on a definition of CT. Although there was some agreement that dispositions were an important component in such a definition, given the vagueness of the concept "disposition" disagreement on the particular role of dispositions within the definition of CT was inevitable. In reporting the proceedings of the APA conference, Facione (1990) said:

It may be that humans compartmentalize their lives in ways that CT is more active and evident in some areas than in others. This gives no more reason to abandon the effort to infuse CT into the educational system than that knowing no friendship is perfect gives one reason to despair of having friends.

This reflects a pragmatic approach in order to reach goals which are similar to those that are embedded in the research question of the study that is reported in this document that is, benefiting students. Regardless of whether the ability to think critically reflects "academic giftedness" and, regardless of teacher beliefs on this subject, it can be agreed that CT skills are educationally desirable and should be taught.

Although Facione (1990) was clear to say that "good thinking" was *not* synonymous with "CT", by raising the spectre of this as a possible conclusion, the construction of "CT" as a product of a discourse that results in nothing more than a value judgement was made plain. It is easy to disbelieve his denial in favour of the alternative belief that "CT" is synonymous with "good thinking", which does nothing to move the debate forward. Socrates might ask, "What is CT?" to which the reply might be "Good thinking". He might then ask how we define "Good thinking" and receive the response, "It is critical". This construction is more likely to result in committed educators drinking hemlock than achieving success in course design!

4.3 Transferability

It has been noted that students may exhibit CT skills and abilities in one context, or domain, but fail to do so in another (Willingham, 2007). According to Ennis (1989), it is self-evident that researchers' stating that CT is domain-specific are likely to be wary of claims of general transferability of CT. In fact, those operating within the Psychological Tradition have dismissed this transferability as a rare occurrence (Kennedy et al., 1991; Pithers & Soden, 2000; Willingham, 2007). Of course dismissing transferability this way is possibly a tacit acknowledgement of this "rare occurrence" as a possibility, which undermines their more categorical claims. In fact, it is conceded possible to teach the transfer of skills which may undermine some counter claims altogether (Kennedy et al., 1991). For example, a staunch proponent of domain specificity, McPeck (1990) conceded his approach does not preclude the transfer of CT skills and abilities to real-world contexts, particularly when instruction emphasises authentic learning activities that represent problems encountered in daily life.

A study by Halpern (2001) showed college students could successfully transfer CT skills to a context different from that in which they were taught months after the teaching had taken place. In Halpern's study, students' ability to utilise these new skills in authentic real-world contexts was noted.

It is useful to return to the analogy of the skills that may be acquired by learning to play golf at a young age in order to discuss the issue that Bailin (2002) and Ennis (1989) have characterised as the "distance" of

transfer. If the skilled golf player is asked to play croquet, a game that requires a ball being hit with an object that is not dissimilar to a golf club, golf skills may inform the way they would approach this task and in this way, would be considered a "near" transfer. Should the same person be asked to hammer a nail into a piece of wood, although we may be able to see a connection between the skills of golf and carpentry, they are more "distant" than those involved in playing croquet.

In the same way, in CT should a student have mastered the skill of deconstructing an argument into its component parts, the skills required to make a decision about which motor vehicle to purchase, although connected as both require analysis of various claims, are more "distant" than asking our master debater to read a persuasive essay, for example. Researchers have used this argument as a way to support their own claims about the transferability of CT skills both with and without domain-specificity. For example, some have used the term "transfer" to describe the process of applying CT skills learned as part of their academic education to issues encountered in "the real world" (McPeck, 1990). As in all other fields, the way a discourse has been constructed will dictate the conclusions a writer comes to about the components inside the discourse.

In 1988 Nickerson reviewed the literature and concluded that the success of any transfer method appears to depend on what is being taught and how it is being taught. In arguing that instructional courses designed to improve metacognitive skills demonstrated more successful transfer than training courses for basic cognitive processes, he implied the somewhat obvious conclusion that it is necessary to construct an instructional course that is designed to be transferable if this is the desired outcome.

4.4 Teaching Philosophy/CT

Before going on to advocate skilling teachers in Philosophical skills to prepare for the necessary task of teaching Philosophy, UNESCO (2007, p. 12) states:

The teacher's profession consists in knowing how to teach, which implies that teachers have to acquire a particular group of skills. This question is ignored by some philosophers who maintain that to teach one needs only to know that "teaching" equals "explaining what one knows".

Bloom's taxonomy and Piaget's Theory of Cognitive Development (Piaget 1967/1971) are two theories regularly taught in Education courses throughout Australia (Hattie & Brown, 2004 p. 3). For example, in a document to guide course construction in the University of New England's publication *The aligned curriculum* (Chapman, 2004), we are told:

We use Bloom's numbered taxonomy system as an easy way to see the level of thinking required across a course and at the unit level of learning outcomes. While assessment tasks at levels 1 and

2 are acceptable, the bulk of assessments at university should aim to require students to perform at levels 3 and well beyond. Other systems or hierarchies have been developed but Bloom's taxonomy is easily understood and is probably the most widely used approach in education fields.

In terms of a discourse that constructs cultural concepts (Silverstein, 2004), these theories play a central role in constructing a theoretical basis for the activities of most teachers even if, as has been acknowledged, neither theory is widely read in its original form. It is true that Educational institutions believe they have "taught" these theories to beginning teachers and expect that they will inform the basis of planning and delivering lessons. Research suggests that these concepts do not in fact have the intended result and my view is that, if they did, the current project would be unnecessary (Goodwin, Lefkowitz, Woempner & Hubbell, 2010).

For example, much of early research conducted in Education was undertaken within Piaget's cognitive framework owing to its place as a paradigm in the culture (Hodge & Kress, 1988) and as a consequence of its widespread dissemination. The conclusions reached that indicated that cognitive processes in children were not as developed as those of older people were understandable. The interpretation of Piaget's stages of cognitive development in a way that indicates that children are incapable of abstract reasoning, which was described by Piaget as "formal operations", precluded attempts to teach CT within a profession that often had little regard for the "institutional knowledge" (Schön, 1995) that may have informed such attempts (Kennedy et al., 1991). Later research suggested it was possible to include such attempts in the curriculum (see, e.g., Gelman & Markman, 1986) which may have been one of the cultural imperatives that allowed the development of a "Philosophy and Ethics" course for delivery in Western Australian Schools. Silva (2008) echoes Lipman's arguments for teaching Philosophy or CT to children by claiming there is no developmentally ready time which is most appropriate. Willingham (2007) contrasts examples of CT in children with that of trained scientists who occasionally demonstrate errors in reasoning. After analysing the research literature on this subject, Kennedy et al. (1991) concluded that the capacity for critical thought appears to improve with age however even young children can benefit from instruction in this area, as had previously been argued by others, including Lipman (1988, 1988b, 1991, 1996).

According to Ennis (1993), Bloom's taxonomy refers to the types of thinking noted in the performance of activities by students in schools and the most complex types, that is, "analysing", "synthesising/creating", and "evaluating" are sometimes offered as a definition for CT. Hattie and Brown (2004, p. 3) acknowledge that Bloom's Taxonomy is the most well-known taxonomy in education and that most, if not all, beginning teachers would be familiar with its concepts as a consequence of their training. Hattie's (2003) meta-analysis of studies, however, used an alternative taxonomy, namely, the Structure of Observed Learning Outcomes (SOLO) taxonomy (Biggs & Collis, 1982, 1986) with a view to achieving the aim of "Building Teacher Quality" by investigating the qualities of teachers. This analysis led Hattie to define three

categories of teacher, namely, novice, experienced and expert. His description of the criteria by which he decided how individual teachers should be labelled, although based on SOLO, has a rough approximation to Bloom (1956), particularly in the teaching behaviours "expert" teachers might exhibit (Hattie, 2003, p. 9). For example:

Expert teachers aim for more than achievement goals. They also aim to motivate their students to master rather than perform, they enhance students' self-concept and self-efficacy about learning, they set appropriate challenging tasks, and they aim for both **surface** and **deep** outcomes.
(emphasis added)

In defining the key terms (p. 9), Hattie says:

We can make a distinction between surface and deep learning. Surface learning is more about the content (knowing the ideas, and doing what is needed to gain a passing grade), and deep learning more about understanding (relating and extending ideas, and an intention to understand and impose meaning). The claim is that experts are more successful at both types of learning, whereas both experienced and expert teachers are similar in terms of surface learning.

It can be seen that "surface" learning is similar to the descriptions given in Bloom of "lower-order" thinking whereas "deep" thinking is similar to "higher-order" or, as has been shown, "CT" (Ennis, 1993). While acknowledging that Hattie offers further descriptions of "expert teachers" that go beyond the thinking they demonstrate and seek to engender in their students, it is easy to see that one of the qualities they exhibit is the ability to think critically when it is warranted by the context. In this way, Hattie provides support for the value of CT as a component of high-quality teachers.

Although widely acknowledged as desirable however, it has been accepted that preparing teachers to teach CT and to engage in it themselves is difficult for a variety of reasons. For example, in a recent interview (Saeed, 2005), Lipman argued:

The teacher needs to have had a course for training in how to conduct a philosophical discussion, how to employ the exercises and discussion plans, and how to encourage children to think for themselves. This course in training would also make use of the text, *Philosophy in the Classroom* (Lipman & Sharp, 1980).

If Lipman's argument is correct, it could explain why "Philosophy" has had such a small uptake in Western Australian schools as few teachers would have the time to read Lipman's teacher manual and perhaps would not have the inclination to participate in extensive professional development.

It has also been argued that, with the abundance of literature available on CT, there are many different

definitions of CT, which also makes it difficult to implement CT in classrooms (Wright, 2002). Rudd (2007) states that students need effective instruction in order to develop good thinking skills however Willingham (2007, p. 8) goes so far as to say: "Can CT actually be taught? Decades of cognitive research point to a disappointing answer: not really." In between these two views there is a range of intermediate views although most agree that, whether it can be taught or not, it seldom *is* taught successfully (Choy & Oo, 2012).

A concerted effort among universities and other teacher education institutions to incorporate CT into their curriculum has been noted by research (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001) which also notes that students may not be able to think critically because their teachers are not able to model CT sufficiently by incorporating it into their daily practice. The central reason for this is a requirement, which they were unable or unwilling to meet, for a certain amount of reflection. The connection between CT and reflection originally noted by Dewey (1933) has been long known.

Some studies, such as that conducted by O'Hare and McGuinness (2009), have investigated the development of CT skills and abilities as students proceed through tertiary education and noted that the CT scores of third-year university students in Ireland were significantly higher than the corresponding scores of first-year students in the absence any direct instruction in CT. The authors speculated that attending university exerts an independent effect on the development of CT, which conclusion is supported by a meta-analysis of eight studies in which Gellin (2003) concluded that college students who engaged in extracurricular social activities improved CT skills. Gellin also cited research that showed that those involved in teaching CT as part of the curriculum did not understand it (Paul, Elder & Bartell, 1997, as cited in Gellin, 2003, p. 746).

One important point in relation to teachers' CT abilities is that students learn more from what teachers do than from what they say (Blohm, Facione, Facione & Giancarlo, 2002). This is a similar view to Lipman's in the sense it suggests that teachers are a key factor in students' acquisition of the skills of CT at all levels of the teaching/learning process albeit providing different reasons for this view. In High School classrooms it may be asked: If teacher modelling is important and teachers are not "modelling" CT, what are they modelling and how does it impact on student learning? If they are in the classroom and demonstrating a range of behaviours then, even if they are not deliberately acting in a way that provides information to students about how to act, they are still modelling behaviour albeit unwittingly! In fact, a University Professor who was consulted during the preparation of this thesis as he had responsibility for teaching domain-specific CT stated that the positivist viewpoint presented to students by the majority of his colleagues was responsible for the unwillingness of students to engage in the compulsory course he delivered (personal communication, September 2013).

Choy and Oo (2012), for example, reported a study that had research questions regarding the reflective thinking skills of teachers in which it was found that most of the teachers did not reflect deeply on their teaching practices nor did they practise the four learning processes which the researchers claimed were indicative of reflection: assumption analysis, contextual awareness, imaginative speculation and reflective scepticism. The conclusion was that CT is practised minimally among teachers.

Gibbs (1997, p. 2) stated: "If the aptitude of a teacher is lacking, he is not willing to teach thinking to his students", while Paul (1992) argues that typical school instruction does not encourage the development of higher-order thinking skills like CT. Paul suggests that the "coverage of content approach" found in typical schools, is designed on the premise that recall is equivalent to knowledge. This type of lower-order learning which includes a large learning-by-rote component or association, results in students who memorise material rather than understanding the logic of it. Students tend not to recognise that their assertions, beliefs, and statements have implications which require supporting evidence. For most students, believing, not thinking, is knowing (Paul, 1992).

Walsh and Paul (1998) state that in order to improve students' CT skills, teachers must be trained in this subject and take some compulsory internal education and, only in this way, can teachers be good models who think effectively for their students. Ann (2000) indicates that teachers must be good guides for their students in how to get the knowledge and how to absorb, criticise, and use it. Dalzell (1997, p. 5) also says: "A teacher who can think effectively is a very good model for his students and this creates an encouraging state."

The Mid-continent Research for Education and Learning (McREL) has collected data from more than 27,000 classroom observations that offer a dismaying glimpse into the level of instruction that appears to be occurring in America's classrooms (and that intuition tells us is probably reflected in those of Australia also). In well over half of these observations, student learning reflected the two lowest levels of Bloom's taxonomy: remembering (25 percent) and understanding (32 percent). Meanwhile, students were developing the higher-order thinking skills of analysis (9 percent), evaluation (3 percent), and creation (4 percent) in less than one sixth of the classrooms observed (Goodwin, Lefkowitz, Woempner & Hubbell, 2010).

It is difficult to understand why proponents of teaching CT do not necessarily accept the basic assumption made in this thesis that teachers can acquire the skills necessary to teach CT in their classrooms by *engaging* in CT. In the research undertaken in this study, teachers were provided with enough detail through guiding documentation to support the delivery of the course and, in this way, the need to have professional development and teaching manuals could be negated when teachers have a disposition to

engage in CT. Arguably, if teachers do not have such a disposition, nothing would encourage them to develop it.

Halpern (1998) has pointed to research from the field of psychology which has conclusions similar to those reached by others (Kennedy et al., 1991; Van Gelder, 2005) that suggest a significant proportion of adults fail to think critically and also lack basic reasoning skills. Halpern (1998) suggests that the large numbers of people expressing a belief in paranormal phenomena is indicative of this failure. Others such as Richard Dawkins (2006) would argue that religion could be used as a similar example. Arguing that there is a lack of supporting evidence, however, makes no concession that "evidence" in the realm of "belief" can be seen as any observation that is construed this way by the members of a culture. That is, we are free to believe as we like! Halpern attributes such failures to simple "bugs" in reasoning rather than the inability to reason well. Halpern's belief in turn, suggests that she is in possession of an a priori knowledge it is not possible to acquire since she cannot be privy to the knowledge of whether paranormal phenomena exist. Therefore, her inclusion in this literature review is simply for interest as the conclusions formed by Halpern have no more legitimacy than the belief in the phenomena she is deriding.

In attempting to support her argument, she points to a tendency possessed by humans to look for patterns such as causal connections, even when none exist. In fact it could well be asked: does not the fact that there are critical thinkers in the world prove that it can be learned or is one born a critical thinker?

In Van Gelder (2005) Kuhn (1991) quotes Michael Shermer (2002) as describing people as "pattern-seeking, storytelling animals" (p. 42), a tendency that leads us to being "comfortable with the first account that seems right" even if the patterns apparently being observed are not actually present. Interestingly, there is little discussion about the nature of the evidence necessary for one person to claim the existence of a pattern and another to dismiss this although it is suspected that these claims also rely on a positivistic view of the world which, particularly in the area of "cognitive science", is questionable for reasons that have already been explained: a "science" that investigates the workings of the mind, must operate within a constructed discourse of what constitutes "mind", which is necessarily not objective (see Chapter Three). In fact, such a claim depends on the same elusive a priori knowledge, the logical lack of which has been noted previously. While somewhat patronisingly defining this entirely constructed phenomenon as "makes-sense epistemology", Perkins, Allen and Hafner (1983, p. 186) have also entered into the sacrosanct realm of "belief" which, as opposed to claims of "knowledge", needs no definition or evidence.

In quoting Messer and Griggs's (1989) study on the weight people place on personal experience as evidence to support their belief in paranormal phenomena, Halpern (1998, p. 449) appears to think this poses a problem for psychologists who wish to understand how these beliefs are maintained in the absence of "credible evidence". Whether evidence is "credible" or not, however, seems to be dependent on

the believer's point of view. Halpern's point of view is evident when she decries the lack of "scientific training" among paranormal researchers suggesting that she herself makes a great number of assumptions without critically examining them. She then concludes that we should not expect to see dramatic improvements in CT over time as a result of instructional interventions, as a result of the poor reasoning she believes herself to have identified.

Kennedy et al. (1991) point out that empirical research suggests that students of all intellectual ability levels can benefit from CT instruction. Similarly, Lewis and Smith (1993) argue that CT skills are for everyone, not just the gifted. This does not mean that all will acquire the skills to the same extent. It also does not suggest that all who acquire the skills to any extent are gifted in any way. It does leave the proposition available, that those who demonstrate a profound understanding of CT and are able to regularly engage in it are possibly "academically gifted".

The APA conference referred to above, on deliberations to define CT, recommends that "from early childhood, people should be taught to reason, to seek relevant facts, to consider options, and to understand the views of others" (Facione, 1990, p. 27). The conference report advocates the inclusion of explicit instruction in CT skills and abilities in all levels of the K–12 curriculum, although teacher education institutions might respond that this is the reason for the inclusion of Bloom in education courses that was noted earlier.

An interesting study by Koenig and Harris (2005), the findings of which were replicated in a number of later studies such as Jaswal and Neely (2006), for example, demonstrated that 3- and 4-year-old children will differentiate the credibility of various sources of information. The 4-year-old children appeared to prefer the judgements of adult participants who had a history of being correct over those who were purposefully inaccurate.

Earlier Lutz and Keil (2002) had shown an ability among young children to differentiate between domains of expertise and find a connection to their credibility. For example, a mechanic's diagnosis of car trouble was found to be more credible than a doctor's. Heyman and Legare (2005) described a difference in awareness of children between the ages of 7 and 10 and those of younger children of people's motives to distort the truth and the relationship of this with credibility; a skill that is directly related to CT.

4.4.1 How is Philosophy/CT Best Taught?

Some researchers into the teachability of CT through Philosophy courses and/or other strategies have noted the existence of CT and suggested ways in which it can and cannot be defined. They have also

debated whether it can be taught at all and if so, how. A significant omission in the literature appears to be an investigation of how those who can be identified as "critical thinkers" through the application of definitions and checklists acquired the set of skills or abilities that would allow them to be so described if it was not through teaching, whether we construe that term to mean "formal" teaching as might take place in a classroom, or informal other means that have facilitated its learning. If Willingham (2008, p. 8) is correct in his assertion that they cannot be taught, then how are they acquired and what is the explanation of the indisputable fact that there are both critical thinkers and non-critical thinkers in the world?

Perhaps this result could be explained by nature, that is, there is a CT gene base that predisposes some people towards critical thought and others not to be so disposed. If this notion is accepted surely it suffers from the same problems that have been noted in regards to the similar notion of "underachieving gifted". Is there any logical sense in saying that there are critical thinkers who never think even if one wishes to argue that there is a reason for this, namely, they are not *disposed* to do so? Is a thinker who never thinks still a thinker? This is a seemingly philosophical question or, more likely, a nonsense concept devised by Lewis Carroll to be abandoned amongst the "slithey toves".

Alternatively, it could be explained by the fact that this notion, in common with all others, is constructed by the discourse. If this is so, it leads to the irresistible conclusion that the true definition is that which occupies the most significant place in the culture, as the definition is at once the concept it is seeking to define. This becomes so as it is a function of the place such notions occupy in the culture. This is certainly an idea that has a prominent place in this thesis in relation to many other constructs and it has the added advantage of making enough sense to allow it to be dealt with provided this is also done within the construct.

Many researchers maintain that the collection of skills and abilities they would construct as part of the concept "CT" can be taught. Halpern (1998) suggests this to be the case given "appropriate instruction" and describes two instructional courses aimed at improving the CT skills of college students although she criticises the way the success of such courses is assessed. She also criticises teachers for not applying any knowledge of "cognitive psychology" they might have, while framing the vague advice she gives on how to teach CT in terms that are derived from this discipline. She refers to "good instructional programs" but does not provide enough detail for a teacher looking for a "how to do it" guide to be able to incorporate her ideas in a teaching/learning program.

Abrami et al. (2008) have stated a belief that most educators would agree that learning to think critically is among the most desirable goals of formal schooling, a view shared by Bailin and Siegel (2003) when they said that "CT is often regarded as a fundamental aim and an overriding ideal of education" (p. 188). This

view echoes Sheffler (1973, p. 1): "CT is of the first importance in the conception and organization of educational activities."

There has been debate whether CT can be taught in a general sense, that is, a set of skills that can be applied to all situations, or whether it should be taught in regard to "domain-specific" knowledge which suggests the need to teach it in the context of each subject in the curriculum as no transferable skills are taught. Examples of the pure general approach are described in several summaries, including those by Kruse and Presseisen (1987), Nickerson, Perkins and Smith (1985), Sternberg (1984, 1986), and Sternberg and Kastoor (1986). Ennis (1989, p. 4) clarified it this way:

By the "general approach" I mean an approach that attempts to teach CT abilities and dispositions separately from the presentation of the content of existing subject-matter offerings, with the purpose of teaching CT. Examples of the general approach usually do involve content. Local or national political issues, problems in the school cafeteria, or previously learned subject matter, for example, could provide content about which the CT is done, but the primary purpose is to teach students to think critically in non-school contexts. However, the concept of the general approach does not require that there be content.

It has been noted however that if CT skills can be considered generic, they should be taught in specialised courses that focus on component skills (Royalty, 1991; Sá, Stanovich & West, 1999, as cited in Abrami et al., 2008).

A study was conducted in 1991 using Ennis's (1989) general approach in which 70 fourth- and fifth-grade public school students were taught to adopt the roles of four modes of thinking (task definer, strategist, monitor, and challenger) with encouraging results (Riesenmy, Mitchell, Hudgins & Ebel, 1991) that compared performance in critical-thinking activities with a control group who had been given no instruction. The group receiving instruction performed significantly better than the control group immediately after as well as at a later time, suggesting that real and enduring changes had been made in students' thinking.

McCarthy-Tucker (1998) reported that high school students in English and algebra who received a mixed-method approach (Ennis, 1989) consisting of instruction in formal logic as a supplement to instruction in standard curricular content in these subject areas, showed much greater improvement than a control group on two standardised measures of thinking, namely, the Test of Logical Thinking (TLT) and the Content Specific Test of Logic (CSTL).

Although some researchers state that students need to be taught specifically to transfer critical-thinking skills between domains (Bailin et al, 1999), if transfer is possible this appears to undermine any claims that CT has to be taught in relation to specific domains of knowledge. Surely, if skills that are taught using a general approach can be transferred if they are deliberately taught to be so, does this not simply indicate

the need to teach them in this way every time they are taught? The consequences of this for instruction are:

- Students must be given opportunities to apply the components of critical-thinking skills in a range of contexts.
- An emphasis should be made on metacognition which, combined with "executive functioning", has been defined by Kennedy et al. (1991) as goal setting, planning, and monitoring progress toward goals.
- Students should be sensitised to "deep problem structure", an explanation of which is provided below.

Halpern (1998) has claimed that "structure training" is a way of ensuring transferability of CT skills that have been taught using a general approach. She states that "students need spaced practice with different sorts of examples and corrective feedback to develop the habit of 'spontaneous noticing'." She then suggests that providing cues for students to recall information already held in memory is a way of allowing connections to be made between various contexts.

Hummel and Holyoak (as cited in Halpern, 1998, p. 453), in identifying "structure sensitivity" as a fundamental property that underlies human thought, said: "First thinking is structure sensitive. Reasoning, problem solving, and learning ... depend on a capacity to code and manipulate relational knowledge." This view is shared by Willingham (2008) who distinguishes between a problem's "surface structure" and its "deep structure" in suggesting how to address the problem of transferability.

Brown (1990) argues that domain-specific knowledge may also be necessary for young children to successfully transfer skills to new problems that display the same deep structure. She observes:

We conclude that even young children show insightful learning and transfer on the basis of deep structural principles, rather than mere reliance on salient perceptual features, when they have access to the requisite domain-specific knowledge to mediate that learning (p. 130).

This conclusion suggests that achieving the transfer of critical-thinking skills includes providing adequate instruction on relevant background information; however, Halpern's (1998) notion of facilitating recall may achieve this result.

Specific instructional strategies to facilitate the emergence of skills noted as being associated with CT are noted in the literature such as explicit instruction, collaborative or cooperative learning, modelling, and constructivist techniques, although it is acknowledged that these are not necessarily discrete concepts. For

example, Abrami et al. (2008), Case (2005), Facione (1990), Halpern (1998) and Paul (1992) have indicated the desirability of explicit instruction in CT and Facione (1990) has indicated this instruction should include attention to its dispositional aspects.

A collaborative or cooperative teaching approach is advocated by some (Abrami et al., 2008; Bailin et al., 1991; Bonk & Smith, 1998; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000). Links with Lipman's approach are easy to establish when the connections are acknowledged and considered between these notions and the work of Vygotsky (1930–1934/1978). This is particularly so in relation to his description of the "zone of proximal development" as the distance between the possible accomplishments of an individual and his or her accomplishments with the help of a more capable other. Lipman used the term "community of enquiry" which placed similar emphasis on social interactions as a means of facilitating cognitive development (as summarised in Dillenbourg et al., 1996). It is also noted that Piaget's (1967) suggestion of "cognitive conflict" that can emerge from interacting with others is echoed in this research.

Thayer-Bacon's (2000) paper is an example of research suggesting the importance of collaborative learning. Others such as Bailin et al. (1999) support this notion, arguing that CT involves the ability to respond constructively to others during group discussion, which gives support to Lipman's "community of enquiry" model. It is claimed that interacting in ways that encourage and respect the contributions of others has a powerful effect on the development of CT skills. In providing support to this notion, Heyman (2008) indicates that social experiences can shape an individual's reasoning ability particularly in relation to considerations of the credibility of various evidential claims. Abrami et al. (2008) found support in their meta-analysis for collaborative learning approaches to the development of CT.

In supporting a collaborative approach as a means of allowing opportunities for disagreements and misconceptions to arise and be discussed, Nelson (1994) points out that this is best achieved through a scaffolding process. A three-stage approach is suggested which consists of:

1. preparation to provide students with a common background for collaboration, which can be achieved through strategies such as providing the same information to the group;
2. the provision of focus questions or analytical frameworks of a more sophisticated nature than they would devise themselves;
3. structuring the collaboration through the creation of incentives for group members to participate by defining roles.

Bonk and Smith (1998) identify a number of activities that facilitate the gains noted by others in adopting a collaborative approach. They include traditional teaching strategies such as: Think-Pair-Share, Round

Robin discussions, student interviews, roundtables, gallery walks, and "jigsaw" activities. In addition to explicit instruction and collaboration, they also advocate pedagogies that rely on constructivist learning, which are student- rather than teacher-centred (Bonk & Smith, 1998), a position also supported by Paul (1992).

Constructivist instruction could be considered less structured by "traditional teachers", particularly those who have been described by Schön (1995) as preferring knowledge through practice rather than university knowledge. As "Constructivism" has been one of the catch cries of Education faculties in Universities in recent times, it can reasonably be considered the kind of knowledge that is discarded by practitioners as a result of what has been described by Schön (1995, p. 28) as "the dilemma of rigor or relevance". In placing the onus on students to take responsibility for their own learning, the emphasis is moved from the teacher to the student, which is often a difficult concept for teachers to embrace.

Although some of the difficulties in suggesting teachers model CT have already been explored, the literature continues to advocate modelling, suggesting that a way of achieving it is by making their reasoning visible to students during the course of their classroom activities. Although suggesting "thinking aloud" as a possible strategy, in the hope that students can observe the teacher using evidence and logic to support arguments and assertions, neither Facione (2000) nor Paul (1992) has acknowledged the research mentioned previously that indicated that teachers have poorly developed skills in CT. The tautology embedded in this statement is acknowledged although, in a constructivist, collaborative learning forum, a way might be provided for teachers to test their beliefs about how skilful they are in CT if they are student-centred enough to accept the result. Certainly, the admonition of Facione and Paul does not address the problem of how teachers may acquire the skills they are attempting to teach.

The suggestion to use concrete examples to illustrate abstract concepts can be seen as harking back to the ideas of Piaget (Heyman, 2008; Paul, 1992). Examples of "concrete examples" have been suggested as: the creation of graphic organisers such as concept maps and argument diagrams (Bonk & Smith, 1998; Van Gelder, 2005); KWL charts, which require students to identify what they already know about a topic, what they want to know, and what they have learned upon completing instruction; "in a nutshell" writings, which entail summaries of arguments; exit slips, which identify the most important thing learned and the areas of needed clarity; problem-based learning, particularly the use of ill-structured problem contexts; and mock trials (Bonk & Smith, 1998).

The issue of domain specificity that has already been referred to has implications for the teaching of CT. For example, Ennis (1989) considered a range of approaches to teaching the skills of CT in ways that did not rely on the subject approach that is implied if not taught specifically in teacher education courses presenting Bloom's Taxonomy.

The "general approach" in which CT is taught outside the regular curriculum has already been described. In fact the Western Australian Philosophy and Ethics course (2013) could be considered such an approach even though it is now considered part of the optional curriculum in Years Eleven and Twelve in some WA schools. In some instances of this approach, content is used in order to contextualise the course content although it is not necessarily related to domain- or discipline-specific knowledge, being most commonly drawn from authentic life problems.

Van Gelder (2005), for example, advocates the general approach by arguing that students need "deliberate practice" in CT before suggesting that this can only occur through its explicit teaching apart from other curriculum content. As has also been mentioned, it is common for writers to indicate the need to teach for transferability by using a variety of contexts in which to consider problems that allow the development of skills. For example, Halpern (2001, p. 278) claims that teaching general thinking skills in a "broad-based, cross-disciplinary" course, is the preferred method.

Proponents of the infusion and immersion approaches appear to include Bailin et al. (1999) while Lipman (1988) can be seen to take a general approach while also arguing that the teaching of CT must be accompanied by instruction in basic skills, such as reading, writing, listening, and speaking. This view is shared by Bailin et al. (1999) and Silva (2008) who maintain the need for knowledge to be taught simultaneously with thinking.

Pithers and Soden (2000) dispute the notion that CT can be taught independently of the curriculum, preferring instead the view that remains embedded in teacher education institutions that instruction in ways of teaching higher-order thinking across the curriculum can be successful. In light of a wealth of evidence that it cannot, Case (2005) argues that CT "is a powerful method of teaching all other aspects of the curriculum — both content and skill" (p. 46).

Explicit instruction in critical-thinking skills can be incorporated into both the general and the specific components of the curriculum according to Ennis (1989) and Facione (1990). Facione (1990, p. 10) claims that CT can be taught in the context of domain-specific content, or content drawn from "events in everyday life" (p. 10).

Paul (1992) also recommends a "mixed" approach of running basic critical-thinking skills courses, as well as courses within specific subjects. Kennedy et al. (1991) reviewed research on various approaches and concluded that there is no evidence to support the superiority of any particular approach.

In their meta-analysis of 117 empirical studies on the effects of instructional interventions on students' CT skills and dispositions, Abrami et al. (2008) suggested that CT should be taught both by integrating CT into regular academic content, and by teaching its skills independently. The authors also found that interventions in which educators received special training in teaching CT had the most significant outcomes, compared to studies in which course curricula were simply aligned to CT standards or CT was simply included as an instructional objective, suggesting, in support of Lipman, that professional development for teachers is required. This fact may be troubling to the writers of The Australian Curriculum who cite *The Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) which states that "critical and creative thinking are fundamental to students becoming successful learners" but suggests no means of skilling teachers in teaching CT.

4.4.2 Metacognition

In relation to the previous section, it is also useful to discuss the notion of Metacognition, which is simply defined as "thinking about thinking", and its connection to CT. Other more robust definitions which include an element of self-regulation include those shown in Table 6:

Table 6.

Definitions of Metacognition

the knowledge and control children have over their own thinking and learning activities	Cross and Paris, 1988, p. 131
awareness of one's own thinking, awareness of the content of one's conceptions, an active monitoring of one's cognitive processes, an attempt to regulate one's cognitive processes in relationship to further learning, and an application of a set of heuristics as an effective device for helping people organize their methods of attack on problems in general	Hennessey, 1999, p. 3
the monitoring and control of thought	Martinez, 2006, p. 696
cognitive competencies...most relevant to CT	Kuhn, 1999, p. 17

Others are not as emphatic about the connection between metacognition and CT. For example, writers such as Van Gelder (2005) and Willingham (2007) consider metacognition a component of CT that allows the thinker to use strategies and skills appropriate for the context. Others describe metacognition in relation to its role of allowing monitoring of the quality of CT (Kuhn & Dean, 2004; Schraw et al., 2006). Halonen (1995) describes it as a component with a similarly utilitarian purpose and Halpern (1998, p. 454) stipulates that this purpose is achieved by asking metacognitive questions such as:

(a) How much time and effort is this problem worth? (b) What do you already know about this problem or argument? (c) What is the goal or reason for engaging in extended and careful thought about this problem or argument? (d) How difficult do you think it will be to solve this problem or reach a conclusion? (e) How will you know when you have reached the goal? (f) What critical-thinking skills are likely to be useful in solving this problem or analysing this argument?

The APA report describes the experts agreeing that "self-regulation" is a metacognitive component of CT (Facione, 1990), which is similar to the conclusion drawn by Schraw et al. (2006) that suggests "self-regulated learning" is the result of metacognition, CT, and motivation defined as: "our ability to understand and control our learning environments" (p. 111). Flavell (1979) sees CT as part of the construct of metacognition when he argues that "critical appraisal of message source, quality of appeal, and probable consequences needed to cope with these inputs sensibly" can lead to "wise and thoughtful life decisions" (p. 910).

Lipman (1988) claims that metacognition is distinct from CT as in itself, it doesn't need to be critical; it is possible to think about one's thought in an unreflective manner which seems to negate the obvious truth that "thinking about one's thoughts" could be a definition of both metacognition and being reflective although the ability to decide when it is appropriate to use a particular thinking skill could be said to be a function of general intelligence (McPeck, 1990).

In addition to the parts that make up "CT" that have already been described, Bailin (2002) attempts to construct a connection between creativity and CT, a view that is shared by others (Bonk & Smith, 1998; Ennis, 1985; Paul & Elder, 2006; Thayer-Bacon, 2000). Paul and Elder (2006) note that both creativity and CT are aspects of "good", purposeful thinking, suggesting that this is the connection between two concepts that seem dissimilar at first glance. For example: "CT without creativity reduces to mere scepticism and negativity, and creativity without critical thought reduces to mere novelty" (p. 35). They claim before going on to explain their view that the two concepts are both inextricably linked and develop in parallel which, they say, has implications for teaching.

4.5 Conclusion

Although the research community has suggested for many years that Philosophy and critical and reflective thinking are ways of improving the educational outcomes of students, little has been done to incorporate them into school curricula. This is certainly the case in Australia owing to a number of reasons that have been noted but also as a result of the institutional cultures across the states remaining steeped in the past. In fact, it is easy to believe that the situation described earlier has changed little as it appears to relate to a continuing apathy in Australian education referred to earlier when quoting Cunningham (1972, p. 10):

A visiting academic, J Russell, who was Dean of Teachers College at the University of Columbia, visited Australia in 1928 and commented on how all education systems here were influenced by the nineteenth century, characterised by sameness, uniformity ... and acceptance of older methods and ideas.

Further to this, an educational conference held in Australia in 1937 revealed that the situation had not changed during the preceding nine years as is evidenced by a joint statement about the "Lack of encouragement or incentive for each school and each teacher to show originality" (Cunningham, 1972).

Even though the Partnership for 21st Century Skills has identified CT as a skill necessary to prepare students for both tertiary education and the workforce and UNESCO has issued a report advocating the inclusion of Philosophy into the curriculum as a way of preserving freedom, little has happened to include its teaching which may be largely due to the difficulties noted earlier (e.g., Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001), showing that modelling CT is essential to its teaching and that teachers are not able to model critical thinking sufficiently by incorporating it into their daily practice .

CT skills are embedded in the Australian Curriculum as well as other important student learning outcomes and it has been shown that students who can reflect on their own thought processes and the "content" of their thoughts are more likely to demonstrate thinking that researchers have described as "high-quality". Metacognitive processes and the ability to critically evaluate one's own arguments through "reflection supports" have been shown to be necessary for self-regulated learning.

It has also been shown that a "disposition" to think critically which engenders motivation can be developed through appropriate pedagogical strategies that can also lead to a facilitation of attitudes of willingness to consider diverse perspectives through collaboration, which also may promote higher-order thinking.

The research question of this study, namely:

How do teachers of English describe the value of the course in Philosophy/CT in relation to its success in achieving its goals, specifically:

- (i) How do they perceive their own development of skills to teach Philosophy/CT thinking in a mainstream classroom?
- (ii) How do they perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

is derived from Lipman's view (Lipman, 1991, cited in Kuhn, 2004) that engaging students in Philosophy in the classroom, necessarily involves engaging them in CT. The course described in Chapter Six of this thesis is clearly first and foremost a course in Philosophy, however its connection with the literature on CT described in this chapter is also explored in Chapter Six. The analysis of the research, in relation to whether the claims made by Lipman can be upheld in running a short, ten-week course in subject English, relies solely on the perceptions of the teacher participants because, by term three when the study will be conducted, they know enough about their students to make meaningful comments on changes and improvements in their students' thinking.

Before detailing the actual course that will be the instrument of this study, the next chapter will seek to describe and explain the research methodology used to communicate what happened while teachers implemented the course and describe the phases of implementation, review and analysis.

Chapter Five: Methodology: Description, Defence and Justification

5.1 Introduction

I am a teacher. Although I currently do little teaching beyond the small number of students I tutor in order to pay the bills during a full-time PhD study, I am still a teacher. I undertook this study because of this status, wishing to add something to my profession that would benefit high school students, perhaps in the mildly arrogant belief that I had learned something worthwhile during my long career that was worth investigating, formalising and passing on.

As well as still having a passion for teaching, I also have a passion for expressing my professional experiences by way of subjective storytelling, sharing not just the anecdotal happenings but the emotional and cognitive impact of these happenings. This is a reason I was attracted to the methodology of autoethnography as a means of conducting and passing on the research experience.

I have learned many things during my career and most have had a profound impact on my thinking. For example, in an effort to be the best teacher I could be, I enrolled in a Master's program in the late nineties only to find that neither the university nor the school system made any strenuous attempt to share the often excellent research undertaken at universities with those who could benefit from it in classrooms. My Master's thesis languishes on a shelf in the university that awarded it in a locked cabinet, inside a locked room on the second floor of a building. In order to access it, one needs to request the keys from a reception desk and provide a reason for wishing to do so. The symbolism of this exercise does not escape me although it has been explained by the literature (Schön, 1995).

It would seem that the faith I put in the research and the literature that results from it is not well shared in the profession for which I have a passion. In fact, many of my own experiences reflect this.

I would claim that throughout the many years I was a teacher, I have seen nothing more than a re-labelling of existing practices as a result of each attempt at change. My most recent experience was when attempts were made to introduce Outcomes Based Education (OBE). As a persistent scholar, my first response to the announcement of the intention was to undertake a literature search so I could understand the theory behind this move. Having done this, I concluded it had educational merit.

As my colleagues and I went through the mandatory professional development, I often heard reservations expressed about the changes. The fact that many people are resistant to change in the workplace (Topchik, 2001) goes some way to explaining this reaction. As a Senior Teacher I considered it part of my

responsibility to encourage colleagues in my department to embrace new and worthwhile ideas by engaging them in professional discussion.

On one occasion, I engaged in a discussion with a few colleagues about OBE in the presence of a student teacher I was mentoring during an extended final practicum. He took me aside afterwards and told me his view was that it was as if these colleagues had put their fingers in their ears and loudly called out, "Nooonoooooo..." at the first mention of the word "theory". It has long been my view that the word "theory" provokes the same reaction among many teachers as citronella provokes in cats: aversion. There appears to be good support in the literature for this view (Schön, 1995).

Of course, as a PhD candidate seeking to "make a difference" through my research and thesis, this belief placed me in an invidious position. As an experienced teacher, I had often been asked across the table in the staffroom and other similarly informal places if I had any ideas about teaching a particular topic. I had provided a response and sometimes colleagues would provide feedback by saying, "That went well" or, "I won't try that again" which, at a fairly basic level, could be said to be a form of reflective practice. That is, they had examined whatever educational measure they had used and, using a set of criteria that went unstated, considered its merits. This consideration would affect their behaviour in the future as they would use it again, perhaps in an altered form, or not. In order to justify this claim, it is necessary to provide a short description of "reflective practice", especially as this is one of the "catchcries" in the Education faculties of many modern Research Universities including UNE. This is also a necessary reason I have chosen the methodology explained in this chapter, that is, I believe that a thesis written in an easily accessible fashion which is analogous to the means of conveying information in the staffroom could participate in the discourse of professional practice and make a difference to that practice. It could be argued that I could publish the ideas contained in the thesis in journals in order to achieve such a goal; however, in my own experience, teachers do not read professional journals but some will read a thesis if it is recommended by a colleague.

5.2 Reflective Practice

Like many other concepts in education, there is widespread disagreement about the nature of reflective practice. As has been explained, "Reflective Practice" as a concept used in a practical sense derived from "the messy lowland" described by Schön, has a very different meaning from the meaning it is accorded in the "high hard ground" of the "modern research university" (1995, p. 28). Its informal operation in professional practice has been explained; however, as I wish my thesis to be available to participate in this part of educational discourse by making it available for reading by teachers who are so disposed, it is well to explain the difference in meaning as an addition to an explanation of the methodology.

There is general agreement that reflective practice as a concept is steeped in the initial work of Dewey (1910) that was further developed by Schön (1983), Argyris and Schön (1996) and Mezirow (1990) (Fook, 2002; Fook & Gardner, 2007; Johns, 2005; Redmond, 2006). Payne (1997) suggested that those engaged in a profession tend to use the word "theory" to describe the ideas that influence them rather than the way they discharge their professional duties but he also referred to both explanatory theory and practice theory (Payne, 1997). The meaning of "explanatory theory" seems to be similar to Schön's description of the "high, hard ground of technical rationality" whereas practice theory is similar to the "messy, confusing ... swamp" of "day to day...practice" (Schön, 1995, p. 28), both seemingly descriptions of the difference between university-generated "institutional knowledge" as distinct from what Schön describes as "knowledge in practice". Interestingly, Schön (1995) describes the "epistemology of practice" (p. 29) as "not knowledge per se" but notes that "it is treated as such by the profession" (p. 28).

Fook and Gardner (2007) describe how the term "theoretical framework" is used in professional discourse in a postmodern sense as a way of describing the beliefs and assumptions that individuals use to understand the ways they interact with their world, rather than as a way of describing the body of literature and research about reflective practice. They claim that professionals "have developed both a theoretical approach to critical reflection and a practical process for how it may be done" (p. 15) suggesting that, in relation to professional practice, the myths constructed by discourse are legitimised as has been described earlier.

This observation certainly led me to believe that the informal process described is a central way "knowledge" is transmitted in the teaching profession. As I have no desire for this thesis to suffer a similar fate to my Master's thesis, although the University is different and this may not be UNE's practice, I realised I needed to find a means of reporting my findings in a way that is analogous to the informal chats across the staffroom table. I will attempt to contextualise the methodology I have used against this backdrop.

5.3 Postmodern Knowledge Generation

The University of New England (UNE) "gold book" (UNE, 2010) states in relation to doctoral degrees:

By the end of candidature students ought to be capable of independently conceiving, designing and carrying to completion a research or project. The research should uncover new *knowledge* [emphasis added] either by discovery of new facts, the formulation of theories, the development of new interpretive arguments/frameworks, innovative critical analysis, and/or the innovative re-interpretation of known data and established ideas. (2.1, p. 2)

Since this makes the purpose of a Doctoral candidature at the University of New England clear and this section of my thesis clarifies the strategies I used to achieve this purpose, it is well to link the above statement to the methodology.

Although it may be assumed that uncovering new "knowledge" could be considered by some to be unproblematic, in the context of a study that deals largely with "Philosophy" as an academic discipline rather than the more general meaning of the term, this is far from the case as will be shown. In general, however, the dictate that "Research should uncover new knowledge" clearly stems from the modernist, positivistic view that there is knowledge in the world awaiting discovery (presumably by a UNE doctoral student). This view is open to challenge and, while it may not be necessary to explore the extensive literature on epistemology to do so, the problematic nature of this view of knowledge can be revealed by the following "thought experiment".

*If a person asserts that a fact is **known** that is later proved to be false, were they ever entitled to assert that it was known? If they were not, how can anyone ever assert that they know anything since, they can never be sure that it won't later be proven false?*

It may be the case that the word "knowledge" does not occupy the position in our culture implied by the statement in the "Gold Book" and, if this is the case particularly in the professional study of Education with which this thesis concerns itself, it could be that the uncovering of "knowledge" as an academic pursuit is less defined than the authors of the "Gold Book" would suggest.

In fact, it is questionable whether knowledge in an absolute sense plays the significant role in our lives such a viewpoint would have us believe. Much human behaviour is motivated by intuition: most of us fall in love, marry and have children for this reason. Our most profound human decisions can be informed by our feelings which are necessarily shaped by our own experiences and it makes sense to value and recognise them as determinants of our interpretations (Carr, 1986; Polkinghorne, 1997). In our day-to-day lives, subjectivity rules!

In relation to professional practice, as has been noted, writers including Schön (1995), Silcock (1994), Richardson (1990), Day and Pennington (1996), Eraut (1995) and Osterman (1990) argue for the inclusion of subjective elements in practice as a form of "knowledge" which stems from the "messy, confusing ... swamp" of "day to day...practice". In view of this it is well to ask the ontological questions: in the teaching profession, what is the nature of that possessed by those who are employed for their "knowledge" and how is it acquired, as this research project and ensuing thesis seek to make a contribution to this profession?

Schön's theories of "Reflective Practice" (1983, 1987) have had an enormous impact on the study of Education (Erlandson, 2005), both as an academic discipline and a profession, and link to the subject under discussion since they highlight epistemological problems in relation to "knowing" and applying what is known in regards to the practice and study of teaching that has a direct connection to the methodology I have used.

Schön, in common with others, sought to explore and define varying ways of "knowing", a concept that is at odds with the place of "knowledge" in the world of "everyperson", earlier described but which can be considered to be profound in explaining the ways in which the participants in schools interact and the reasons that underpin such interactions. Drawing from Polanyi's book *The Tacit Dimension* (1967), Schön describes a way of knowing he describes as "tacit knowledge". In order to "reconsider human knowledge" (Polyani, 1967, p. 4), Schön begins with the assumption that "we can know more than we can tell" (p. 4). An oft-cited example of tacit knowledge (Schön, 1983, 1987, 1995; Argyris & Schön, 1992), which comes from Polyani's work (1967), is that of facial recognition. It is observed that we can know a person's face in a way that allows us to identify it in a large crowd without knowing how. He goes on to postulate that there are many examples of knowledge like this that cannot be expressed and forms of knowledge such as this inform teaching practice more than the knowledge gained from theories such as the theories found in institutions such as universities. The clear implication is that tacit knowledge, based on experience and intuition, is subjective rather than objective knowledge propounded by those researchers and others who hold a positivistic view of the world.

In direct illustration of Schön's description of the ivory-towered demands of "institutional knowledge", Charmaz and Mitchell (1997, p. 121) say, "the proper voice is no voice at all" in relation to academic writing; arguing that scholarly writers are expected to be objective and passive. This positivistic approach appears to be the stance taken by many in modern universities in general (Holt, 2003). The epistemological assumptions that underlie this stance insist that qualitative investigators should address credibility, dependability, and trustworthiness of data (Holt, 2003) by imposing late-twentieth-century modernistic views of replication, representation and validity of "data" on all research areas including those that owe more to the interaction of individuals than the application of research theories. Apart from the fact that this is counter-intuitive for reasons I have begun to explain, a strong argument can be constructed that the "objective researcher" is a mythic creature in the humanities in general and in teaching in particular.

Attempts to be objective by those who are intimately engaged in this "caring profession" are destined to be little more than pretence. If "objectivity" can exist in the way positivists construe its meaning, it certainly cannot exist in Schön's "swamp" where, as he says, "problems are messy, confusing and incapable of technical solution" (1995, p. 28). It is easy to see that writers who employ the term "Tacit knowledge" are

establishing a distinction between the objective knowledge that many Universities suggest represents academic rigour and the subjective knowledge of day-to-day practice. This study concerns itself with problems found "in the swamp" and I will explore them from within the swamp. It is immediately obvious that if objectivity does exist as a concept then I am not capable of it in these circumstances; however as concepts are constructed within Western Australian Education in the way I have described, I am simply making this explicit.

In fact, many regard "Tacit Knowledge" as personal, private knowledge which is appropriately treated only at the individual level (Ambrosini & Bowman, 2001, pp. 812–813; Johannessen et al., 2001, p. 8; Boiral, 2002, p. 296). This private knowledge not only counts as knowledge in the teaching profession but further, plays a more significant role in a teacher's performance of their professional duties than objective knowledge could, therefore a research methodology that allows for this is appropriate.

It is arguable that subjectivity is all that is possible in human experience. To negate it when attempting to interpret and analyse "data" and, in fact, to mystify intuitive experience by characterising it as "data", seems to be a deliberate attempt to construct a discourse that is not inclusive and therefore not accessible, especially to those who are apparently the intended audience for the research: those who inhabit Schön's (1995, p. 29) "swamp". The same argument can be applied to Schön's (1995) use of the word "knowledge" however, when it relates to the intuitive goings-on in "the swamp". In fact, it would seem to be the case that there is little or no possibility of an interface between the high, hard ground of institutional knowledge, even if objectivity can exist, and the "know how" of the swamp because of the peculiar nature of teaching culture which is represented in WA high schools. It is the case that the organisational culture of schools in general is constructed through its discourse to make this impossible, as has been discussed. Schön's (1995, p. 29) "knowing in action" is privileged by the culture and, not only is "institutional knowledge" marginalised, it is easy to suspect that often it is disregarded completely. For these reasons I have used autoethnographic case studies as the most appropriate means of reporting this study.

5.4 Autoethnography

Autoethnography has been said to be:

a blurred genre ... a response to the call ... it is setting a scene, telling a story, weaving intricate connections between life and art ... making a text present ... refusing categorization ... believing that words matter and writing toward the moment when the point of creating autoethnographic texts is to change the world. (Jones, 2005, p. 765)

I have adopted it as a methodology as it is a means of research that privileges subjectivity and facilitates a more personal point of view by emphasising reflexivity and personal voice (Mykhalovskiy, 1996; Tierney & Lincoln, 1997). For this reason alone, it seems to be analogous to the way knowledge is dealt with in the teaching profession. Its explicit acknowledgement of the subjectivity of the researcher is appropriate for a number of reasons including the notion that concepts derived from subjectivity are the most powerful determinants of pedagogy in WA schools and that with my extensive experience of teaching in DETWA schools I am unable to remove the "passion and commitment" I feel towards my subject, which Polyani (1958) has stated are qualities essential to experiencing and investigating the world. Peshkin (1985) discussed the desirability of positive exploitation of the subjectivity of the researcher, and Eisner (1991) presented the researcher as a connoisseur and "instrument", whose personal schema and past experiences provide the sensibilities that make investigation possible.

As autoethnography is "a blurred genre" (Jones, 2005), it is not a concept that has strict rules or defining criteria that can be used to decide whether a writer holds faith with its precepts or not. I have treated it as a variable concept in that where appropriate I will write evocatively such as in the case studies; however, where I am attempting to record participants' perceptions and beliefs, a good example of which might be found in responses to the second part of the research question, the narrative may be seen to owe more to traditional academic prose. In short, I see "autoethnography" as existing on a continuum along which a writer may move: now involving himself as a clear voice, and now withdrawing to look at participant responses with a less subjective eye.

There has been much debate about the desirability of being objective in a research project and whether this is even possible. In outlining this methodology, I need to further examine the issues surrounding this debate for reasons that will be seen. Ellis and Bochner (2000) have described how the "crisis of confidence" inspired by postmodernism in the 1980s has caused scholars to be troubled by social science's ontological, epistemological, and axiological limitations. They have claimed that this "crisis of confidence" has caused the introduction of new and abundant opportunities to reform social science and reconceive the objectives and forms of social science inquiry of which autoethnography is but one. Further discussion has ensued, however, about the number of universities that continue to situate the world within a positivist paradigm (Higgs & McAllister, 2001) that perceives qualitative research (let alone autoethnography) to be "fluffy", "not proper research" and "less academic". My own experience in using this methodology in my Master's study (Martin, 2004) is perhaps the central reason that a defensive tone may be noted in this explanation.

In relation to the issues surrounding the reliability and subjectivity of qualitative study that have previously been described it is worth noting Denzin and Lincoln's (1994, 2000) description of key "moments" in the history of qualitative research. In fact, this description answers questions that may be asked by

researchers who may be more experienced in more traditional paradigms of research such as: "How do we mitigate against a particularly subjective researcher without credibility etc?"

The first moment was the traditional period (early 1900s), when qualitative researchers aspired to "objective" accounts of field experiences. The second moment was the modernist phase (post-war years to 1970s), which was concerned with making qualitative research as rigorous as its quantitative counterpart. The third moment (1970–1986) was concerned with the blurring of genres. The fourth moment (mid-1980s) is characterised by crises of representation and legitimation. The fifth moment concerns experimental writing and participatory research. Additional stages include the sixth (post-experimental) and seventh (future) moments, whereby fictional ethnographies and ethnographic poetry become taken for granted. It can be seen that in the later moments of qualitative research, there are no attempts to mitigate against subjective researchers as the re-framing of knowledge that has previously described allows for such researchers.

The crisis of representation refers to the writing practices, that is, how researchers write and represent the social world. Additionally, verification issues relating to methods and representation are (re)considered as problematic (Marcus & Fischer, 1986). The crisis of legitimation questions traditional criteria used for evaluating and interpreting qualitative research, involving a rethinking of terms such as validity, reliability, and objectivity.

"Autoethnography" arises from Denzin and Lincoln's fourth moment, namely, crises of representation and legitimation. It is a genre of writing and research that connects the personal to the cultural, placing the self within a social context (Reed-Danahay, 1997) while attempting to address the postmodern doubts made explicit by Agger (1990) about the dubiousness of privileging any one method for obtaining authoritative knowledge about the social world. Originally, autoethnography referred to a method in which a researcher would include autobiographical material in research texts about "others". Later, autoethnography developed in different directions and it now offers various possibilities for researchers' self-expression (Burnier, 2006; Ellis, 2007; Ellis & Bochner, 2000; Lahman, 2009; Reed-Danahay, 1997; Spry, 2001).

Autoethnographic texts are usually written in the first person and feature dialogue, emotion, and self-consciousness as relational and institutional stories affected by history, social structure, and culture (Ellis & Bochner, 2000). Reed-Danahay (1997) explained that autoethnographers might vary in their emphasis on *graphy* (i.e., the research process), *ethnos* (i.e., culture), or *auto* (i.e., self). Whatever the specific focus, authors use their own experiences in a culture reflexively to look more deeply at self–other interactions. It is a research method in which the researcher's personal experiences form both the starting point and the central material of study. The method was developed in discussions that were motivated by the crisis of ethnographic representation and that concentrated on the limits and conditions of ethnography and

ethnographic knowledge. As a result of these discussions, the researcher's visibility in both conducting research and reporting its results became more acceptable. Wolcott (1994) argued that qualitative researchers need to be storytellers and autoethnography allows a researcher to achieve this status without compromising the validity of the research as, in a semiotic sense, the signified that the word "validity" points to has been re-framed.

According to Clifford (1986) as cited in Uotinen (2011, p. 1309):

All knowledge is mediated, subjective, context-bound, and partial; knowledge is always committed to the personal perspectives and starting points of the researchers, informants, and readers, and has to be accepted—or rejected—as such...

Therefore a method which allows a researcher to describe the impact of all subjective elements including the environment, context and his own feelings as mitigators of the "truth" value of his text is appropriate since these factors impinge even if the researcher is making a claim to objectivity. Although the writing process inevitably alters these factors (Howes, 2005; Bateson, 1988; Knuuttila, 2002; Vesala, Ketola, Knuuttila & Mattila, 2002) this situation can also be accounted for in an autoethnographic text.

5.4.1 Criticisms of autoethnography

That is not to say that this methodology is not without its critics whose criticisms are summarised by Delamont (2007) when she states six objections to autoethnography:

1. It cannot fight familiarity.
2. It cannot be published ethically.
3. It is experiential not analytic.
4. It focuses on the wrong side of the power divide.
5. It abrogates our duty to go out and collect data.
6. "We" are not interesting enough to write about in journals.

In addition, she also claims that autoethnography is "lazy". Although Delamont does not define what she means when employing this term, she does provide a number of examples of how an autoethnographer may miss the point of the situation being studied by focusing on self rather than attempting to analyse the situation under study. Unfortunately, she does not acknowledge and appears to overlook the fact that the term "autoethnography", as a mode of reflexive narrative method, describes a continuum of practices based around a subjective approach rather than a single method with defined features (Foley, 2001). Foley has described how difficult autoethnography is to define and it may be guessed that the discourse

surrounding it which would contribute to a clearer definition, and to which Delamont's writing has contributed, has not progressed to the extent that would allow accurate definition. Ignoring this possible criticism, however, Delamont forges ahead with her attack on autoethnography using an unstated definition of the object of her attack whilst clearly behaving as if the narrow, inflexible view that underpins her criticisms is the only possible construction.

For instance, in the example Delamont (2006) mounts on page two of her article, she describes "The Bob Marley Centre In Cloisterham" in close detail as "located in a neighbourhood that is notorious for race riots, drugs and crime" before going on to reject her own "autoethnographic question", namely, "how do I feel about being at an all-female event?" It is clear that she provides this "example" as an example one of the reasons she rejects autoethnography. She then goes on to pose questions she claims are more appropriate as vehicles for data collection such as:

Is the Bob Marley Centre really in a dangerous neighbourhood?

How far are the metal detectors and signs "necessary"?

If there are "dangers", what form(s) do they take, when are they acute and when dormant or latent?

She at no stage acknowledges that the answers to the questions she finds acceptable for data collection are dependent on her own cultural context and an analysis of this context is perfectly appropriate and perhaps desirable due to its close associations to her interpretation of her own and others' interpretation of the situation which would inform such answers. This fact could be accommodated in autoethnographical method in ways in which it could not in the apparently objective research methods she is advocating. This is one example of how her concerns could be immediately addressed and it must be assumed that her failure to acknowledge this fact is in order to privilege her own viewpoint. Further, in her example about "The Bob Marley Centre" (p. 2), she attempts to make her point by posing trivial questions and labelling them "autoethnographic", e.g., "Why don't I feel scared in this dangerous neighbourhood?"

The question she asks could have had analytic components which are similar to those she gives as "proper" questions for a sociological researcher, such as: "What cultural assumptions am I responding to that shape my feelings?" In fact, her examples demonstrate the sparsity of her arguments since, if she had genuine objections to autoethnography, she would not have felt the need to provide trivial examples. In finding the answers to her own questions, she will need to reference a set of values, attitudes and beliefs which she may not acknowledge. In attempting to be "objective" she, in common with all researchers, mitigates her data through this "veil" so why not be explicit in acknowledging it?

A basic unacknowledged assumption that underscores her six criticisms also characterises the writings of other critics (Anderson, 2006; Medford, 2006; Tolich, 2010; Uotinen, 2010b; Walford, 2004) and that is,

she has what has been described by Foley (2001) as: "Naïve ... positivist longings for objectivity and foundational science" (Foley, 2001, p. 478). The naïveté of such longings stems from the fact that she wishes to privilege the modernist view of research and either background the postmodern view that stems from the fourth moment of qualitative research (Denzin & Lincoln 1994, 2000), or ignore it completely. In respect to her perceived goal she claims to have six objections though many seem to be different ways of stating the same idea which, had she been writing autoethnographically, she could have acknowledged are her own set of prejudices. In the table below, I will briefly refute her criticisms and a more detailed explanation of these refutations will follow.

Table 7.

Delamont's criticisms of autoethnography (2007)

1. It cannot fight familiarity	1. Delamont (2002) acknowledges the difficulty in "fighting familiarity" even "when we have data" (p. 2) but fails to explain why an autoethnographer could not use the same techniques she recommends to researchers using more "traditional" research designs.
2. It cannot be published ethically	2. Delamont's arguments to support this contention, e.g., Patricia Clough's lover's genitalia, could be published ethically by seeking his permission in the same way as required by other research methods.
3. It is experiential not analytic	3. The dichotomy between "experiential" and "analytic" Delamont seeks to create, need not exist in autoethnography; it is possible to analyse one's own experiences and indeed, in a professional sense, any reflective practitioner does so on a daily basis.
4. It focuses on the wrong side of the power divide	4. This is a tautological argument as Delamont is not the arbiter of which side of "the power divide" is the "wrong" one. In fact, a varying viewpoint is that the "power divide" does not exist in the objective way this argument suggests.
5. It abrogates our duty to go out and collect data	5. This would be true if the only purpose of using autoethnography was to write about experiences the researcher has already had or, as Delamont implies, experiences that have no relevance beyond the personal. In fact, an autoethnographic researcher will often seek new experiences through the usual university method of seeking approval for designed research and then writing about their research experiences in a way that acknowledges the researcher's own subjectivity.
6. "We" are not interesting enough to write about in journals	6. This point is similar to arguments 3 and 5: writing about "we" is not the first aim of many autoethnographers; writing about their personal experience of the research is.

5.4.2 More Discussion

1. In Delamont's 2002 book *Fieldwork in Educational Settings*, the section entitled "Fighting Familiarity" is the reference she cites to support her first argument against autoethnography. She argues that a researcher has a duty to approach research from a perspective which she describes in her 2009 article as "anthropologically strange". That is, she feels that a researcher who has a high degree of familiarity with the subject of their research is likely to fall into error that is described by Becker (1971, p. 10) in relation to educational research as "being so familiar that it becomes impossible to single out events in the classroom as things that have occurred, even when they happen right in front of you". Delamont then goes on to quote an event that was recorded by an "untrained observer" which was a short observation of an English lesson (2002, p. 47). She claims that this is an example that demonstrates the "familiarity problem".

Perhaps understandably, she places emphasis on the problem of familiarity rather than on the lack of training of the observer since the latter would not support her criticism. In the narrow definition of "autoethnography" that Delamont is drawing upon in which researchers focus entirely on themselves, it may be possible to see that familiarity is an issue. Other definitions such as that found in Atkinson (2006), which is the very article Delamont cites in support of her third criticism of autoethnography, address this issue. "Analytic autoethnography" (Atkinson, 2006) resolves the criticism raised by Delamont (2007, p. 2) that autoethnography "is experiential not analytic" as the autoethnographic researcher writes in a detailed reflectively analytical way, about their own experience of the research topic. This method provides more detail than may be found in other "traditional" ethnographic research methods that, perhaps naively, lay claim to objectivity. In fact, it has been argued that a great strength of autoethnography is the freedom it gives the researcher to acknowledge his/her subjectivity which is often derived from the familiarity Delamont decries as being counterproductive.

In the 21st century, when the majority of people in the western world have had an intimate familiarity with education achieved by their formative years in Primary and Secondary schools, Delamont's argument seems to suggest that no research is possible in Education. If Delamont's view is accepted, this is certainly the case in regards to researchers wishing to investigate and examine the Education system of which they are a product. Instead, Delamont implies that, if research in Education is to take place at all, researchers need to undertake their activities in areas where they feel "anthropological strangeness". Of course, Delamont's view must be rejected in light of the vast amounts of research undertaken in education each year (including hers) by researchers who are products of the education systems they investigate. Contrary to Delamont's claim, it can be argued that familiarity is an asset to the researcher and would in fact, have avoided the "crisis" that Delamont describes as occurring in her own research (1986, 1990) in which wider familiarity with the cultural context of the subject she was researching would have allowed her to avoid a situation which placed her entire research project at risk.

The key to addressing the problem of "familiarity" if it is perceived as such by the researcher is the same in autoethnography as in other areas of research and that is the training that Delamont argues was lacking in the excerpt she provided. If a researcher has designed a study and noted this as a problem, then the design itself can include strategies to remedy the problem; however, more likely, familiarity is advantageous to any research project. On this subject, Atkinson (2006, p. 401) says: "It is a misrepresentation of the history of social research to imply—as some recent commentaries seem to—that until fairly recently, sociologists and anthropologists were unrealistically wedded to an ideal of entirely impersonal and dispassionate fieldwork." He goes on to quote Coffey (1999, as cited in Atkinson, 2006, p. 403): "The ethnographic enterprise is always, in some degree, autoethnographic in that the ethnographer's self is always implicated in the research process."

2. Delamont's second argument regarding the ethics of autoethnography is difficult to understand. It appears to be an inductive argument, namely: Some researchers using autoethnography have published in a way that can be characterised as "not ethical", therefore all researchers using autoethnography will publish work that is "not ethical".

The premise: Some researchers have published in a way that is "not ethical" is not categorically proven by the examples she provides. In the case of inductive reasoning, even if this were the case, the conclusion could be true without reference to the premise. Delamont provides no further evidence to support her argument leaving her criticism open to the claim of absurdity. Perhaps Delamont takes note of this when she uses the modifiers "almost impossible" attached to the statement "to write and publish ethically ". She then goes on to say: "Readers will always wish to read autoethnography as an authentic, and therefore 'true' account of the writer's life, and therefore the other actors will be, whatever disclaimers, or statements about fictions are included, identifiable and identified" (p. 2).

This argument fails to acknowledge that, in the first instance regarding authenticity, the same holds true for much, if not all, research since, if this is not the case, why characterise it as "research" rather than a set of opinions expressed by its author? In the second instance, she raises interesting ontological questions about the nature of truth but apparently fails to realise this. If the "other actors" are identifiable in spite of the disclaimers, they are as characters that have been mitigated through the context of the researcher and the medium of written communication. So are they fictional or, at the very least, mere representations of what someone believes is real? And does it matter since most autoethnographical research is not about the controversial subjects she uses as extreme examples to cloud the issue? It's easy to consider this argument as a "red herring", however I wish to make it clear this is not a reference to a particular fish but fish in general!

An uncritical reader, whose existence she is postulating in this comment reading Delamont's (2007) paper which is the subject of the current discussion, may fail to notice Delamont's "almost impossible" modifiers and accept her implied claim that "autoethnography is impossible to publish ethically" without realising that the logical correlate of "almost impossible" is "possible", leaving Delamont's second criticism with no intellectual ground to stand on in making this claim.

In fact, a counter claim that needs no support as it is intuitively true, is that the audience for academic research of all methodologies including autoethnography is critical and informed readers who are not likely to "wish to read" anything in the way Delamont claims. The process for having research approved at modern research universities involves submitting and amending research proposals and obtaining approval from an ethics committee. Although Delamont's second criticism had no merit to begin with, this fact alone refutes it in a way that is unchallengeable and, this being so clearly the case, the question must be posed as to whether Delamont is, in fact, simply being mischievous in seeking the controversy she acknowledges attempting to engender in this article and her other publications on the same or similar subjects.

3. As a third criticism of autoethnography, Delamont seeks to create a dichotomy between "experiential" and "analytic". In Delamont (2009) in which she re-states these criticisms, some in an expanded way, she claims that Atkinson (2006) "has argued at some length that autoethnography is all experience and is noticeably lacking in *analytic* outcome". In fact Atkinson (2006, p. 403) makes a distinction between "self-absorbed" ethnographic writing of all forms and analytic autoethnography:

Some texts of ethnographic writing, in this process, therefore look inward at the personal and emotional life of the ethnographer-as-author rather than looking outward to an intellectual constituency informed by social theory. The fact that these personalised, experiential accounts are sometimes justified in terms of social criticism does not excuse their essentially self-absorbed nature: the personal is political, but the personal does not exhaust or subsume all aspects of the political.

And (p. 400):

autoethnographic sensibility is by no means incompatible with the long-standing analytic goals of interactionist (and other) ethnographic research ... there have indeed been many sociological and anthropological works that derive in large measure from the author's own biographical engagement in a given social world.

In short, the dichotomy that Delamont attempts to create, which undoubtedly stems from the same narrow view of **autoethnography** that informs her other criticisms, is actually undermined by the author she cites to

support this view. No doubt there is some autoethnographic research/writing that is merely experiential and, even though it could be argued that this is legitimate if the experiences that are its subject have research merit, **autoethnography** is by no means "all experience" without analysis as Delamont would have us believe.

4. In arguing that **autoethnography** is "on the wrong side of the power divide" Delamont cites Becker's (1967) paper "Whose side are we on?". Interestingly, Becker does not use the terminology of "power" in this paper and it is clear that Delamont has imposed this postmodern terminology on Becker's ideas in a subjective way which is informed by her own cultural context thus rendering her open to the same criticism she is levelling at autoethnographers. Becker (1967, p. 238) begins his paper with a discussion about whether we, as researchers, should have *values*:

Some urge them not to take sides, to be neutral and do research that is technically correct and value free. Others tell them their work is shallow and useless if it does not express a deep commitment to a value position.

He concludes (p. 239):

This dilemma, which seems so painful to so many, actually does not exist, for one of its horns is imaginary. For it to exist, one would have to assume, as some apparently do, that it is indeed possible to do research that is uncontaminated by personal and political sympathies. I propose to argue that it is not possible and, therefore, that the question is not whether we should take sides, since we inevitably will, but rather whose side we are on.

Becker then goes on to discuss the myriad reasons "that there is no position from which sociological research can be done that is not biased in one or another way" (p. 245).

In short, whereas it is clear that Delamont wishes to draw on Becker's support for sociological research that is objective rather than subjective and uncorrupted by the experiences of the researcher, her source again lets her down by stating that subjectivity is all that is possible; whereas Becker discusses with which group the researcher may sympathise since she will inevitably sympathise and advocates that she makes this transparent to her reader. In fact in the very way that the reflexive narratives that spring from autoethnography make both possible and desirable, Delamont attempts to strengthen her arguments by imposing postmodern notions of "power relationships" on Becker's text which a close reading will reveal was not implied by Becker.

In a personal communication Becker (pers. comm., November 2012), in response to an email asking whether he could clarify his position on Delamont's statement, Becker said:

I don't think I can help you—I have no idea, no more than you—what this is supposed to mean and strongly suspect that if I had a longer quote my confusion would be even greater. I do know what I meant, and it was not exactly my thought that what "we ought to do" was to study the powerless rather than the powerful. All I meant was something much more simple, which was that we ought to understand what all the people involved in whatever we're studying are thinking about and wanting, etc.

In addition, Becker's statement also reveals that Delamont's basic assumption in this criticism is that autoethnographic researchers will naturally foreground their middle-class background which places them on a side of the "power divide" which she implies has objective existence. She further suggests that there are clearly defined "right" and "wrong" sides, and common agreement about where these stand. This entire argument appears to be an attempt to avoid the criticisms that could be levelled about her modernist, positivistic views and her inability to see beyond them. In attempting to avoid these criticisms, however, she provides the evidence that these criticisms are valid whereas, as a criticism of autoethnography, in merely clouding the issue they become invalid.

5.5 Analytic Autoethnography

As Anderson (2006) has noted, autoethnography has been very popular in the research community in recent years, largely in contradistinction to "evocative autoethnography". In drawing a distinction between "evocative" and "analytical" autoethnography he suggests (2006, p. 378): "Unlike evocative autoethnography, which seeks narrative fidelity only to the researcher's subjective experience, analytic autoethnography is grounded in self-experience but reaches beyond it as well."

Anderson (2006, p. 378) then defines analytic autoethnography as having the following features:

- (1) complete member researcher (CMR) status
- (2) analytic reflexivity
- (3) narrative visibility of the researcher's self
- (4) dialogue with informants beyond the self
- (5) commitment to theoretical analysis.

These features will be expanded and developed to contextualise this study after the following comments. Richardson and St Pierre (2005, p. 962) observe that the narrative genres connected to ethnographic writing have, in the past decade, "been blurred, enlarged, and altered. ... These ethnographies ... are produced through creative analytical practices (CAP)." Denzin (2006, p. 420) has noted that there are

versions of analytic autoethnography that are competing and contradictory in their aims and methods. Therefore, although attempting to conform to the requirements cited by Anderson but acknowledging the claims of Denzin (2006) that Anderson is attempting to return research to its positivistic past, I will analyse the autoethnographic case studies derived from the interviews I will conduct reflexively, by comparing them to the existing historical literature as I report them.

In order to make this process clear, I will attempt to describe my relationship to the participants and the study using Anderson's five features (Anderson, 2006, p. 378) as the framework.

(1) Complete member researcher (CMR) status

Anderson (2006, p. 378) refers to a book entitled *The Body Silent* (1987) by cultural anthropologist Robert Murphy, who has used his text to explore in an ethnographic form his own experiences with a spinal disease. Anderson claims Murphy's writing is a good example of the approach he is advocating. He describes the book as: "a particularly rich embodiment of the kind of autoethnographic research that [he is] seeking to promote", owing to the way Murphy "forcefully demonstrates that deeply personal and self-observant ethnography can rise above idiographic particularity to address broader theoretical issues".

Anderson further argues that the book seeks connections to broader social science theory—especially in using Murphy's own experiences to argue that conceptions of liminality provide a more accurate and meaningful analytic framework for understanding human disability than does a deviance perspective. Anderson recognises that Murphy's text is an "illness ethnography" but uses the fact that Murphy has complete member researcher (CMR) status as a result of having this disease to illustrate his point. He goes on to explore the ways in which such status has the potential to impact on the data collection process; a subject to which I will return in relation to my own study very soon.

Although Adler and Adler's (1987, p. 70) claim that autoethnographic research makes fieldwork "near[ly] schizophrenic in its frenzied multiple focus" is acknowledged by Anderson, he feels that producing a narrative text that explains, unlike Ellis and Bochner's (2000, p. 44) call for a text that refuses to do this, makes analytic autoethnography a more worthwhile venture.

As an English teacher who worked ("served" is my preferred description) in the classrooms of Western Australian government high schools for more than thirty years, I feel confident in my ability to claim CMR status for my research. I understand the dialogue that shapes the cultural discourse in Western Australian education, which itself gives rise to knowledge-in-practice concepts that informed my interaction with the

participants in my study. As well, I have contributed to this discourse through my own publications and my interaction with the thirty-nine student teachers I mentored during my career.

The relationships I will seek to develop with the participants in my study during the ten weeks it will run are analogous to those described by Hayano (1982, p. 150), when he described a tension between fieldwork demands, such as his desire to "keep on friendly terms with most of the players in the card rooms", on one hand, and his need as an effective poker player to remain distant from them, on the other; issues that arose as a consequence of his CMR status. This result may provide more accordance with Anderson's statement (2006, p. 381) that "A better heuristic image is probably that of a member as someone who is considered a legitimate participant in the group's conversations (and activities) through which (potentially multiple and contradictory) first-order constructs are developed, contested, and sustained." Adler and Adler (1987, 67) observe: "CMRs come closest of all ... to approximating the emotional stance of the people they study." Still, being a complete member does not imply a panoptical or non-problematic positionality.

(2) Analytic reflexivity

It is clear that according to the methodology I am describing, the title of "analytic autoethnography" makes the connection with analytic ethnography plain. In relation to this point, Davies (1999, p.7) has said: "In its most transparent guise, reflexivity expresses researchers' awareness of their necessary connection to the research situation and hence their effects upon it." I have already acknowledged the fact that my CMR status will impact on the data collection process. This will be more so in relation to the two participants in the study who have no training in teaching at all and are struggling (as home schoolers) to teach English to their children.

Atkinson, Coffey and Delamont (2003, p. 62) have noted how:

[Auto]ethnographers-as-authors frame their accounts with personal reflexive views of the self. Their ethnographic data are situated within their personal experience and sense making. They themselves form part of the representational processes in which they are engaging and are part of the story they are telling.

This reason is a major one for choosing this mode of reporting the data, as my belief is that this is a central component to reporting the case studies that would exist whether I had chosen a methodology that acknowledged it or not. It is my belief that teaching professionals who are to be continually effective in achieving their own professional objectives and those established for them by the various school systems need to constantly engage in reflective practice (Schön, 1995) and this reflexivity will shape self in the same way as that claimed for writing autoethnography (Davies, 1999, p. 180). Many teachers, like myself, keep daily journals which speak in first person and record thoughts and feelings about their daily

professional practice after it has taken place and it is arguable that this process is a form of shaping self through autoethnography which demonstrates the close ties between reflective practice and autoethnography. In fact Atkinson, Coffey and Delamont's (2003, p. 60) observations demonstrate the links described if a teacher's journal is considered "field notes": "The personal has never been subordinate in the private world of field notes."

(3) Narrative visibility of the researcher's self

A central feature of autoethnography is that the researcher is a highly visible social actor within the written text (Anderson, 2006, p. 384). My own feelings and experiences are incorporated into the story of the research and considered as vital data for understanding the social world being observed. As far as key moments in my life have shaped my identity, the identity that reconstructs and interprets these experiences, they are also included. I have also followed Anderson's (2006, p. 384) admonition that I should "illustrate analytic insights through recounting [my own] experiences and thoughts as well as those of others". In addition to this I have openly discussed changes in beliefs and relationships over the course of fieldwork, in an attempt to reveal myself as a person grappling with issues relevant to membership and participation in fluid rather than static social worlds.

In fact, Foley (2002), in a clarifying account of autoethnography's relationship with reflexivity, claims that "Directing one's gaze at one's own experience makes it possible to regard oneself as 'other'." For Babcock (1980, as cited in Foley, 2002, p. 473): "reflexivity is the capacity of language and of thought of any system of signification to turn or bend back upon itself, thus becoming an object to itself" and also, "Methodologically, this means that we are forced to explore the self–other relationships."

(4) Dialogue with informants beyond the self

Atkinson, Coffey and Delamont (2003, p. 57) have noted: "No ethnographic work—not even autoethnography—is a warrant to generalize from an 'N of one'." In reporting my own case studies, I will take note of this point by including direct quotations from the participants in my study instead of simply providing my responses to the things they said. This approach allows others to have a voice even if, when considering their views reflexively, my response to their voice is visible. In this way I have sought to resist the self-absorption reported by critics of this methodology (Davies, 1999, p. 184) in order to inform and change social knowledge.

(5) Commitment to theoretical analysis

Before going on to claim that the defining characteristic of analytic research is to gain insight into some broader set of social phenomena than those provided by the empirical data, Anderson (2006, p. 387) admits that: "Every piece of writing is analytic to the extent that writers choose to highlight certain parts of a story." In saying this, however, he does not make explicit the fact that this is a necessarily value-laden activity and as such, does not justify the use of terms like "data" or "empirical" in its explanation which spring from the modernistic, positivistic views of another paradigm. In highlighting certain parts and subordinating others the writer cannot then claim any kind of objectivity.

In the version of analytic autoethnography that will be represented in this thesis, by using a reflexive method of presenting autoethnographic case studies, I intend to consciously situate my representational practices within the disciplines of past knowledge construction and, through this interpretive move, make the socially constructed, historically situated nature of the emergent experiences transparent, thereby acknowledging the partiality of any truth claims (Woolgar & Latour, 1986). In doing this I will also make explicit the fact that such "truths" as are represented are best understood as conditional constructions grounded in historical "articulations" (Morely & Chen, 1996) or "practices" (Bourdieu & Waquant, 1992).

5.6 Unstructured Interviews

A series of unstructured interviews (Bryman, 2001; Polkinghorne, 2005) with participants in the study will be considered case studies and reported using a first-person narrative approach which will include embedded analytic reflexivity. Unstructured interviews can be considered analogous to "guided discussions" in which few of the questions have been pre-planned and a deliberate attempt has been made to utilise the rapport developed between researcher and participant in order to develop a shared understanding of the interview questions and the research question, which will be made explicit to participants. For instance, researchers are likely to work collaboratively with participants on projects to understand the phenomenon of interest, and researchers use interviews to stimulate conversations with participants about the meaning of their experiences (Schwandt, 2000). Consequently, both case studies and their analysis challenge the positivistic ideal of developing and relying upon universal second-order apparently scientific metalanguages (Foley 2002, p. 475). Charmaz (2005) has noted that in the past few decades a transition has occurred among qualitative researchers to postmodern paradigms that emphasise constructivist–interpretivist perspectives and this approach follows this trend. Benney and Hughes (1956, p. 138, as cited in Elliott, 2005, p. 17) have stated that interviews can be a means of producing data and enquiry in their own right and the distance placed between researcher and participant makes this more likely, as their responses will be considered and reported and mitigated by my own responses.

After the case studies have been reported in the way described, they will then be considered in Chapter Eight in relation to the research question and the literature that has informed the study.

5.7 Construct Validity

Yin (2009) explored the requirements of construct validity for qualitative case studies and suggested that establishment of the correct operational measures for the concepts being studied would ensure research validity. As this study takes a postmodern approach, it does not directly concern itself with "validity". The debate among some postmodernists and neo-postmodernists regarding questions of validity is acknowledged (Fleming, 1996; Isenberg, 1991); however, I have adopted the view which Irani, Tafakkori, Fathi & Ghasemzadeebli (2013, p. 4265), in their report on postmodernism, summarise from the works of Baudrillard, Lyotard, Derrida and Foucault, suggesting that postmodernism "ignores objective truth". To ignore objective truth is not to say it does not exist, therefore I am not stating that this study does not have validity; rather, it does not concern itself with this as an issue therefore amplification of the issues I have acknowledged is not necessary. As participant observer as well as researcher, my first-person autoethnographic account is the primary source of evidence; however, the account will be appropriately substantiated in the three main ways suggested by Yin (2009, p. 41):

1. Multiple sources of evidence will be used consisting of: my personal accounts including letters, memos, interview recordings and transcripts, emails, and other related items.
2. Autoethnographic case studies will be analysed both reflectively and reflexively.
3. Drafts of the narrative account will be reviewed by my doctoral supervisors thus ensuring that my description of the design process and my interpretation of events had internal consistency.

5.8 Research Question

This document explores concepts in Western Australian Education and necessarily critiques and reflectively explores a subculture and its interaction with issues in Education in which I have been closely involved. Further, it requires a reflective analysis based on my personal perspectives and perceptions. The UNE "gold book" stipulations already noted suggest it must be assumed that the study itself is required to be a response to Schön's (1995, p. 27) demand for a "new scholarship" and "a new epistemology". Schön argues that an analysis of professional practice will reveal a kind of "knowledge" and "a kind of rigor that falls outside the boundaries of "institutional knowledge", which suggests that the methodology is the most appropriate means of considering the research question:

How do teachers of English describe the value of the course in Philosophy/CT in relation to its success in achieving its goals, specifically:

- (i) How do they perceive their own development of skills to teach Philosophy/CT thinking in a mainstream classroom?

- (ii) How do they perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

5.9 Phases of the Research

5.9.1 Phase One:

The first phase of the research involves the following steps:

- a. A 33,000 word book entitled *Rescuing Bright Kids* (Martin & Merrotsy, 2013), that deals with both the content of various areas of Philosophy and also the processes involved in Philosophical thought, was written and published (Martin and Merrotsy, 2013). The book uses literary devices such as informal language, anecdotal examples to demonstrate key points and distil complex research into simple terms and this, together with illustrations, is intended to make the book accessibly readable by its intended audience of high-school English teachers and parents.
- b. I will go through a process of identifying and approaching prospective participants in the study. This process will include networking with teachers I know in order to recruit appropriate participants although, it must be noted that I will not recruit teachers in my network; rather I will independently approach teachers those in my network may suggest. I will also set about making random contact with schools across Western Australia in the various education systems in order to identify teachers who will be willing to engage in my study.

Contact will be made by telephone and email and will result in a personal meeting in which I will provide prospective participants with the information (appendix 1) I have prepared and request them to sign the necessary consent form (appendix 2).

- c. The six participants I will identify for the study will be supplied with an electronic copy of the book together with a course that is structured to take the place of a "standard" course in Middle School English over a ten-week term. In addition, each participant will be provided with detailed lesson plans for each lesson, and the resources such as the hard copy of texts, links to online texts and worksheets needed to deliver the course.
- d. A pre-study unstructured interview will be conducted with each participant in order to:
 - identify their current beliefs about the indicators of high intelligence/"giftedness" in their students

- allow them to express an opinion on the nature of their class in regard to degrees of "giftedness" as well as exploring their exposure to "gifted" students
 - establish their previous exposure to Philosophy and/or CT
 - identify any possible problems they might experience in delivering the course and find solutions to them.
- e. Each of the participants in the study will be able to communicate with me according to their requirements by email, telephone and personal visits in order to address any questions or concerns that may result from the ongoing course delivery. Minutes will be kept of these conversations which, together with emails and journal entries, will be submitted among the artefacts generated by the study. It is my intention that no information will be supplied to participants that could be construed as "professional development" in "CT", "philosophical method", etc.
 - f. When each of the participants has delivered the course over the course of a ten-week school term, a further series of unstructured interviews will be conducted and these will form part of the case studies that will be reported in Chapter Seven entitled "Autoethnographic Study".
 - g. A separate chapter will be written which analyses the content of the case studies and draws conclusions about the worth of the overall study.
 - h. The participants, having been told that the final reporting of the case studies will be written in a way that attempts to represent them as the researcher sees them, will be given the opportunity to read and comment on the draft, prior to submission of the thesis. Participants will be accorded the right to request changes if they consider them necessary for any reason including concerns about anonymity.

5.9.2 Phase Two:

A large part of the thesis that will result from phase one of this study will be reported using autoethnographic method (Burnier, 2006; Ellis, 2007; Ellis & Bochner, 2000; Lahman, 2009; Reed-Danahay, 1997; Spry, 2001) which presents a series of personal narratives as the product of the research it describes. The purpose of the use of this reporting method is to draw together my own experience prior to the study of my research question, and my experience of the research itself. These narratives will be treated as case studies which include reflexive analysis. To accomplish this analysis requires comparing and contrasting personal experience against existing research (Ronai, 1995, 2003), in relation to the interviews conducted with the participants who can possibly be considered cultural members, occupying a similar place in the culture of teaching to my own. (Foster, 2006; Marvasti, 2006; Tillman-Healy, 2001), and/or examining relevant cultural artefacts (Boylorn, 2008; Denzin, 2006, p. 9). It is acknowledged that this view may be varied according to the circumstances of the actual participants.

5.10 Conclusion

The participants in this study will have to a greater or lesser extent a similar set of values, attitudes and beliefs to my own which have been formed by the culture of the teaching profession or, in the case of the home schoolers, their experiences of their own education and the documents that guide home schooling. These will necessarily underpin their responses which, in the research question for this study, requires them to explain perceptions and beliefs. Although the case studies will allow comment on the shared cultural understandings that have informed the relationships we have formed during the research program, it is also reasonable to contextualize these perceptions within the research literature. As many of the writers in the literature I have reviewed have not used autoethnography in reporting their research, it would not be legitimate to use evocative autoethnography per se in the discussion chapter.

It has been noted previously and is repeated here that autoethnography is "a blurred genre" (Jones, 2005). As it is not a methodology that is clearly defined I have treated it as a variable concept in that where appropriate I will write evocatively such as in the case studies; however, where I am attempting to record participants' perceptions and beliefs, a good example of which might be found in responses to the second part of the research question, the narrative may be seen to owe more to traditional academic prose. In short, I see "autoethnography" in its many varied forms as unproblematically existing on a continuum along which a writer may move: now involving himself as a clear voice, and now withdrawing to look at participant responses with a less subjective eye.

An autoethnographic study producing a series of evocative narratives that embeds teachers' accounts is the most appropriate method of reporting the research together with a brief analysis and conclusion. The discussion chapter (Chapter Eight) which includes the analysis and conclusion should resolve any concerns that may arise regarding recording participant perceptions and beliefs about outcomes in their students. Clearly, teachers make judgements about the educational development of their students on a regular basis as part of the process of ongoing informal assessment.

This process plays a central role in determining the teaching approach taken by teachers; however, the teachers are not required to provide valid data to support their judgements as it is accepted that this process is analogous to the knowledge that comes from "knowing-in-action" (Schön, 1995).

Since the researcher is an intimate and longstanding member of the group that is the subject of research, which can be considered to be a sub-culture of the dominant culture found in Western Australian state schools, it is clear that an ethnographic study is processed by the researcher's own experiences. These experiences render it difficult, if not impossible, to maintain an objective stance and therefore it is desirable

to make this clear. An autoethnographical narrative in which the researcher is participant as well as researcher is the method that best addresses this research problem especially when it is moderated in the ways I have described.

An overarching narrative ensues that contains the narratives of the other participants of the research within it. Analysis of the central narratives forms a further voice in the case studies but does not necessarily generate theory. Rather, it contrasts the case study narratives as part of a discourse with recent historical discourses, previously outlined in the literature review (Van Dijk, 1987).

The following chapter will describe the course in English used as the instrument of this study and will give examples, including samples of the lesson plans supplied to participants, to illustrate its purpose.

Chapter Six: A Course in English

וַיֹּאמֶר אֱלֹהִים, יְהִי אֹר; וַיְהִי אֹר

Dixitque Deus fiat lux et facta est lux:

And God said, Let there be light: and there was light. Genesis 1:3

6.1 Introduction

The course used in this study, was designed for delivery in a secondary school classroom in which subject English was being taught. The course was constructed firmly within a Social Constructivist paradigm which, for reasons that will be shown, may have required pedagogical changes by the teachers who delivered it.

Von Glasersfeld describes constructivism as "a theory of knowledge with roots in Philosophy, psychology, and cybernetics" (1989, p. 162). Jerome Bruner (1980), when speaking about constructivism, has asserted that all reality is a narrative construction in the imagination of individuals, a view that is clearly represented in both the form and content of this thesis.

Social constructivism is consistent with Dewey's (1915; 1938/1963; 1987) notion of the active learner as well as social cognitive theory represented in Vygotsky's (1978/1930) writings and the work of several contemporary psychologists, for example, Cole (1996), Rogoff (2003), Schunk and Zimmerman (1997). Its basic premise is that "knowledge" is first constructed in a social context and is then taken up by individuals (Bruning et al., 1999; M. Cole, 1991; Eggen & Kauchak, 2004). This premise places the responsibility for learning on the learner (Glasersfeld, 1989) as it emphasises the importance of the learner being actively involved in the learning process. A disadvantage of this is that the notion of individual knowledge, even if it is socially constructed, can explain the development of myths etc in the culture of teaching, as has been previously explored, as ideas constructed by the culture are not necessarily critically examined before being adopted.

Through a process that some writers have described as "collaborative elaboration" (Van Meter & Stevens, 2000) learners build shared understandings that they could not have achieved alone (Greeno et al., 1996). This is essentially the same sharing of views as might take place in a "Community of Enquiry" (Lipman 1981, 1991, 2003; Lipman and Sharp, 1978; Lipman, Sharp, & Oscanyon, 1980) and, has been explained, this is the model for my own research program. This process further encourages the learner to arrive at his or her version of the truth, which is influenced by his or her background, culture or embedded world view which accommodates the relative versions of truth called for in a postmodern classroom with direct links to what the learner already knows (Bransford, Brown & Cocking, 2000).

While some have argued that this approach can lead to a descent into epistemological relativism (Phillips, 1995), its contextualization within the values, attitudes and beliefs that construct the culture in which it is taking place effectively prevents this. Systems of symbols that are culturally embedded, such as language, logic, and mathematical systems, are part of the background the learner brings to this process. In relation to language, which is the central emphasis of a course in English, the embedded nature of cultural values, attitudes and beliefs is relevant and appropriate to an understanding of the social constructivist paradigm. This relationship between language and culture also stresses the importance of the nature of the learner's social interaction with knowledgeable members of the society such as the teacher. Rather than pedagogue, the role of a teacher in a classroom taking a social constructivist approach has more in common with a facilitator. That is, rather than giving didactic lectures that cover the subject matter, a facilitative approach helps the learner to arrive at his or her own understanding of the content. This process also helps to convey to the learner a different definition of "knowledge" and the place it occupies in the world, as knowledge is not treated as objective or absolute (Bauersfeld, 1995).

Teachers approaching education from a constructivist perspective emphasise enquiry rather than remembering facts, which places the approach clearly in the higher levels of Bloom's Taxonomy (Hunt, 1997). This process also helps to shape the knowledge and truth that the learner creates, discovers, and attains in the learning process (Wertsch, 1997). The mechanistic positivist accounts of learners as recipients of hard-wired knowledge are supplanted in constructivism by accounts of learners as situated, active knowledge constructors.

The emphasis in the course described in this chapter turns away from teacher-centred approaches with emphasis on content, and replaces it with a student-centred emphasis on ideas (Gamoran, Secada & Marrett, 1998). This change of roles, which some teachers may perceive as dramatic, implies a different set of skills from those used by teachers who usually take the more traditional teacher-centred approach (Brownstein, 2001). The course and support materials supplied to teacher participants in my research study attempted to facilitate the teacher's acquisition of these skills and also encouraged teachers to adopt a social constructivist approach to their own classroom practice.

6.2 Teaching Materials

In order to indicate some key components of the approach that was being suggested to teachers, the oft-used title: "Community of Enquiry" was changed in this course to "Risk-Free Critical/Reflective Discussion" (RFCRD) although the basic format was entirely the same as found in a "Community of Enquiry". The "rules" of this discussion mode were outlined in a handout which was supplied to participants as an attachment to the program. The Australian National Curriculum (2014) states:

Lave and Wenger (1991) described "learning communities" that value their collective competence and learn from each other. Through their notion of "authentic" learning, the importance of engagement and linking student interests and preferred learning modes with classroom learning has emerged. Marzano, Pickering and Pollock (2001) identified the strategies most likely to improve student achievement across all content areas and grade levels. These include using non-linguistic representations and learning organisers, and generating and testing hypotheses.

6.3 Program of work

The following overview and course materials will be provided to the participants in my study in exactly the form in which they appear below.

"The world according to Maria, the amazing talking Goldfish" or, "The history of the world through popular culture..."

Overview

Some of the most obvious things in the world are difficult to see. For example, what is it that makes us think the way we do and then act the way we act? For example, why do some people think that the pursuit of wealth should be our central focus whereas others think friends are much more important than money?

This course will explore how our worlds, both personal and beyond, are constructed through texts, reason and logic. If a broad definition of the word "text" is adopted, namely, "anything that conveys information", students will be shown how *all* texts (including themselves) have our cultural values, attitudes and beliefs (VABs) embedded. The shared cultural understandings that stem from these VABs then dictate what we think, the goals we set and how we go about achieving them. They also dictate what we think counts as knowledge, and the values and ethics that stem from such considerations.

Unfortunately, we are so familiar with these things, they have become naturalised and invisible but, like the bowl that constrains the goldfish, they hem us in and often restrict our choices. When students begin to see that their choices are dictated by what the culture believes, many new worlds can open to them and this is empowering! Additionally, providing strategies for students to analyse texts in varying ways provides the thinking skills necessary for them to begin thinking beyond the obvious.

After completing this course students will be able to:

- identify the cultural values, attitudes and beliefs that are embedded in texts

- critically examine societal behaviours and trace their relationships to a number of kinds of "knowledge"
- explain how societal and cultural pressures can be resisted when necessary
- create texts that challenge shared cultural understandings
- think critically about many issues that confront them

Time

Approx: 20 Hours.

Scheduling: start of term.

- 10 weeks
- 1 lesson plan = 2 periods.

Materials

1. Either a computer connected to both the internet and a data projector so that images can be shown to every student or enough computers for every student to view material on the internet
2. Access to song lyrics on the internet or previously prepared by teacher.

The course is easy to map to the three parts of ACARA by adding a column and then adding areas of Language, Literature and Literacy in ACARA found on The Australian National Curriculum's website. This was left to individual teachers during the study, however, as schools are at different stages of implementing the Australia National Curriculum at the time of writing. There is no requirement for WA schools to fully implement the National Curriculum until 2017.

Secondary English: A Course in CT

Area of Study	Activity	Resources	Assessment
1: Introduction	Students (Sts) learn the rules of a <i>Risk-Free Critical Reflective Discussion (RFCRD)</i> Sts given an overview of the course objectives	<i>All attachments and lesson plans are available by contacting the author</i> Attachment 1: RFCRD	

<p>2: Critical Literacy 1</p>	<p>Sts <i>discuss</i> the cultural construct "teenager" and the behaviours etc associated with it</p> <p>Sts <i>view</i> selected YouTube videos of teenage role models from 1950–80</p>	<p>Computer with internet connection and video projection facilities</p> <p>Attachment 2: Images of 1940s teenagers</p>	<p>Research: What major events occurred in the world prior to the fifties that may have set the scene for social change in the fifties and beyond? Why would these events bring about large changes in society?</p> <p>Write four or five paragraphs on the following subjects:</p> <ol style="list-style-type: none"> 1. The texts you have studied today show some of the changes that were starting to take place in our culture over time. What were some of these changes and what caused them? 2. The lyrics of the songs represented ideas that the writers thought existed in the culture at the time they were written. How are the lyrics different from the lyrics of current songs and is there a connection between current lyrics and the ideas we have in today's society?
<p>3: Critical Literacy 2</p>	<p>Sts learn the correct use of the terms "Values", "Attitudes", and "Beliefs" (VABs)</p> <p>Sts <i>critically examine</i> the VABs embedded in familiar texts</p>	<p>Computer with internet connection and video projection facilities</p>	<p>Write a couple of paragraphs on the following topic:</p> <p>Each of the images you have viewed reflects a particular style that was accepted by many people in the culture of the day; what problems do you feel people would encounter if they presented themselves like that today? Using what you have been taught about VABs, try to explain why this is so.</p>

<p>4: Critical Literacy 3</p>	<p>Sts trace the way <i>shared cultural understandings</i> are transmitted through childhood texts</p> <p>Sts <i>critically consider</i> their own goals/ambitions in light of the cultural constructions that have shaped them</p>	<p>Computer with internet connection and video projection facilities</p> <p>Access to popular childhood texts such as fairy stories etc (available online)</p>	<p>Discuss the advantages and disadvantages of conforming to the expectations that arise from the set of shared cultural understandings that come from texts.</p> <p>Describe in writing how our society is constructed as a result of our set of Values, Attitudes and Beliefs.</p> <p>Explain how the culture could be different if existing Values, Attitudes and Beliefs were challenged. How would this change the assumptions we have to make to interact with others?</p> <p>Create a text that challenges existing values, attitudes and beliefs (script for a visual text, written text etc).</p>
<p>5: Critical Literacy 4</p>	<p>Sts understand that the culture is an evolving system in which its VABs are constantly challenged and then changed to accommodate the new VABs that spring from the challenges</p>	<p>Computer with internet connection and video projection facilities</p>	<p>Panel Discussion:</p> <p>If the "virtual reality" of computer games ever became so convincing we couldn't tell the difference between it and our usual "reality", why wouldn't we think it's real?</p>

<p>6: Epistemology 1</p>	<p>Sts learn that language plays an important part in the transmission of knowledge and language continually evolves</p> <p>That "knowledge" as a construct is more complex than it first seems</p>	<p>Attachment 3: "The Flat Earth"</p>	<p>Ask students to write responses to the following questions:</p> <p>a. If knowledge claims are not as straightforward as they seem, how might this change the way you interact with your studies and the world?</p> <p>b. How are claims of knowledge usually used in the world? E.g. people often say things like: "It's been scientifically proven..." What are the reasons for putting a statement this way?</p> <p>c. Consider the statement: "When we know something for sure such as the solution to a problem, we often stop searching for other knowledge/solutions; this limits the amount of knowledge we can find as there may be many things yet to be known for which we'll never look." If this is true, what does it mean in relation to the way we look at the world?</p>
<p>7: Epistemology 2</p>	<p>Sts will learn to <i>question concepts</i> that were previously certain</p> <p>Sts will <i>critique</i> "The Cogito" (I think therefore I exist/am)</p>	<p>Attachment 4: Optical Illusions</p>	<p>Write an essay which discusses the following topic, taking care to support any statements you might make with evidence and/or examples:</p> <p>"Knowing something isn't as easy as it seems. In fact, some people argue that we can't say with certainty that we know anything. How would the world be different if we accepted that knowledge isn't possible?"</p>
<p>8: Epistemology 3</p>	<p>Sts will <i>critically examine</i> the claims of science</p> <p>Sts will <i>consider</i> various types of evidence for validity and strength</p>		<p>Sts will prepare and deliver a speech on the following topic: "There have been large mistakes made in the name of science. (Give examples.) We need to devise a new definition of the word "knowledge" that better suits the 21st Century."</p>

<p>9: Argument Analysis 1</p>	<p>Sts will discuss the ways arguments are constructed through texts.</p> <p>Sts will learn the <i>sylogistic form</i> of argument</p> <p>Sts will <i>consider</i> the "truth value" of valid/invalid and sound/unsound syllogisms</p>	<p>Student access to library resources and/or internet for research into social issues</p> <p>Attachment: Short Stories (reproduced below in this Chapter)</p>	<p>In a RFCRD:</p> <p>Discuss the effectiveness of syllogism as a means of finding truth, taking care to highlight both its strengths and weaknesses</p> <p>Consider how effective the lesson was in exploring the subject of syllogism and record findings in writing.</p>
<p>10: Argument Analysis 2</p>	<p>Sts will learn, <i>understand and apply</i> the principles of "Socratic Questioning" to the <i>investigation</i> of argument in relation to social issues</p> <p>Sts will critically examine various public policies on social issues</p>	<p>Attachment 5: Socratic Questioning</p>	<p>Using the skills you have acquired from the course so far, write an account of the assumptions, VABs etc, that are embedded in the lessons you have been given to date.</p> <p>Write a conclusion as to whether the course so far has given you the skills to be a more effective individual both in the education process and in your private life.</p>
<p>11: Argument Analysis 3</p>	<p>Sts will <i>consider</i> the implications of validity and soundness on statements of truth</p> <p>Sts will demonstrate an understanding of the concept of "deductive reasoning" by critically examining a number of common arguments</p>	<p>Attachment 6: Argument analysis</p>	<p>Read, analyse and criticise the arguments on Argument Analysis handout (attachment 6: argument analysis)</p>

<p>12: Argument Analysis 4</p>	<p>Sts will learn to examine the "truth value" of arguments constructed using "Inductive Reasoning"</p>		<p>Read a selection of information found on the internet.</p> <p>Write a critical evaluation of at least two of the websites viewed stating whether the conclusions that have been presented (may appear as statements of fact) are appropriate.</p> <p>Summarise your findings by making a statement about the trustworthiness of the internet as a source of factual information.</p>
<p>13: Argument Analysis 5</p>	<p>Sts will learn the differences between inductive and deductive reasoning and critically examine the reasoning that is used as a matter of course in our daily lives</p>		<p>Ask students to consider the following questions in their RFCRD:</p> <p>a. What are the epistemological problems in using inductive reasoning?</p> <p>b. How are these problems commonly dealt with in society?</p> <p>c. Examine the confusion and conflicts that would flow from the abandonment of inductive reasoning; how would our culture be different?</p> <p>d. Link the new ideas regarding inductive reasoning to ideas that have previously been presented in this course.</p>

14: Argument Analysis 6	Sts will demonstrate an understanding of forms of argument in forming and stating their opinions		Describe the links and connections that can be made between the various sections and evaluate societal behaviours that flow from the assumptions etc that are commonly held. Ask students to write and deliver a speech based on a controversial subject while their classmates critique their use of logic and argument, in writing.
15: Argument Analysis 7	Sts will explore the arguments/research that support the existence of gifted and talented students		Ask students to write an argument that either supports or does not support the notion that there are gifted and talented people in the world.
16: Values and Ethics 1	Sts will understand the notions of <i>intrinsic</i> and <i>extrinsic</i> value and how they are applied as modifiers to the word "value"		<p>1. Ask students to list the things that they consider to be morally desirable in our culture, explaining why these things are desirable.</p> <p>Ask students to write on one of the following topics:</p> <p>a. Many of the moral concepts we believe, value or have an attitude towards are as a result of things that need to be managed in our community. E.g., We need to value honesty and believe that stealing is bad because we live in a culture where the idea of ownership is strongly held. If the circumstances of our society were to change in the future, so would our moral views. Discuss.</p> <p>b. Write a story which describes the behaviour of people after a major disaster has destroyed the current structures of government, police, etc. Since people's behaviour is usually dependent on the VABs held in the culture, don't forget to detail how and why these change after the disaster.</p>

<p>17: Values and Ethics 2</p>	<p>Sts will explore the connection between the values, attitudes and beliefs of a culture and the culture's morals</p>		<p>Ask students to:</p> <p>a. Construct a survey to find out what their friends, fellow students, parents, neighbours value and what the intrinsic reasons are for this.</p> <p>b. Write a paragraph or two explaining the responses they received when asking questions that sought to understand the intrinsic value people placed on things and the reasons for this.</p> <p>c. Demonstrate an understanding (in speech, writing etc) as to the links, if any, between the things that have been examined in the last few lessons and wars, conflicts between races (e.g., indigenous peoples and settlers), etc</p> <p>d. Evaluate the written and unwritten school rules as to the merit of the principles that underscore them.</p>
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<p>18: Values and Ethics 3</p>	<p>Sts will explore the differences between morals and ethics</p> <p>Sts will examine and critique the behaviours that are linked to moral/ethical views in our culture</p> <p>The links between moral/ethics and concepts of right and wrong will be critically analysed by students</p>		<p>Ask students to:</p> <p>Interview someone who occupies a position of authority in our society (e.g., school principal, police officer, town councillor etc) about the moral/ethical concerns that arise in the course of their employment.</p> <p>Write one or two case studies based on the information gained from item 1. Now write a brief analysis of the case studies identifying the values, attitudes, beliefs, morals and ethics that arise.</p> <p>Write a letter to the Principal of the school identifying some moral/ethical concerns that arise from the school rules and some situations that you have seen develop in the school. Make suggestions about how these can be dealt with better in the future.</p>
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<p>19: Values and Ethics 4</p>	<p>Sts will explore the ways in which morals, ethics, values, attitudes and beliefs are transmitted through popular texts</p> <p>Sts will view issues of right and wrong as relative concepts that spring from the cultural constructions already considered</p> <p>Sts will be introduced to the concept empowering/ disempowering discourses that are constructed, reinforced and transmitted through texts</p> <p>Sts will critically examine the power relationships in the culture as they are represented in texts</p>	<p>Access to a feature film that is appropriate for showing to the particular class studying this course together with the means of showing it that is, TV/DVD player</p>	<p>Sts will view a feature film while making notes on the following headings:</p> <p>Attitudes, values, beliefs, morals, ethics, concepts of right and wrong.</p> <p>Sts will critically evaluate the cultural assumptions made in the filmic text, that is, What does the filmmaker assume is known/believed by their audience?</p> <p>In writing or in a RFCRD, sts will examine the merit of the assumptions made and the values etc that are transmitted for a multi-cultural audience in Australia in the 21st Century.</p> <p>Ask students to write a critical evaluation of texts constructed by fellow students</p> <p>Students will write the plan for a campaign to encourage people in the community to resist cultural constructions that disempower them. This will involve choosing a group and identifying some texts that have this impact on the group.</p>
<p>20: Conclusion/ Summary</p>	<p>Sts will critically reflect and evaluate this course in English</p>		<p>In a RFCRD, discuss with students the changes they have gone through in thinking etc since the beginning of the course.</p> <p>Students will write a well-constructed essay on the following topic:</p> <p>"Thinking is a natural process however it can be developed through a series of strategies that can be implemented in schools. There are/are not far reaching consequences in teaching students to think more clearly. Discuss."</p>

The introduction to The Australian Curriculum (2014) states:

Critical thinking is at the core of most intellectual activity that involves students in learning to recognise or develop an argument, use evidence in support of that argument, draw reasoned conclusions, and use information to solve problems. Examples of thinking skills are interpreting, analysing, evaluating, explaining, sequencing, reasoning, comparing, questioning, inferring, hypothesising, appraising, testing and generalising.

As can be seen, the course was divided into four areas, namely, Critical Literacy, Argument Analysis, Epistemology, and Values and Ethics, which were designed to provide teachers and students with a brief "taster" of significant areas of Philosophy that also have direct links with CT. For example, a number of contributors to the literature (Ennis, 1985; Facione, 1990; Halpern, 1998; Paul, 1992) typically agree that analysing arguments, claims, or evidence are among the specific abilities demonstrated by a "critical thinker", which justified the inclusion of a section on "argument analysis". Others have suggested that "the propensity to engage in an activity with reflective scepticism" (McPeck, 1981, p. 8) or similar approaches is an equally necessary ability; so this is explored in "epistemology". Making decisions or solving problems, as identified by Ennis (1985), Halpern (1998) and Willingham (2007) as abilities necessary to a critical thinker, are explored in the section on "values and ethics". The section dealing with "critical literacy" encompasses most of the areas identified by the literature as the term itself, as well as its content in the course, implies critical thought.

It is acknowledged that after study of the course, neither teachers nor students will have any firm understanding of any single area; they will simply be familiar with thought processes that are involved in Philosophy/CT. It is also acknowledged that none of the issues in Philosophy will be explored in detail as the entire course is intended to be begun and concluded in the space of a single school term of approximately ten weeks. My own belief, which will be explored in this study and which is based on my own experience, is that short exposure to these thought processes is analogous to opening a door that leads in a different "thinking direction" than that which is ordinarily followed. Having been made aware that different directions exist and also that many things usually considered unquestionable are available for doubt and questioning, new possibilities become apparent, which broaden the views of students in any situation requiring thought. An example is the question about the place that knowledge occupies in our culture which, although the subject of debate among philosophers, is seldom questioned in the world of "everyperson". In general usage, people claim to know many things and this claim is often considered unproblematic and accepted by their listeners who may even use such claims to assist in decision making. The ways in which these ideas are explored is considered in more than one section in the course.

It has been shown by others (Topping & Trickey, 2007) that *extended exposure* to these ideas can lead to the improvements in the thinking of students I have mentioned; however it was my intention to discover

whether the short exposure accorded to teachers and students during a school term could produce similar gains. The results will be explored in Chapter Eight of this thesis.

6.4 Guiding Documents

In order to facilitate the delivery of the course, detailed lesson plans and the resources necessary to deliver them will be supplied to participants together with a short book (see Appendix 3) entitled *Rescuing Bright Kids* (Martin & Merrotsy, 2013) that attempts to explain the approaches in a popularised way such as could be read by an audience previously unfamiliar with Philosophy or CT. The content of the book is deceptively simple as many of the ideas are complex, albeit presented in ways that made them appear simple. This is not to say that the ideas are simplified.

Given the views expressed by Wittgenstein, that: "The limits of my language are the limits of my mind. All I know is what I have words for" (1922, 5.6), and considering that this is a view that has shaped linguistic Philosophy since the publication of Wittgenstein's seminal work, *Tractatus Logico-Philosophicus* in 1922, it seemed natural that these ideas could be explored in subject "English" which has similar language objectives. This view can be seen in the Western Australian syllabus (2013) referred to later in this chapter. It seems reasonable to believe that the intended audience for the book is unlikely to read the original work of philosophers such as Wittgenstein; therefore the book is analogous to the relatively recent attempts by authors to render the great works of Shakespeare, for example, in graphic novel form without compromising the themes.

The book referred to as an instrument for this study, that is, *Rescuing Bright Kids* (Martin & Merrotsy, 2013; electronic book without page numbers) said this about language:

It's true that language has power and a whole branch of study known as **semiotics** suggests that our individual worlds are actually constructed through the meanings we apply to words. This means that words have meanings which change according to their **contexts** and over time, rather than being the concrete, objective and immovable constructs some may have thought.

It is not difficult to see some of the concerns of linguistic Philosophy in this passage, which further says:

If objects such as clothes and cars have **symbolic significance** in our culture, that's nothing compared to the words that describe them. Every good advertiser knows the value of a set of carefully constructed words in order to bring about the set of behaviours they desire, which mainly involves transferring large amounts of money from wherever you keep it to wherever they want to put it. For example, describe that good looking car as a *freedom machine* and some people will certainly consider buying it on the strength of that description. Consider what *freedom machine* means and you may arrive at the conclusion that it means the car can actually move you from one place to another which is what cars do isn't it?

This demonstrates the purpose of the book which is to distil issues such as that explored by Wittgenstein and those who followed in a populist, and therefore accessible, way.

6.5 Simplicity to Complexity

In order to further demonstrate the attempts made to move from *apparent* simplicity to complexity of ideas, I will unpack two components of the course as examples. The short stories that follow were written for the course in order to explore the "ways arguments are constructed through texts", which is part of the early section dealing with "Argument Analysis". It is used as an example here as it is as close as this course gets to a Standard English lesson.

Late At Night

Through the sullen darkness the growl of double exhausts splits the night. A bottle smashes against the pavement, male voices laugh hysterically and wheels scream against the bitumen.

Two streets away, in the pool of a weak streetlight a taxi driver drops his last fare for the night. With a cheery wave and a fifty-cent tip, her high heels sound on the brick paving and her door slams on the cold night air.

Against the stillness the freeway roars in the distance. The freeway leads to his family: his four children sleeping innocently and his anxious wife wringing her hands awaiting his return.

On the top of the darkened television a photograph stands. The camera catches the laughter of her family as they stroll over "The Bridge of Hope" in a Singapore park, a stopping off point on the way to their new home in Australia. She thinks of the oppression that had corrupted their homeland and forced them to flee for their children's sake. An old, familiar culture regretfully left behind as they flew into the unknown but a fragile freedom recaptured in this new wondrous land.

Her mind wanders to her husband patrolling the streets alone seeking money to feed the little ones. Her eyes catch the medical degree on the wall and she thinks lovingly of her husband who will drive a taxi to support his family when the language barrier prevents him from practising the profession for which he has a passion. He says that one day soon he will become fluent in English and then he will repay what they owe to those who welcomed them when their lives were troubled and insecure. She knows that they would consider such sentiments foolish as they gave unselfishly and require no repayment.

The wheels of the taxi chafe at the smooth surface of the freeway as he drives home against the onslaught of headlights. And then the engine coughs and dies leaving him on the side of the road with rain glistening on the windscreen. He waits thinking of what to do. The radio chatters incessantly in the background masking the snarling engine of the car that is stopping behind him. He sees the headlights in his rear view mirror. He feels comforted that help has arrived.

He steps out of the taxi and walks towards the shadowy figure standing at the door of the car. Through the rain he hears a voice, "Ya got problems, mate?" Then, as he draws closer, "You ain't from around here are ya?"

He feels a sudden stab of pain as a foot catches him in the groin and the concrete kerb rushes up to meet him. He grasps for understanding as the rain clouds his eyes. They are by him, kicking, sneering, taunting with words he doesn't comprehend.

The last hate-filled words he hears before he is overcome by darkness are: "That'll teach ya to take jobs from decent Aussies."

The wife sits alone as the morning begins. She has been awake all night and still her husband hasn't returned. The tinkle of childish voices rings through the house singing "Advance Australia Fair" in preparation for this morning's school assembly.

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Textual Analysis

If you are able to answer the following questions, they will help you to understand the way the writer has written the story in order to position his audience:

1. Why are none of the characters described in any great detail?
2. What "shared cultural understandings" did the reader need to bring to this story to comprehend its plot and themes?
3. Describe the values, attitudes and beliefs embedded in this story. For example, how would you describe the relationship between the taxi driver and his wife? What reasons do you have for thinking this?

4. Describe the taxi driver's attitude towards Australia and Australians by quoting and explaining the parts of the story that support your answer.
5. The writer of this story has relied on stereotypes for characterisation. Describe the techniques that have created these stereotypes and describe the cultural assumptions that shape them.
6. Explain the symbolic significance of "The Bridge of Hope," and explain the role "hope" plays as a motivator of behaviour in our culture.
7. Give reasons to support your view on whether the writer supports Australia's migration program and contrast this with your own views on this subject.
8. How does ending the story with the taxi driver's children singing "Advance Australia Fair" position the audience?
9. Explain how the writer is inviting the audience to respond to the central theme of this story.
10. If this story can be treated as representative of social issues in our culture, explain the reasons these issues exist.

As You Like It

A television screen flashes in the darkness of a suburban lounge, a male voice fresh with enthusiasm speaks: "Burger Barn...we do it as you like it!"

A beef pattie, the fat glistening in the studio lights, falls magically into the open mouth of the waiting bun. A young man takes a bite and satisfaction smooths his face. The scene fades.

"Hey dear, what's for tea?"

"I don't know...whaddya fancy?"

"I really should go on a diet you know, lose some weight."

"What about some takeaway?"

"Ya talked me into it!"

His sagging body leans heavily against the counter. He studies the menu religiously while a young face with a fixed smile waits expectantly for the pronouncement. He orders the same as he always does, "Two double beef burgers and two large chips."

The metallic voice delicately corrects him, "Two large fries..."

* * *

The dry, gnarled tree presides over the blood red skyline. The earth is hard and unyielding under the direct gaze of the unfriendly sun. Scrawny birds are silhouetted against the wizened branches.

The zebra watch despondently from the parched and dry riverbed as, in the sparse shade of the tree, an ebony figure claws at the ground. Her sunken eyes reflect the futility of her actions yet she must do something; she must feel that she has some control left over her life but the ground doesn't care and briskly resists her clawing fingertips caked with nothing but dust.

In the distance, she hears her young child feebly crying, yet there is no growth under her fingers. The soil isn't damp, nothing will grow here, but still she goes on digging; hoping.

* * *

The redness rises in his cheeks as he takes the first bite. A bead of fat dribbles from the corner of his mouth.

"Frank, you're so gross...can't you eat without making such a mess?"

"You love me anyway, right?"

"Maybe," she grins, "But I can remember when it was five star all the way and now look, Burger Barn, is this what it's come to?"

"Oh darl, I'm sorry. I'll tell you what, I'll take you to the tavern Friday night, how's that?"

"Better, but what about the smorgasbord at that new hotel that's just opened in the city, The New Broughton I think it's called?"

"I would love, you know I would but now we've got the kids money's a bit tight..."

* * *

They are excavating the hard earth. They are digging a shallow hole. Hear the shovels, sh...sh...sh...through the hardness.

Her ebony face is too weak to cry as she holds the tiny bundle; cradles it against her breast as if she is unable to let it go. She pulls the ragged sheet comfortably around the tiny closed face, briefly considering one last tired kiss.

She leans over the shallow hole wearily and carefully lays her bundle in, while the vultures tell each other excited tales. She walks away without looking back, her thin legs struggling to make each step.

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Textual Analysis

If you are able to answer the following questions, they will help you to understand the way the writer has written the story in order to position his audience:

1. Explain the reasons the writer of "As You Like It" has contrasted a common scene in Australian society with an unfortunate but common scene in the third world and explain what this says about materialism.
2. List the emotive words that the writer has used to describe the third world scene and write a paragraph explaining the values, attitudes and beliefs that make these words emotive and how they position the audience.
3. How does the use of dialogue assist the characterisation of the Australians in this story and explain how this contrasts with the silence of the African characters?
4. What comment about the difference between these two cultures is made by the fact that the "ebony figure" is not given a name?
5. Explain the comment made about Australian culture made by the use of the words "religiously" and "pronouncement" in the description of the scene in the Burger Barn.
6. Why does the writer say, "Hear the shovels, sh...sh...sh..." when describing the digging of the child's grave?
7. Explain the cultural cues that allow you to understand the relationship between Frank and his partner?
8. Explain the shared cultural understandings that are necessary to understand the central theme of this story
9. The writer implies a criticism of Australian society in this story. State how the way in which the story is written reinforces the central theme
10. How is the writer inviting his audience to respond to the ideas he is presenting?

The most obvious thing about these stories is that, with word lengths of 534 and 507 respectively, they are quick and easy to read and so serve as stimuli for the main thrust of the lesson (Argument Analysis 1).

This makes clear the idea that, although literary analysis is possible as would take place in a standard English lesson, this lesson is not about the short stories or their construction; rather, it is about the ideas that emerge from them. Deliberate attempts have been made to include structural features that are worthy of examination in subject English such as figurative language, particular and identifiable points of view and brief elements of characterisation that rely on previously understood cultural stereotypes allowing students to utilise the skills in critical literacy they have already acquired from the early study of the course. In identifying the stories' main themes, students are able to see that through the story's own cultural context, they are being positioned to take views on particular issues in Australian society which have had relevance in the culture for many years due to Australia's unique cultural history. One of the stories is actually based on a specific true event and there is no doubt that the events of the other are "true" albeit not in the same specific way. This lends itself to a discussion on the distinctions between fiction and fact, which is essentially a philosophical question related to epistemology which leads to issues explored later in the course.

The section on epistemology explores further ways arguments are constructed and the value of various types of evidence. For example, in lesson 6 (epistemology 1) students were given the following argument (attachment 3) and were firstly asked to refute it, before considering the type and "weight" of the evidence used to support it. The link between this and both the critical literacy and argument analysis sections is obvious:

The Flat Earth

The world is definitely flat and this is easy to prove for the following reasons:

- a. Most people agree it looks flat.

- b. If it was a ball as many people claim, anything spherical, cylindrical or round in any other way placed on it would roll. It's possible to place a ball on the ground and have it stay perfectly still which proves the world is not round.

Now, some people may say that it's such a large ball that any particular part of it may appear flat. I would say that there's no evidence at all for this. If some people would argue that photographs have been taken from space to prove it I would retort: "Prove that anyone ever went into space" and, if they felt they were able to do this, I'd point out that all photographs are flat anyway! Show me a photograph that has depth to

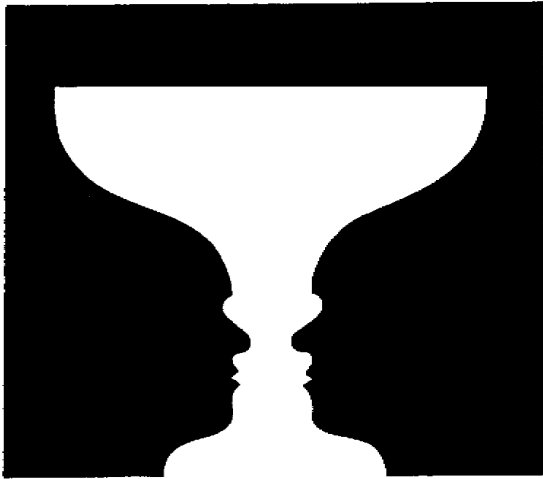
such an extent it can show every aspect of a ball; in fact the Earth is a flat disc which is the reason it appears round from above (if anyone is able to get above).

Some may even argue that ships etc disappear over the horizon which shows they are going around the ball. If anyone has ever seen a ship do this, it's because they have very poor eyesight and the ship has moved out of range; in fact, ships sail around the circumference of the disc.

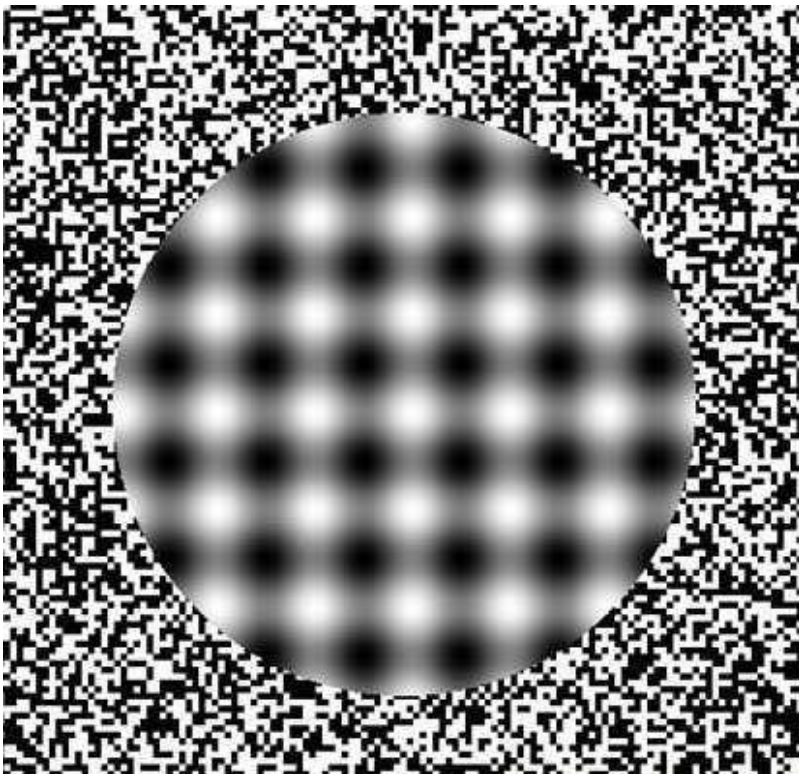
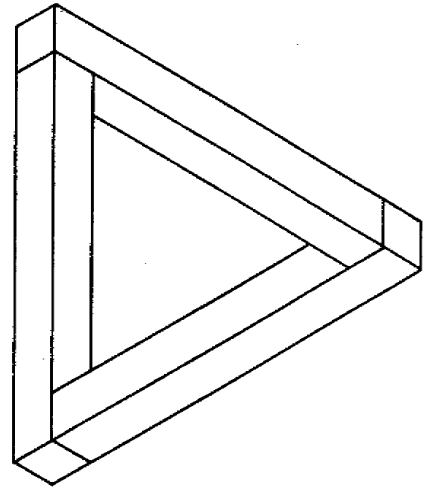
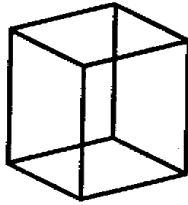
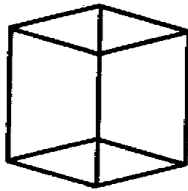
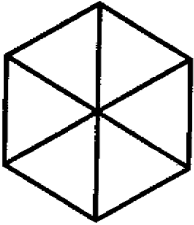
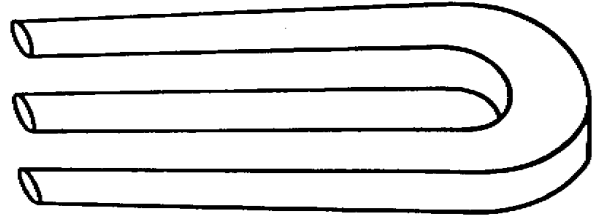
Finally, someone might argue that they have seen it written in a book. I would ask them to cut and paste *this* argument into a book and they'd then see an alternative argument written in a book! It's hardly proof is it?

Having been shown that issues previously taken for granted that resulted from thought were available for scepticism, students were led through Epistemology lesson 2 into traditional philosophical thought, specifically the Philosophy of Descartes, by looking at the following resource sheet which demonstrates that not only did individual lessons move from simplicity to complexity but the course steps did also.

Attachment 4: Optical Illusions



The impossible magnet



Rationale of the Course in English

It is a fact that most, if not all, secondary school students in Western Australia undertake a course in English. Therefore, if the elements of Philosophy/CT that have shown to be beneficial in many ways in a student's education are embedded in a term of the English course, then these elements can be explored by all students. It was also the purpose of the study to establish whether teachers can learn to deliver courses this way through support provided in terms of a program and guiding documentation. In fact, there may be other reasons for doing this that will emerge during the course of the study.

As previously mentioned, the teaching of CT in Australian schools is supported by the Australian curriculum (2014). At the time of writing, as the Australian Curriculum is still in the process of being implemented in Western Australian schools, attempts were made to find documents that inform current teaching in WA schools. It was not possible to locate a written "Rationale" for Year Ten courses in English that was written by the School Curriculum and Standards Authority, which is the WA organisation responsible for the various courses. As the teachers participating in the study were teaching Year Ten students in a Western Australian context, it is reasonable to believe that, in the absence of written documentation providing a rationale for teaching English in Year Ten, the rationale provided for the Year Eleven and Twelve classes would equally apply to Year Ten as it very likely presents a view of teaching English that is embedded in WA education, namely:

Language plays a central role in human life: it provides a vehicle for communication, a tool for thinking, a means of creativity and a source of pleasure. Through language people shape understandings of themselves and their world. An understanding of language and the ability to use it effectively empowers students. It gives them access to knowledge, enables them to play an active part in society and contributes to their personal growth. (Rationale, English syllabus, 2013)

It can be seen that the authority responsible for the construction of the document from which this was drawn is making assumptions about a number of things, including a connection between language and thought and also the way language functions as a means of creating personal and social identity. The idea that the language system shapes the thinking of its speakers was first formulated by the German philosophers J.G. Herder (1744–1803) and W.V. Humboldt (1767–1835). According to Koerner (1992), Humboldt's Philosophy of language was a major influence of linguistics as he felt that the subject matter of linguistics should reveal the role of language in forming ideas. That is to say, if language forms ideas, it also plays a role in shaping the attitudes of individuals. These theoretical matters, however, are best known from the writings of Sapir (1929; cited in Tohidian, 2009) and then Whorf (1956; cited in Tohidian, 2009) and have been the subject of much debate since. Known as the "Linguistic Relativity Hypothesis" or the "Sapir-Whorf Hypothesis", the references cited in the English syllabus suggest they have a bearing on

a course in English and therefore this study and can assist in its contextualisation. The connections between this idea and linguistic Philosophy are immediately obvious.

The notion known as "the linguistic relativity hypothesis" posits a connection between thought and cognition (Gumperz & Levinson, 1996; Lucy, 1997; Slobin, 2003). In general, Whorf's views on language touch upon the problem of reality and perception, logic and cognition. In his "Language and Logic" (1941), Whorf attempts to demonstrate that common logic is not universal but dependent on the language of the speaker. The average person does not realise the influential nature of linguistic structure on cognitive processes for the same reason that other cultural ideas are rendered invisible by the way they are naturalised within the culture. It can be argued that, in the same way that CT makes other cultural norms visible, it can also have this effect in relation to language.

The extent of this connection differs according to who is examining the hypothesis. However, as the notion has entered the culture in the manner of other concepts that have been described, a discussion of the actual concepts could occupy a chapter of this thesis, which is not warranted in reporting the research. Therefore they will be considered in outline. For example, Casasanto (2008) has claimed that the fundamental questions related to the nexus of cognition and language involve whether we "think in language" and whether language shapes our thoughts. Clearly, the answer to this question had been considered resolved and unproblematic by the authors of the Rationale of the English syllabus. On this subject, Whorf said:

The background linguistic system (in other words, the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas, the program and guide for the individual's mental activity (reported in Carroll, 1956, pp. 212–14).

While this suggests a relationship between language and cognition, that is, a linguistic relativity similar to that posited by Wittgenstein, it does not claim unidirectionality or causality from cognition to language and these issues have been investigated by many other writers (e.g., Lenneberg, 1953; Fishman, 1972; Black, 1959; Lucy, 1992). For example, Casasanto (2008) claims that linguistic relativity is different from a concept he describes as "linguistic determinism". His claim is that, because linguistic relativity does not strictly determine the thoughts of the language user, if it is the case that there is a strong connection between language and thought, our thoughts would be determined by the extent of the language we had acquired.

This and similar matters have been the concern of other research which has focused on exploring paths in which language does influence thought as well as attempting to determine to what extent language affects cognition (Lucy, 2003; Slobin, 2003). It has been claimed that language is an important vehicle for thought, in part, because language facilitates the understanding of others' knowledge and beliefs. Gentner (2003, p. 202) emphasises, in part, the important role of language in the understanding of abstract, relational

information and most writers agree that language is an influential tool in shaping thought (Casasanto, 2008; Gentner, 2003) which suggests an approach of compromise allowing practical application. It can be seen that these are ideas that are addressed in the English course used for this study.

Perhaps most relevant is the research of Lee (1997) who explains the Whorfian hypothesis in terms of the role of language in teaching and thinking in order to improve pedagogical practice by reflecting on the language–mind relationship. This author places an emphasis on the notion of "linguistic thinking", which further lends support for a course in English as an instrument for improving cognition through philosophical/critical thought as described by the syllabus and The Australian Curriculum. He goes on to discuss "thought insofar as it is linguistic" or "language in cognition" (p. 432), his premise being that cognitive processes are linguistic in nature. A central idea derived from the debates outlined is that, if reality is perceived and structured by the language we speak, the existence of an objective world becomes questionable, and the scientific knowledge we may obtain is bound to be subjective (Husserl, 2012, p. 642).

When Lee (1997) explains the Whorfian hypothesis in terms of the role of language in teaching and thinking in order to improve pedagogical practice by reflecting on the language–mind relationship, he perhaps says the most to inform the place of the English course described in this chapter. In placing an emphasis on the notion of "linguistic thinking", "thought insofar as it is linguistic" or "language in cognition" (p. 432), "because cognitive processes are linguistic in nature" he demonstrates that language and thought "are inextricably interrelated entities", thus making the matter clear. As language is closely intertwined with conceptual activity, linguistic thinking plays an integral part in communicative activities and meaning-making processes (Lee, 1997), which are the central goals in any course in Secondary School English.

If it is accepted that language is *at least* a vehicle for thinking, there is no need to engage in the debate of whether it is more than this in considering a course in subject English as a vehicle for achieving the benefits cited in the literature of teaching CT.

The *Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) as cited on the Australian National Curriculum's (2014) website recognises that:

critical and creative thinking are fundamental to students becoming successful learners. Thinking that is productive, purposeful and intentional is at the centre of effective learning. By applying a sequence of thinking skills, students develop an increasingly sophisticated understanding of the processes they can employ whenever they encounter problems, unfamiliar information and new ideas. In addition, the progressive development of knowledge about thinking and the practice of using thinking strategies can increase students' motivation for, and management of, their own learning. They become more confident and autonomous problem-solvers and thinkers.

Whether or not we accept the supposed radical constructions of Sapir–Whorf theory regarding the part language plays in the thought process, there is no doubt that there are more pedestrian reasons subject English plays a crucial part in a student's journey through the academic curriculum. All subjects in this curriculum, including mathematics, rely on a student's ability to manipulate concepts through the use of language. It seems reasonable to believe that the more language capacity students possess, the more successful they have the potential to be. It is acknowledged that language capacity is not the only factor in such potential, however it is certainly a key factor. As the concepts presented in Philosophy and CT are necessarily linguistic, a student who successfully engages with these areas of study will become skilled to perform better in the curriculum regardless of whether it is believed that the skills are directly related to their cognition. It is also the case that presenting courses in Philosophy/CT in subject English may overcome the problems that have previously been described with "Domain Specific knowledge" in ways which will be explored. The conceptions of CT which form the course's basis tend to be borrowed from the literature on cognitive development (Anderson, 1980; Case, 1980; Piaget & Inhelder, 1958). Bailin (2002), for example, has argued that CT is constituted by processes that can be interpreted in one of two ways, either as mental processes or as a series of procedural moves.

An interesting observation which may illuminate the matter of CT courses in English in more compelling ways was the study conducted by Topping and Trickey (2007) which reported that a whole class of children gained an average of 6 standard points on a test of cognitive abilities. The test used in this study was The Cognitive Abilities Test (CogAT, CAT) by Lohman and Hagen (2001, 2002) which followed an Intervention characterised by a verbal cognitive focus and high self-regulated peer interactivity developing from initial teacher scaffolding similar to that provided in my own study (Topping & Trickey, 2007, p. 789).

The researchers justified their interventional approach by reference to Philosophy for Children (Lipman, 1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980) which they claimed espouses the principle of cognitive modifiability. In regard to this they said:

Lipman conceptualized three modes of thinking (critical, creative and caring) and four main varieties of cognitive skill (inquiry, reasoning, concept formation and translation). All of these elements constitute Lipman's definition of collaborative philosophical inquiry and featured in the intervention here. (Topping & Trickey, 2007)

Although the results reported cannot be construed as an improvement in IQ, there is a correlation between the arguably innate ability measured by IQ tests (Dickens, Flynn & James, 2002) and one's performance on the CogAT which suggests that an intervention which improves performance in cognitive abilities could cause a corresponding improvement in IQ.

It has been argued that courses aiming to increase IQ would be most likely to produce long-term IQ gains if they caused children to persist in seeking out cognitively demanding experiences (Dickens, Flynn & James, 2001) which suggests a strong connection between both concepts (Dickens, Flynn & James, 2002).

In relation to intelligence, Sternberg said: "Viewed narrowly, there seem to be almost as many definitions of intelligence as there were experts asked to define it" (Sternberg, 1985, as cited in Gregory, 1998, p. 151). As an illustration of this point I would quote Boring who said: "Intelligence is what is measured by intelligence tests" (Boring, 1923, p. 35).

Regardless which of the many definitions of "intelligence" is adopted, it is indisputable that all means of testing that are currently being used in Western Australia rely on performance in a test that is delivered using language. Although some researchers such as Linda Silverman with her interest in the theories of Dabrowski (as cited in Silverman, 2009) may suggest that there are tests for intelligence that do not rely on language or performance, for many reasons these are not utilised in Western Australia at present. This leads to the inescapable, although seemingly simplistic notion that, if using particular teaching strategies improves performance on tests of cognition or intelligence, then people are capable of being taught to be more intelligent. As John Bruer (1994) notes: "We send our children to school to learn things they might not learn without formal instruction so that they can function more intelligently outside school" (Bruer, 1994, as cited in Geake & Cooper, 2003, p. 273).

This notion becomes unarguable if it is considered that none of these notions, namely, intelligence, test scores, cognitive abilities, etc has meaning beyond the discourse that constructs them. Like "giftedness", if all aspects of intelligence are defined by performance that is tested, then the test results and the concept become one and the same within the construction. This renders this idea "simple" rather than "simplistic" and also shows Boring's assertion (Boring, 1923) to be correct!

It is suspected that Whorf would agree with the notion that, in regards to the functions of the mind at least, all that can be said to exist are the multifarious theoretical characteristics that have been said to point to intelligence even by those who believe that these phenomena have objective existence independent of the construction. The most used in the course of everyday conversation and the mythology of DETWA-based education is that of IQ although such testing does not rely on the notion that the mind and the brain are one nor does it see its failure to be clear on this point as relevant. It does, however, treat intelligence and the tests that both measure and identify it as one and the same thing.

There are many writers who still occupy the arguably mechanistic and positivistic space that suggests, not only that there is a correlation between brain activity and thinking but that there is a causal relationship between the two. Some of these writers advocate that all educational focus should be on improving brain activity and in fact, suggest that using a technological approach to facilitate this is desirable (Geake, 2003, 2004, 2008, 2011). Although it is often difficult to understand the true nature of such an approach or the evidence that would support its conclusions, it is easy to see that these writers argue that the mind, that is, consciousness and the intelligence that has some kind of relationship with this phenomenon, are a mere function of the physical brain. This only has relevance to this thesis when such writers argue that teachers should be aware of this argument, and should focus their attention on improving brain function in order to improve cognitive functioning rather than the other way round. John Geake (2003, 2004, 2008, 2011) is an example of a voice that calls for changes in education to accommodate this notion and an analysis of his claims creates a framework for the critique of others of a similar ilk.

For example, Geake states:

over the last decade, teachers have shown an increasing enthusiasm for relevant information about brain functioning and its possible applications to education. Thus the primary professional role of teachers might be regarded as having responsibility **for changing the brains of one's pupils**, hopefully for the better. The future of teaching and learning in schools will be affected by advances in our understanding of how brains function. (2004, p. 65, emphasis added)

In fact, Geake's descriptions of how technologies such as Magnetic Resonance Imaging could evolve to allow teachers to "plug their students in" in order to give them a mental check-up seems to border on science fiction yet it appears attractive in its functional simplicity until one considers the research that suggests that an essentially important function of an effective teacher is to build relationships with her students such as that cited in relation to Social Constructivism. It is questionable whether treating a student like a modern car which can be diagnosed by electronic equipment could achieve this relationship-building. It is also debatable whether the parents in his examples would be as enthusiastic about teachers who did do this as he suggests, namely,

The scene is a parent-teacher night at a local primary school. A parent is discussing the poor maths results of her child, Chris, with Chris's class teacher. In the first scenario, the teacher acknowledges that Chris's maths performance has been under surveillance for a while. To that end, the teacher has available Chris's event-related neuroimaging report captured in the school's neuroimaging assessment room. Here, the whole class regularly undertakes their term assessment tasks while wearing individual neuroimaging headsets. (The school bought a class set of neuroimaging head-set scanners some years ago. They've been set up in the former class computer room, long abandoned when all students were issued with hand-held computer note pads with infra-red links to their teacher's classroom PC.) ... The parent is pleased with the professionalism of the teacher, especially that the teacher knew what was the matter, and could do something about it. (Geake & Cooper, 2003, pp. 17-18)

In fact, it would be easy to believe that Geake is being satirical however this view is undermined by the persistence of his claims.

Geake further claims that a recent study sought evidence for neural correlates of general intelligence. In answer to the questions: where and how does the brain generate measures of general intelligence?, he cites Duncan et al. (2000) and states they found a common brain involvement, in the frontal cortex, on both spatial and verbal IQ tests. In part, this leads him to the view: "that a neuroscientific understanding of children's learning could enhance the professionalization of teachers" (2011, p. 44).

This appears to be a similar claim to that which would suggest that knowing the workings of car would be beneficial to a driver wishing to drive it. There is a *prima facie* truth to such a claim in relation to cars and drivers that is related to taking into account the workings of the engine to avoid driving in a fashion that does damage, but beyond this, such knowledge seems to be irrelevant if it weren't for Geake's worrying, but apparently justificatory statement, which may suggest where Geake wants to drive the car even if the destination seems to be incompatible with the aims of constructivist learning at least, in the 21st Century. As Changeux (1985, p. 249, emphasis in original) notes: "different learning inputs may produce *different* connective organisations and neuronal functioning abilities but the *same* behavioural capacity". In other words, much human behaviour can be predicted and controlled, again, as is commonplace in classrooms (Geake & Cooper, 2003, p. 10).

In using terms such as "predicted" and "controlled" It is easy to believe that Geake has a view of education that is out of step with the culture but he then goes on to reassure us:

a good reason for educationists to embrace cognitive neuroscience is the hope that such an endeavour might stem the increasing marginalisation of teachers as pedagogues ... teachers must be empowered once again ... to design curricula and pedagogies, because they are in the best position to judge how to engage young people (Johnson & Hallgarten, 2002, p. 12, as cited in Geake, 2004, p. 17).

Whether we support the "position of teachers as pedagogues" it is not difficult to see that there is a political motive in following his admonition which has to do with control and the tendency of the culture to value knowledge derived from disciplines of which they have had no direct experience over those derived from the academic study of "education". Most people in our culture have had experience of education, teaching and teachers, and it is suspected that they would see few if any theoretical underpinnings in the lessons to which they were exposed delivered by people who had become familiar with them. This can be contrasted with the reverence with which people who are knowledgeable in subjects that are apparently difficult to understand are treated in our culture. For example, the term, "It's not brain surgery" is commonly used in our culture to suggest that whatever isn't brain surgery is simple. The corollary of this is that brain surgery is not simple and logically, neuroscience is analogous to brain surgery. Geake's suggestion is that if

educationalists engage cognitive neuroscientists in dialogue to share each other's professional knowledge they will be accorded a more powerful and influential place in the culture than they occupy as "pedagogues". Although this may be true from the perspective of the perceptions of "everyperson", we are left wondering how this will benefit students.

In the case of Geake's claims, there is a central underpinning belief, that is, the connection between brain activity and cognitive functioning previously noted, that he appears to believe is self-evident as the issues that would undermine his claims remain unexplored in his writing; the problems explored in Philosophy of mind do not appear to exist in Geake's reality, yet it would have been in his interest to acknowledge and dispose of them as they do impinge on his claims even if it is unwittingly. In view of this lack of acknowledgement, Geake's perspective could be seen as one of the myths about brain activity that he claims is "pervasive nonsense" in the teaching profession, a myth he believes should be abandoned (2007, p. 71). We are given no more reason to believe that his view is accurate than we were apparently provided with to establish the views he wishes to debunk that relate to right-sided/left-sided brain functions and claims of ten percent usage.

Interestingly, neither Geake nor any other researcher of whom I am aware reports any research nor draws any conclusions about the connections between thought and other bodily organs (Smith 1990, p. 3), suggesting an unwarranted belief in a prior knowledge of the claims researchers wish to make in this field. It is easy to believe that, in addition to the correlations between mind activity and brain activity that can be monitored, there are also correlations between mind activity and other bodily systems such as the adrenal system; however it is not suggested in any of the literature that the adrenal system is responsible for mind. Unlike most physical processes, mental processes are unobservable. They can only be inferred after the fact when someone has accomplished a task which apparently requires thinking. Smith argues, in fact, that terms such as observing, analysing or interpreting do not refer to mental operations at all but rather to different tasks which may require thinking as a part of their process:

The words all presuppose that something is going on in the brain (rather than in the liver or the lungs), but they do not specifically refer to what is going on in the brain. They refer to what the person is doing ... [B]ecause English can find employment for at least seventy-seven words to make different kinds of statements about what people do when they think, it does not follow that there must be seventy-seven different kinds of thinking for the brain to do. (Smith, 1990, p. 3)

In fact, this difficulty, which is essentially a philosophical one, is the reason those who have attempted to study the brains of those who have been credited with great intellectual achievement such as Einstein (Witelson, Kigar & Harvey, 1999) have not reached convincing conclusions that establish the connection between brain structures and intelligence and/or performance. It is clearly the case that Einstein's achievements were considered "great" only within a discourse that creates a particular world view

(Foucault, 1970) and, if Einstein had lived in a society that did not value his achievements, they would not have been considered "indicators of intelligence".

The view that the mind is a construction of the brain harks back to the philosophical area referred to as "Philosophy of Mind" as previously noted, which has concerned itself with whether the mind (and therefore intelligence) are functions of the brain or something distinct from it for a long period without reaching any definitive conclusion for reasons I have already argued that show such conclusions are not to be had. In order to explore this subject however, some have turned to considerations of intentionality and propositional attitudes (e.g., beliefs and desires) asking: what is it that causes an individual's neurons to fire and muscles to contract? This kind of question has been the subject of thought by epistemologists and philosophers of mind from at least the time of Descartes. Gergen (1985) has stated that the Social Constructivist approach was developed to overcome the Cartesian mind-body dualism and the well-rehearsed debates between empiricism and rationalism which of course links the educational context of the course described here with its content. He further claims that constructivism is a "metaphor of cognitive psychology" which emerged in the 1970s (Gergen, 1985) and since then, has been the buzzword in school and teacher education in the western part of the world. It has been recognised as both a "paradigm" and a "theory" (Fosnot, 1996).

Even if it is possible to detect brain activity that corresponds in time with observed behaviours such as thalamic activity and speech, a definitive causal connection cannot be established without a priori knowledge. Such knowledge is incapable of being proved with adequate evidence. For example, those who have an interest in mapping the brain may point to the effects of a brain lesion in regards to a behaviour and form the conclusion that a disability on the right side of a person's body, for example, is connected to a lesion observed using magnetic resonance imaging (MRI) in the left side of the brain. However they will not be able to prove convincingly that the lesion *caused* the disability and not that there is another connection analogous to that between a television and a broadcast station: a failure of a television aerial causing the picture to disappear from the television cannot be explained as a fault in either the television or the broadcasting station. In fact, when the television picture does disappear, the television repair person needs a priori knowledge to make the repair but the connection between the re-emergence of the picture and the cause of the problem that brought him (usually at great expense) remains coincidental for at least a period and the television repair person would not exhibit any great surprise at being called out again the following day for the same problem as there is a tacit but unspoken belief that this is the case; that the a priori "knowledge" is not definitive. It has already been shown how it is not necessary to engage in this debate if the matter is placed within discourse theory.

Geake does not seem to be troubled by the arguments that could be levelled against his views and this perhaps indicates he is deliberately attempting to add to the culture-driven myths he decries. In stating an

argument which certainly could be levelled against Geake's view, Phillips (1995) has said: "mechanistic underpinning by an orderly, predictable, and controllable view of the universe proved inadequate to capture the active and social characteristics of learners" (Phillips, 1995).

As has been noted, there has been much research on the social aspects of learning that relies on relationships rather than the pseudo-scientific meddling advocated by Geake.

Geake however goes on to report:

Back in 1938 pioneer neuroscientist and Nobel Prize winner Sir Charles Sherrington called for the abandonment of old phrenology. To suppose the roof-brain [cerebral cortex] consists of point to point centres identified each with a particular item of intelligent concrete behaviour is a scheme over simplified and to be abandoned. Rather, the contributions which the roof-brain ... makes toward integrated behaviour will ... resolve into components for which we at present have no names. (2004, p. 71)

This would seem to suggest that Sherrington is advocating dismissing notions that mental activity can be mapped to brain structures in the manner of phrenologists and those who have since claimed a more scientific basis for doing so. In fact, Geake (2008, p. 126) proves himself to be one of these people when he goes on to say:

The central characteristic of brain function which generates its complexity is neural functional interconnectivity. There are common brain functions for all acts of intelligence, especially those involved in school learning. These interconnected brain functions (and implicated brain areas) include:

Working memory (lateral frontal cortex);

Long-term memory (hippocampus and other cortical areas);

Decision-making (orbitofrontal cortex);

Emotional mediation (limbic subcortex and associated frontal areas);

Sequencing of symbolic representation (fusiform gyrus and temporal lobes);

Conceptual interrelationships (parietal lobe);

Conceptual and motor rehearsal (cerebellum)

This list, on the face of it, appears to simply construct a more complex means of doing that which Sherrington states ought not to be done, although perhaps Geake would argue that it meets Sherrington's claim that it would "resolve into components for which we at present have no names" by naming the components it has resolved into. In the face of the overwhelming evidence presented by the neurosciences that Geake supports so steadfastly, it is impossible to deny that there are correlations between mental

activity and brain structures he mentions, but it is reasonable to ask where the evidence is of the causal connection and even whether such evidence can be possible.

Paul Fletcher, writing in *The Daily Telegraph* (8th September 1998) conjectured: "One day there might be enough known about brain activity to show the process of learning, and whether it was taking place efficiently."

Geake clearly believes that day has arrived but, in saying that the brain "has evolved ... as an organ ... not to know what is going to happen next" (2004, p. 71), he is making a distinction between the brain (organ) and knowing, suggesting distinct parts which could be described equally effectively as body and mind even though this undermines the entire argument. If "organs" can *know*, then equally they can exist without knowing which shows that even Geake is distinguishing between the materially existent organ, and the non-material "knowing" which also cannot be observed.

Geake's argument is also undermined by Eccles (1902–1997), a Nobel prize winning neurophysiologist, when he said:

Now before discussing brain function in detail I will at the beginning give an account of my philosophical position on the so-called "brain-mind problem" so that you will be able to relate the experimental evidence to this philosophical position. I have written at length on this Philosophy in my book *Facing Reality* ... I fully accept the recent philosophical achievements of Sir Karl Popper with his concept of three worlds. I was a dualist, now I am a trialist! (Eccles, 1973, p. 189)

Eccles then goes on to explain the "third world" that is an addition to the mind/brain "worlds" of dualism, an explanation which looks suspiciously like an argument in favour of social construction:

It is the world that was created by man and that reciprocally made man. This is my message in which I follow Popper unreservedly. The whole of language is here. All our means of communication, all our intellectual efforts coded in books, coded in the artistic and technological treasures in the museums, coded in every artifact left by man from primitive times—this is World 3 right up to the present time ... it is the whole world of culture. It is the world of civilization and culture. Education is the means whereby each human being is brought into relation with World 3. (Eccles, 1973, p. 189)

Eccles can be seen as a person who has actively researched brain function contradicting someone (Geake) who has simply adopted the research of others to reach unprovable reductionist conclusions such as: "There are common brain functions for all acts of intelligence, especially those involved in school learning" (2008, p.125).

6.6 Conclusion

English is a subject taught to every student enrolled in a secondary school across Australia. Its objectives and subject matter, that is, the development of students' abilities to communicate and to understand the world that communicates with them through language, is central to every area of the curriculum. If a course in Philosophy/CT can be delivered during normal instruction time during English classes, it can be delivered to every student in the secondary school requiring no extra curriculum time and therefore can achieve the aims of The Australian Curriculum noted earlier.

The literature has shown that there are many benefits to students in delivering a course in Philosophy/CT over time. Perhaps most notable among these was the improvement in tests of cognitive ability demonstrated by Topping & Trickey (2007) which also imply an improvement in IQ over time.

The Western Australian School Curriculum and Standards Authority has suggested benefits from teaching English in schools in improving the cognitive abilities of students. The Australian Curriculum Authority has mandated that all schools in Australia will adopt the National Curriculum by 2015 and that this will include the development of the skills of Australia student in CT. It should be noted that the Western Australian Minister of Education has made WA an exception to this by issuing an instruction to WA Principals that they do not need to adopt the Australian National Curriculum until 2017.

If the course described in this chapter can indicate the improvements in students' cognitive functioning suggested by the literature, it should be incorporated in the curriculum of all Australian schools. It was suggested in Chapter Four that teachers would have problems in delivering this course which are analogous to the reasons that teachers have been shown to fail to address the higher levels of Bloom's Taxonomy. If the course described here is able to demonstrate how to deliver it through its lesson plans and other supporting materials, this problem can also be addressed. The results of the study that sought to explore this possibility are to be found in the following chapters.

Chapter Seven: Autoethnographic Study

7.1 Relevant Personal History

If I had been a sentient being at the moment of birth, I'm sure the memories I would have laid down would have been similar to those I experienced on the first day of school. Prior to this day I had been protected by my mother in the womb of a Shoreditch slum where I had taught myself to read at age four and begun laboriously ploughing through the children's literary classics, as much for the satisfaction of having reached the end as for the pleasurable journey of the read.

Characterised by my mother early as "different," in a vague non-specific way, which served only as an excuse to alienate me from the implied violence of the children who came from the rough families who shared our run down street in a forgotten part of East End London my difference, whatever it was, didn't protect me from my mother. I guess she was different too, but whether she was unique in the same way she often insisted I was, was a moot point. She was definitely moody, loving and terribly violent, but what did I have to compare it with? I assumed that savage beatings and the hospital visits that ensued were a normal part of life. Yet, the many nights I lay snivelling after having cried myself into hysteria listening to the sound of hop scotch squares being laughingly pounded under streetlights outside, left a mark on me somewhere that causes tears to flow even as I write this account many years after the beatings had finally ended. Self-awareness is not something that comes naturally to a child and it is obvious that we all feel that our experience of life is the same as everyone's until somehow we learn differently.

So the security that a child is rumoured to need was never mine. A young child comes to believe that the world is not a safe place when the person he relies on most for his development is unpredictably loving one moment and violent the next, for no external reason that can explain it. And my father worked late every day and, as a result, was never actively engaged in the lives of my younger sibling or myself.

This led me on a journey that has consumed my life. Initially, the journey was the same one we are all on: the journey of self-discovery. If I could discover myself I reasoned, I could understand my role in the world and perhaps find some degree of control over the events that made me feel anxious due to their unpredictability. Later, my journey was diverted by anger and disillusionment at the realisation that a society I had considered caring and benevolent had allowed such excruciatingly painful damage to be done to my psyche not to mention my body.

I had gone to school every day and I found I was indeed different. Perhaps it was the ways these differences manifested themselves that allowed my teachers to completely overlook them. Although I did

excel in art and the various activities of subject "English" I was constantly frustrated from the very beginning that I was forced to read "Janet and John" and their literary equivalents when I would have been more challenged by the works of Shakespeare or Dickens.

If my teachers did not overlook my differences, perhaps there weren't structures in place within the late nineteen fifties/early sixties United Kingdom schooling system to allow them to be identified and nurtured. At the very least, it seems reasonable to expect that someone might have mentioned them to me so that I could include them in the plans for my journey rather than allow them to tear me apart to the extent that I have felt completely alienated from others most of my life and, at times suicidal, but the system seemed so intent on sameness; rendering every student the same state prescribed educational offerings in the same order and level of progression (Butts, 1955; Cunningham 1972) that no differences could be catered for regardless of what the differences were. School is apparently about learning how to interact with the world, but apart from the social aspects of relating to others, the curriculum offerings did nothing to help me on a personal level.

Van Gogh would have been given a stick of charcoal and a piece of rough grey paper two or three times a week the same as everyone. When he reached high school he would have been forced to go through the creatively dulling experiments in colour exercises the same as everybody else and eventually signed up for exams in the order in which the system dictated. If my experience is typical, and I have reason to believe it is, the careers officer would then have suggested that he sign on for employment with the metal box factory where he probably would have worked to this day unless circumstances had meant that he had chanced upon the knowledge that he was talented and had the wherewithal to rise above the conditioning techniques employed in schools then to ensure that every working class student followed the roles prescribed by them by the culture and didn't get into trouble with the Police. In short, became a "good citizen;" which implied maintaining regular employment, living in government provided accommodation and following the same route to work each day until the ride of a lifetime in a black limousine deposited the unfortunate's body at the cemetery, where he continued to conform by decaying in a grave that was neatly lined up with those around it. Sameness and uniformity characterised the UK schooling system that retarded my development and, as I later found, also the Western Australian education system (Butts, 1955; Cunningham 1972).

Among the many things that the administrators who allow this to continue don't seem to realise, is the damage this does to individuals, their families and the culture as a whole. Surely it does not require a great imagination to see how the world would have been a less enriching place without the art of Van Gogh and the influence it has provided to all contemporary art. Art is one of the things that defines us as a race and distinguishes us from other animals that inhabit our Earth. There are many other human activities that do

the same. How many individuals are being retarded by the very systems our society has place in to "educate" young people, not to mention the irrelevant information that is offered in many curricula?

So the reasons for my emotional involvement in the subject of my research are plain:

I feel that my own life experiences show that neglect of the gifted and talented is analogous to child abuse due to the social harm that can be done by not acknowledging their existence let alone catering for them. In fact, The Senate Employment, Workplace Relations, Small Business and Education References Committee in a publication entitled *The Education Of Gifted Children* (Commonwealth of Australia, 2001) identified the gifted and talented as a group that were at educational risk, as did the Western Australian review of the state provision for this group in the Western Australian Department of Education, Gifted and Talented Review Consultation Paper (West Australian Department of Education, 2001). I don't feel that it is overstating the matter to say that not catering for students at educational risk leaves them open to whatever is entailed by the risk mentioned and, to leave children open to risk in any area of their lives even if it is by omission, is failing in a basic responsibility of a carer. I feel it to be a societal responsibility to protect children from educational risk and, if education has any value at all as a means of improving the lives of those who are the products of it, to avoid taking the risk seriously is reprehensible. Of course it could be argued that education doesn't actually make a difference in lives, which leaves the question open as to why all governments in Australia pour so much money into providing it, but that argument may lead off on a tangent that is outside the scope of this study. It is sufficient to say, I believe in the value of education and have dedicated my life to being an effective classroom teacher, therefore I have strong feelings about the nature of the risk. That is not to say that the Department of Education and Training should perceive itself as an Educational "rescuer" by prescribing a treatment that will remove the risk. Kulik and Kulik (1987) concluded that, "grouping can be a powerful tool in the education of gifted and talented students..." but the clearest benefits were derived from courses that were designed especially for the particular cohort. Although they *did not* say that the teachers should be capable of designing such courses this appears to be self-evident and Feldhusen (1989, p. 10) stated categorically that, "The voluminous research on gifted and talented students provides educators with guidelines for serving this special population," making it clear that teachers of this at-risk group should be familiar with the research if they are to cater for them appropriately. A central proposition in this thesis is that there are ways of providing for students who may be gifted without the need for identification or an understanding of theory on the part of the teacher.

7.2 Case Studies: Recruitment

My meeting this morning is with the head of Middle School in a small independent school. I will admit to feeling concerned, almost anxious about finding enough participants to conduct a decent research project. I have spent the past two weeks attempting to recruit teachers and am strongly reminded of my experiences of long ago, perhaps in a different life, as a salesperson; trying to make a sale as if my life

depended on it. In many ways, the lifestyle I had built for myself then did depend on it. I had youth and a cheeky Cockney wit to see me through and the insight I had formed then, which had been long forgotten until now, was that people bought me rather than my product. Unfortunately, the "me" that I sold then, was a character from the past and all I had to sell now was the worth of the project. I certainly believed in what I was proposing, but most of the schools I had approached had a variety of reasons for not being interested: the time wasn't right, the consultation process with parents and staff before making changes to the curriculum would take an extended period, the curriculum was set and satisfactory and, the most common: "we'll get back to you..." left me feeling that Schön (1995) was right when he claimed that there was no interface between the University knowledge, which as a PhD candidate, I currently represent, and the professional practice from which I sought participants.

Eventually, two young teachers from a Private Church School volunteered simply because they saw the study as a way of improving their professional knowledge. In telling this to a friend who is a Principal in a public school, and bemoaning the fact that there wouldn't be a way of trialling my course with state school students for comparison, he put me in touch with a group of teachers who he told me were more skilled than most.

Finally, a home schooler requested me to tutor her son and instead I suggested she participate in my study. She spoke enthusiastically to a friend who was also a home schooler and I had a reasonable number of participants.

7.2.1 Alan

The Beginning Christian College is in a suburban area that is still struggling to emerge from its history as a retirement town and a haven for those wishing to live an alternative lifestyle. The streets that surround the school are an interesting mix of old weatherboard dwellings inhabited by aging hippies and modern brick four by twos built by the families that were attracted by the glossy advertising of the developers who have changed the suburb for ever. In fact, it was the developers who were responsible for changing this place into a suburb of a major Australian city rather than the tired crabbing destination that day trippers escaped to from the city during the seventies. The developers still make advertising claims suggesting that little has changed but the local council will inform any interested person that the infrastructure has been unable to keep pace with the population now that it has become one of the fastest growing areas in Australia.

It is clear to everyone that Wallawee now has an identity crisis. It is criss crossed by canal developments with multi-million dollar properties elbowing each other for room along the banks. From the road, all that can be seen as cars cross the inevitable bridges is a picket fence of masts created by the ubiquitous line of boats outside waterside mansions. Complete with yacht club and marina, Wallawee is a popular place for

those who can afford the boating lifestyle. From the marina, it is not hard to see the rows of expensive water side apartments that stand empty as a testament to developers' greed and lack of foresight as, even a fast growing place has a limited number of people who can afford expensive real estate however much the greedy wish this wasn't so.

The feeling that pervaded the place through the seventies still hangs in the air however, and it has certainly found itself into the ethos of the large government college that shares a campus with the local University and Technical College. The government investment in this innovative project that should have yielded much in this fast growing area in terms of student outcomes, yielded so little that the school needed to shed staff in light of diminishing numbers and eventually amalgamate with another school in the area for survival. Unfortunately, the local residents who actually had an interest in education, noticed the poor results of this school and made the situation worse by initiating a large number of private church schools and, when these began to show promise in student outcomes on 'league tables," ensured that the government school mainly received enrolments from those who were simply discharging attendance requirements mandated by the government. This notion is supported by Index of Community Socio-Educational Advantage (Barnes, 2010) which shows that the government college has a score of 13% in the top quarter whereas the nearest church school, which is in walking distance of the government college, has a score of 29%.

While the government college has a monopoly on programs such as the "Career and Participation Course" and achieves well below the Australian average on NAPLAN, all the competing church schools send a large proportion of their students to University at the end of year twelve and achieve results well above the Australian average on NAPLAN. The college claims its vision of itself as being "a unique centre of excellence for lifelong learning" however the turnover of staff and the results seem to suggest this is wishful thinking.

I remember that, according to Schein (1992), a basic assumption around which cultural paradigms form is an organisation's relationship with its environment. An empowering discourse (Hodge & Kress, 1988) is constructed by the participants of a cultural context which constructs the "reality" they inhabit (Hodge & Kress, 1988; Schein, 1992). This impacts on the culture which, in this case is that found in the government college, as "contending parties seek to impose their own definition of what will count as "truth," "reality" etc. (Hodge & Kress, 1988, p.121). It is interesting that the growth of competing private schools in the area appears to suggest that those inhabiting the environment of the college do not accept its constructed reality. It would be equally interesting to know if internal cultural participants such as the college's staff, accept this construction privately in the same way they express it publically.

Against this backdrop, The Beginning Christian College was established in 1997 by a Principal and one teacher to cater for its 22 students on the grounds of a local church. Currently, the school occupies its own ten hectare site and has a student population of more than five hundred ranging from K-12.

I note that the contemporary definition of organizational culture (OC) includes: what is valued, the dominant leadership style, the language and symbols, the procedures and routines, and the definitions of success that characterizes an organization. OC represents the values, underlying assumptions, expectations, collective memories, and definitions present in an organization (Schein, 1992; Cameron & Quinn, 1999). The parental support for the establishment and growth of The Beginning Christian College indicates strong support from the college as a function of the extremely well defined structural features that are a consequence of the Christian groups of which they are a part. This is in stark contrast to the lax unstructured approach of the Government College.

There are many parking spaces in the car park of the school when I arrive to interview Alan. When I look up after stopping my engine, I realise I have parked in front of a life sized crucifix, which is thrust into the school's well-manicured green lawns. I know this is a Christian school but, it isn't until much later I realise that this artefact actually sums up the degree of Christianity that characterises the staff at the school which, in turn, informs their attitudes.

The architecturally interesting buildings surround this area and, understandably for a school that was built in relatively recent years, they are bright and modern. There is a complete absence of litter and this reflects the pride in the school that is publically expressed by staff; after all the school was built independently as a result of the efforts of parents to establish an environment for their children in which they can be educated in both, the educational way mandated by the state, and the ways of their faith. The sense of ownership that follows from these beginnings is evident in the parents who guide my way through the school each time I visit.

In the early morning, when I arrive for my first meeting with staff, very young students play happily on the grass around the crucifix, looking neat and tidy in their school uniforms complete with white shirts and ties. Some, even smile at me as I pass.

Alan is a young teacher with around six years' experience. He volunteered to participate in my study enthusiastically on the day I met him and has carried that same enthusiasm with him throughout the project. He has even improved some of the materials I gave him by re-designing resource sheets through the use of computer skills that are superior to mine. It becomes evident as the study progresses that he is

looked up to by other teachers and serves as a de-facto head of department in English as the budget currently does not allow the employment of a substantive head.

He works in a building in the school which is as modern as the rest and is set back from the rest of the school. We sit in his office for our first interview and I notice he leans towards me from his seat as he answers my questions. His body language is open and engaging. Before I say anything, he smiles and says, "I've only been teaching a few years."

"That will make for an interesting mix in my study," I offer, "As I have other participants who have been teaching for thirty years or more." He seems reassured although looks confident throughout.

I ask him if he has any "academically gifted students" in the year class to which he will teach the course.

He says, "We use loose streaming in this school and my class is the advanced standard class." He acknowledges my raised eyebrow and attempts to explain. "They are an average achieving class although some of the boys have poor motivation and don't do well for this reason, wherever others do perform well. Some of the girls show good insight and perform well. They tend to adopt a questioning approach and look for connections between things. They have a real drive to find answers to questions. In contrast to this, I find a lot of the boys don't really care." He thinks for a moment and says, "I guess this depends on topic. I find a lot of girls realise they will succeed through language as I believe that language tends to privilege girls in this developmental stage; girls develop their language skills earlier and are generally more advanced for their age."

I ask, "Does that belief influence your classroom behaviour?"

"Yes, I would say it influences the way I interact with students more than anything. For example, I try to encourage boys to explain themselves more. For some boys, three words is enough explanation whereas for some girls, three pages is not enough..." He smiles wryly. "It's not so much a lack of confidence with language, it's just that boys in general, don't feel the need to use a lot of it in explaining themselves: it's just succinct, logical answers to questions, which often lack depth. This means I don't get as much chance to see how the boys function intellectually as a lot of the tasks in English are skewed towards getting students to explain their ideas. As this seems to be a weakness for boys, we don't have very many boys in that class; probably one boy for every three girls. A lot of the boys in the school are in the standard year ten class.

This leads me to quiz him on the behaviours he would consider demonstrate "brightness" and he says, "Bright kids dig deep, that is they show insight and give deep answers." He goes on to say, "Some students think outside the square and are a little bit different in their thinking...For example, they ask probing questions and relate answers to other texts that have been studied." He says that some students seem to be quite gifted but this doesn't always equate to achievement. "Some have managed to fly under the radar quite well and one of the reasons I volunteered to trial your course was I thought this was a way to encourage them to use any skills they have to critically analyse texts and for me to learn how to bring these things out in my students. I thought that is, I could show that those skills, when they use them, are signs of giftedness and this may increase their motivation and their performance."

I remember that many researchers agree that there are "gifted underachievers" (Bélanger & Gagné, 2006; Reis & McCoach, 2000; Peterson & Colangelo, 1996, Moon et al., 2002a) and recount various possible reasons for the phenomenon they claim to be observing, one of which is lack of motivation.

"So you use the term "giftedness" when you're talking to the kids?" I ask.

"Well, not so much the term "gifted," I think I probably use the term "insightful" especially if I'm impressed with their understanding of a text but, as I've said, to me this is an indicator of giftedness."

I feel pleased that this early in his career, Alan is taking note that "giftedness" etc doesn't always reflect itself in achievement. I ask, "Are there any students who have the ability to "think outside the square?"

"There are a couple of kids who work quite well and understand stuff but this is fairly conventional understanding and there are a small number who are a little bit different in their thinking and actually have some really insightful things to say..."

"Can you give examples?"

"Just students who take the ideas we're talking about further or they'll bring the ideas we're talking about into other texts they have experienced outside school; they'll have a conversation about a movie they saw and make connections with what we're talking about now. For example, we looked at some science fiction earlier this year, speculative fiction, and this allowed me to see some of these things because, with speculative fiction, it allows you to bring it out of its own context into your own context and some of those ideas about how to re-appropriate those things seemed really insightful to me. ... One of my favourite

classes to teach is literature and trying to teach the year ten class to have that kind of focus is appealing to me."

I note what was said by Cooper (1999, p 17) and realise that Alan has an understanding of giftedness that serves its purpose albeit derived from an intuitive understanding he has constructed from his own experiences:

"When knowledge and understanding are missing, a number of associated problems exist ... educators cannot identify gifted students when they do not have an adequate understanding of what giftedness is and how it may be demonstrated in the education setting. In addition to a reluctance and inability to refer students for assessment and possible placement in gifted programs, educators who lack this knowledge are unable to provide an appropriate differentiated curriculum for gifted learners" (Cooper, 1999, p.17).

I am interested to know whether my course will encourage Alan's understanding and allow him to differentiate the curriculum for his students in the future.

I clarify, "So, there are students who, in your belief, are brighter than they are currently showing?"

"Yes, and as educators it's disappointing for us to see students who are not reaching their potential. They're mainly boys and they are not necessarily gifted in English, as they're doing well on other subject areas. I see them achieving well in other subjects and think that if they had an equal interest in English they could achieve much better."

I recall that West (2005, P. 41) noted:

"A number of studies have pointed out the under-achievement of boys in schools relative to girls across the western world, particularly in areas related to verbal fluency and literacy"

And also that It has been noted that students may exhibit CT skills and abilities in one context, or domain, but fail to do so in another (Willingham, 2007).

"Do you think they have a distinct belief that subjects are divided into subject areas which excludes the idea that knowledge may be connected across curriculum areas?"

"Yes, I do think that's the case," he says, "But one of the things that brings a relevance to this for me is that I'm working with a colleague at a Montessori School and the way his students respond to tasks is very different to the way my students do. I know their environment is very rich and, while they may be studying English, their subjects are very much integrated in that environment. I try to make my students aware of that by including things like political awareness and social justice in English but I can see that the way they [The Montessori School] is organised; the integration they have, gives students a much better awareness that it's not just words and language, English, it's all connected."

"Do you have anything in your background that might facilitate the teaching of Philosophy or CT in your classroom?"

"I think that "background" might be quite a loose term. I think a lot and I think deeply and I am quite analytical. I like to connect dots and make sense of things and I use knowledge to reject ideas, make decisions and extrapolate. So, I guess I would say it's not something I feel uncomfortable doing; it's something that is a regular part of my daily life...sometimes to my detriment." He is obviously being introspective at this point as his eyes are cast down and he is thinking deeply.

"In terms of back ground type stuff, I guess the way I grew up and the family I **was** part of," He corrects himself, "**Am** part of, is quite narrow minded about things...things happened that made me wonder whether there was a 'right way' of thinking about things to understand the world around me and this involved actively rejecting a lot of the ideas I'd been told growing up. I've become," he takes a thoughtful pause, "I've become very critical and analytical about the things people tell me."

On reflection, I see that Alan is becoming more and more confessional as the interview proceeds. I note that Alan has no formal training in Philosophy or CT but, in a sense, is "self-taught."

"I guess one of the reasons I thought that participation in your study was a good idea was that I have only been teaching for a few years and only recently have had another full time English teacher to work with, so the idea of gaining some professional learning in a range of areas, particularly finding new ways of looking at things with students, is something I am really keen to do to grow as a teacher."

I feel uplifted by this statement of idealism and enthusiasm which I recall reflected my own attitude towards teaching throughout my career. I now proceed with the interview in a tone that suggests I have connected with Alan. He senses he has inspired me.

"In your opinion," I ask, "Is actively teaching thinking skills to students a valuable thing to do?"

"History tell us we need to have populations that can reason, can think and can test. There are so many things that have happened in the world that could have been avoided if people had been able to reason. Even in our political system in which people vote without looking into things, they don't try to understand issues and with a preferential voting system doing so is important. People don't think and ask why and I think that if students are prepared to do that then hopefully this could bring a positive change to society. I tell the literature students I'm going to ruin their brains forever because they will never think about things the same way ever again..." We smile at each other as if sharing an intellectual conspiracy as this is something I've also told my own students in the past.

*I think how much this represents and reflects the views expressed, by both the title and the content of the 2007 United Nations Educational, Cultural and Scientific Organisation's report entitled **Philosophy: A School of Freedom** (2007).*

The interview is coming to a natural end when he asks, "Is there scope in the course for giving ideas and/or direction on how to sustain students' interests?" He explains, "I'm not used to teaching other people's programs but I imagine you have a certain attachment to this course as it obviously reflects your own passion in the subject matter?"

I assure him he retains the professional discretion to cater appropriately for his own class and I am happy to be flexible in discussing and negotiating changes he feels necessary. It is interesting that he makes few changes during the course of the study and interacts with me enthusiastically throughout the term; certainly demonstrating a professional respect for a more experienced teacher but also being enthusiastic about participating in intellectual debate and banter that prompts me to feel very positive about his role as a participant.

It is late in September when I meet Alan for the second and final interview. The setting is the same. I note that, through the foundations established at the last interview and the communications we have had throughout the study, we now meet with the air of easy familiarity which characterises old and respected colleagues. I note also that we have known each other for approximately twelve weeks however see in each other similar beliefs and a shared passion for a profession that consumes us both. This creates an empathetic bond.

I ask him to describe his experience of teaching the course.

He replies, "Some of the ways of thinking about knowledge and beliefs have been new to students and this has challenged ideas they have held on to strongly for a long time. For example they have struggled and then come to understand some of the differences between truth and facts; that's one of the big things. Discussions have been an important feature. One of the best parts of teaching it has been being able to have discussions about things the students are interested in particularly with the focus being on teenagers. We had quite a few lessons where we just talked...It was good."

"Has the course challenged any ideas you might have held?"

"The ideas were reinforced for me rather than happening for me as these are things I've been questioning a lot in the last couple of years anyway. In recent years I've had an interesting relationship with beliefs versus knowledge and thought about truth as something difficult to nail down because of relativity and that sort of thing. You know, the postmodern way of looking at things. Those things were becoming fairly natural anyway but, in teaching them to the students I've been able to reaffirm in myself the relative nature of those things and also the way they're affected by our values, attitudes and beliefs; our own agendas. One of the things I found most interesting in the course was the use of logic in order to construct arguments. I explained to the students that sometimes logic leads to complete falsehood; just because something is logical doesn't mean it can support something else and that it's true. I guess my own issues with Obsessive Compulsive Disorder (OCD) during the last couple of years, that's been an interesting thing to learn about."

Later, I worry about whether to include Alan's casual disclosure of his problems with OCD in the case study but eventually conclude he is suggesting this as an integral part of himself.

"May I ask about that?"

"Yeah, sure. When people think about OCD, they think about having everything in order, clean, that kind of thing but, for some people it's more inside the head and it can be quite invisible therefore a little more difficult to explain to others. Having to do mental gymnastics to disprove ideas that come into your head and will not leave you alone can really make you need to learn that logic sometimes is not truth; just because something makes sense doesn't mean that it's true."

I realise that Alan's description of his thought processes is very similar to descriptions of "metacognition" found in the literature, for example: "the knowledge and control people have over their own thinking and learning activities" (Cross & Paris, 1988, p. 131).

awareness of one's own thinking, awareness of the content of one's conceptions, an active monitoring of one's cognitive processes, an attempt to regulate one's cognitive processes in relationship to further learning, and an application of a set of heuristics as an effective device for helping people organize their methods of attack on problems in general (Hennessey, 1999, p. 3).

"Sometimes conspiracy feelings are a bit of a trap, not just for people with OCD for people in general. Sometimes things make good logical sense and it's been good to learn to intellectualise these things. Logic is only one way to argue a point of view; there are different ways of understanding and argument and logic cuts out personal experience and relies on the knowledge on hand. I came to the course with some postmodern doubt and my experience during term three reinforced this."

I see at once how insightful Alan is in relation to his "problem" and wonder whether this insight assisted his participation in the study.

"Do you feel that anything you've done in the course during the time you've taught it will have a lasting impact on your teaching?"

"Definitely yes. Some of the questioning techniques I've learnt from the course have helped me to refine the way I ask questions," he says. "Sometimes a student will give a good answer but I've realised it's not really a good answer unless they've thought about it. It might be true or it might make sense but the Socratic questioning component really helped me to think about how I might push kids to explain their answers and really think about the answer they've given; to test it further than they do when they just stick up their hands. I now encourage them to use a lot more why questions and do a lot more probing of where the ideas are coming from rather than just accepting them. We've had some really deep discussions as a result of this."

"Do you feel that this has given rise to any transferable skills emerging in the students; have you seen them picking up on ideas and challenging you without you prompting them?"

"I guess they do tend to ask more questions but I'm interested to see how this transfers to the next topic. We're going to study *To Kill A Mockingbird* (Lee, 1966) so there will be plenty of scope to discuss issues, and for them to demonstrate the transfer of skills and also the terminology they've learnt."

"Have you seen any behaviours that you could consider consistent with "giftedness" emerge in students who hadn't shown those kinds of things before?"

"Yes. There are a number of students in this class who are really reserved but there are quite a few kids who started saying things I didn't expect. It's not that I thought they weren't very deep or anything, it's just that I didn't know how they thought previously so I could see new things. The way they critiqued things they were interested in for example, war games or violent videos. They were able to identify what the underpinning stories were and where those stories were coming from and whose idea they supported. I had feedback from a colleague who is a sports teacher, about a letter written to him from one of my students which dealt with some of the assumptions he had made in choosing to run an A and a B sports team this year. The student said that some of the ideas embedded in that decision that weren't overtly expressed. The student had obviously reflected deeply on that issue and used his new skills to critique his own interest in the subject and I found that interesting. I feel that many students in my class now reflect on their own experiences in this way."

"Could you say that any of your students have suddenly emerged as intellectually outstanding?"

"There's probably one or two who have suddenly come out of nowhere. I suspected that some of my students were gifted but not these. One student for example, had not handed in a lot of assignments throughout the year for lots of reasons so I hadn't had a real opportunity to see where she's at. But, when some of these topics came up such as the way your values, attitudes and beliefs would be formed if you had grown up focusing on one kind of text found in popular culture, she was quite vocal in a way that showed me she had thought about these issues at a really intellectual level.

Another one was one of those kids who was looking at video games and he said something that caused me to say, "Can you repeat that so we can bask in the glory of that comment?" because it was at such a different level of anything he'd ever contributed before.

There was another student who'd recently come from another country so her English skills were quite limited but she showed that she has a strong understanding of the concepts in the course now, even though she may still not be able to put them down in writing. These are just a few examples of the good things that happened in my classroom during the term."

I ask Alan how his experience of the course will inform the way he will approach next term's text.

He says, "I will definitely be less prescriptive than I may have been in the past not so much in terms of the activities we may do but in terms of what I want the kids to get out of it. I have realised that what I may want my students to get from a text, may not be what they see as important and I have realised that I want to grow people who can think for themselves. I'm likely to have more skills now to achieve this as well. I will make sure that students are responding for themselves. I think teachers often focus on making sure students know the right things to say in exams; so they can tailor their answers so they will fit into their previous knowledge and hit all these checklists. I feel I want to educate students on how they can get issues out of texts but I don't want to tell them what to say as I think that's possibly dangerous and also it's not much help."

"So, apart from the content, did you need to adopt a different pedagogical approach?"

"I did find I was teaching differently, perhaps putting less effort into reaching pre-determined outcomes or goals and moving towards letting the class move the lesson in the directions they were interested in. I found that I've been less of a teacher and more of a facilitator; more of a person who pokes and prods rather than one who rams stuff down students' throats. In using the group discussion model for the first time, I now feel motivated to reflect on how we might set that up better in the future."

I see at once that Alan is using a process that some writers have described as "collaborative elaboration" (Van Meter & Stevens, 2000) in which learners build shared understandings that they could not have achieved alone (Greeno et al., 1996). In fact, this is the same sharing of views as might take place in a "Community of Enquiry," (Lipman 1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980) and further encourages the learner to arrive at his or her version of the truth, which is influenced by his or her background, culture or embedded world view. This view accommodates the relative versions of truth called for in a postmodern classroom with direct links to what the learner already knows (Bransford, Brown & Cocking, 2000). I am fascinated that Alan has discovered this process embedded in my course as, although it was deliberately embedded, we have had no conversations that would overtly suggest this.

He goes on, "There were times when we used the Risk Free Critical/Reflective Discussion (RFCRD) approach and other times we just talked a lot, and wrote little." He grins.

"I guess students were involved on building on each other's knowledge. There was some resistance to actually re-framing and responding with some students apparently being very discrete in saying, "That's my little bit and that's yours and we'll keep those separate, but as we went more through the unit we did start to feel like we were working more together to come up with ideas."

I ask, "Were there any negatives that need to be addressed in the future?"

"Errr... "Thomas the Tank Engine" and "Wind in the Willows" were quite old text choices and I felt I needed to come with some things that were more modern so, that was one negative if you like, but anything that inspires me to do some work to inspire students is actually good."

I resolve to make the reasons for the inclusion of these texts more explicit in future incarnations of the course as it is their age that is one of the important factors.

"Obviously, being the person I am, needed some structured assessments so I wrote some. There was a lot in each lesson plan so, like any lesson plan, you could go: this is the bit that isn't working for this lesson, so I'll leave that bit out. It was good that you allowed me the flexibility to do that. Quite often, I did that and then came back to the bits I missed later. I think that the course works well as it is especially for teachers who are happy to think about what they're teaching. It was interesting teaching a unit that was based on ideas rather than texts. I think this will provide me with a lot of scope in the future especially with lower ability classes. The idea of using texts rather than teaching texts was a revelation for me. One of my favourite lessons was that devil's advocate lesson. I enjoyed having students telling me why we shouldn't have smoking in schools and why we shouldn't legalise marijuana...that was good. I would definitely run the course again as, from my perspective, this was something that really worked for me in getting students to think although I might consider the timing particularly as it was so effective in term three. It is definitely in my sights for next year.

As I speak to Alan and later reflect on his comments and experiences I realise that he intuitively follows Dewey's advice and, more than that, comprehends its spirit:

"Reflection involves not simply a sequence of ideas, but a consequence—a consecutive ordering in such a way that each determines the next as its proper outcome, while each outcome in turn leans back on, or refers to, its predecessors" (Dewey, 1933, p. 4).

His comment regarding "Teachers who are happy to think about their teaching..." was not lost on me nor was the criticism that was implied by it which echoes the research which showed that, in well over half of the observations of 27,000 classrooms observed, student learning reflected the two lowest levels of Bloom's taxonomy: remembering (25 percent) and understanding (32 percent) (Goodwin, Lefkowitz,

Woempner & Hubbell, 2010). This suggests that many teachers use the "banking model" (Freire, 1970) of teaching, in which they see themselves as purveyors of pre-determined knowledge to students who wait anxiously to receive it which is antithetical to teaching CT.

Choy and Oo (2012), in making an explicit connection between the reflective thinking of teachers and their capacity to teach CT, found that most of the teachers studied did not reflect deeply on their teaching practices nor did they practice the four learning processes: assumption analysis, contextual awareness, imaginative speculation and reflective scepticism which the researchers claimed were indicative of reflection and therefore indicative of their ability to teach CT..

Alan shows himself capable of engaging in all the areas defined by Choy and Oo (2012) and this goes some way to explaining the success of his participation in this study however this will be explored in more detail in Chapter Eight.

As a postscript to this case study, I received the following email approximately eight weeks after the study concluded:

Hi Steven

In writing our second semester reports, Dorothy [the other participant from this school] and I have noticed improved engagement and understanding in the majority of our students. We figure this has a lot to do with the CT course as we noticed more students taking their ideas further and attempting to justify them in their exams. So, we have decided this year's Year 9s will benefit from doing the course in Term 1 of Year 10 next year.

Thanks again

Alan

7.2.2 Paul

Paul is the Head of Department of English in a state run secondary college in a vaguely beachside suburb called Mudigee. In this area, the residents seems to work at complying with the stereotype of working class Aussies and it wouldn't be hard to wonder whether the stereotype preceded the reality or was shaped by it. The truth is however, that while many of the residents look like the media version of Aussie battlers, with the largest population of English migrants in the state, few were born in Australia (Australian Bureau of Statistics: <http://www.abs.gov.au> accessed June 2013).

Many have settled in this and surrounding suburbs to live the recycled myths presented in England by the top rating Aussies soap operas. It can be suspected, that quite a few have become disillusioned with this notion early in their new lives in the "Land of Opportunity" and the large amount of graffiti around the area including the walls of the school are just one expression of it. That is not to say the population is poor. They are just poorer than they'd like.

The roads around the school resound to the sound of V8 engines being run out to their maximum by people who are in a hurry to get somewhere. Not that any of the teachers who "tut" at the speed would dare ask where. The sound of screaming engines punctuates the peace of the suburb through the night as do the voices of couples shouting frustration at their partners, often about the lack of money. The rate of domestic violence in Mudigee is among the city's highest (Australian Bureau of Statistics: <http://www.abs.gov.au> accessed June 2013)

Coupled with the fact that the local newsagents do extremely well selling lottery tickets, it's not hard to see where the minds of Mudigee residents run to in their disturbed dreams; the culture of Mudigee is heavily shaped by the dreams and frustrations of its "almost have" population. Strangely, few of the parents of students at MCC appear to see education as a way of achieving dreams.

Not everyone in Mudigee makes a living from the sweat of their brow however. Mudigee's borders extend to the coast and there are a number of properties with ocean views and price tags so high they can only be reached by those in the high paying professions and, more recently, those who work in the mines in the State's North. It is not hard to see that the large number of Christian schools that has sprung up around Mudigee, thrive as a result of parents who can pay for their children to be educated; the kind of parents who like assemblies and crisp school uniforms; morning prayers and compliant attitudes among teachers and students. The result of this is that those who can't pay are forced to send their children to Mudigee Community College (MCC) where their children make the teachers pay a different kind of price. Only 13% of the students at MCC are in the top quarter of the Index of Community Socio-Educational Advantage (Barnes, 2010) and the school itself has a below average score on this index. This is opposed to scores of 27% and a higher than median score of the nearest Christian school which is less than five minutes away. A small percentage of the students from MCC go on to University whereas 50% more go directly into employment suggesting that Education is not really valued by the majority of students at MCC.

The school admin claim, "NAPLAN results reflect strong progress as a result of a focus on academic rigour" (ACARA, 2014) in their public communications which could be seen as an attempt at "varnishing the truth" (Sweetland & Hoy, 2001), as the school still performs at below average levels on all measures of NAPLAN and has for the last five years.

I remember the debate in which a key consideration is raised by Peter Reason when he asks — "who owns the knowledge, and thus who can define the reality?" (Reason, 1994, p. 325). The classical approach is predicated on 'change from the outside' while the new paradigm looks for collaborative inquiries. If culture is co-created by the members of an organisation, it is they who should jointly inquire into it. Perhaps the MCC feel that this is done through their annual re-visits of the school development plan.

This process of defining and revisiting impacts on the culture of the workplace as "contending parties seek to impose their own definition of what will count as "truth" and "reality" (Hodge & Kress, 1988, 121). An implication of this is that what counts as "knowledge" comes to be "known" through the discourses and the epistemology of the organization is shaped rather than simply being expressed. (Hodge & Kress, 1988).

MCC has a high turnover rate among its staff which seems to imply something about the views of at least some of the staff towards the college. Until recently, it was designated a "hard to staff school" by the state education department which offered incentives for teachers to join its staff. This tag was only lost when the project that invented it was abandoned by government. A quick walk through the campus alerts even the most liberal researcher to the reasons for the designation: the tell-tale scattering of rubbish and the groups of students doing impressions of angry mobs hanging around outside the library. The general impression is of a group of young people barely under the control of the school staff.

Amidst the chaos and clutter of this school, Paul attempts to practice the profession for which he has a long held passion. It's hard to say whether it is this passion that keeps him here or his strong belief in social justice. Perhaps it's the mortgage trap as, although Paul lives close by, his heavily mortgaged home is in a better part of the suburb.

Spend any time with him and you soon realise that Paul is the setting for his own life. In the anarchic violence of MCC or in his own place, you would be struck by the degree in which Paul inhabits himself more than any place he could share. Cut off from others as a result of his own sensitivity; alienated by his natural intellectual life, he learnt long ago his mind, or perhaps his soul, was the safest retreat from the oft mindless and relentless activity of the world outside himself. He has lived there ever since.

During our first meeting I ask him: "Do any of your students think outside the square?"

He responds, "What square?"

In an attempt to clarify I say, "Different to the norm..."

He says, "I don't believe in any norm..."

In spite of what he tells me about his school, I am uplifted by the recognition that his idealism is still intact. He expresses enthusiasm for the course he is about to trial in my study.

He is approaching middle age and, through the anecdotes he relates to me outside of our interviews, I observe that he knows the script of Head of Department by *heart* and plays it out like an Oscar winner; a smile and empathetic nod of the head to a complaining parent; the adoption of an authoritative demeanour in discharging his duty as leader of the English Faculty. I perceive it all as a deliberate attempt to hide the pain filled rage that comes from being let down by the circumstances from which he expected so much more. He rests inside himself and his study these days consists mainly of introspection and Philosophy of Self. The idealistic notion that he can make the world as gentle as himself is played out one period at a time; one brutal middle school class at a time.

That is not to say he does not send out signals; invitations to the world to join him. As an artist, he speaks his pain in colour; as a leader in the Zen Buddhist group in which he takes refuge, he shows others how to avoid trampling sensitivities. He writes poetry. And yet he is drawn to a particular form of solipsism after all, although a world of one would be lonely, it would be less cruel. When we meet we instantly become friends.

I see Paul as an embodiment of the sentiment behind the quotation cited in Miraca Gross' article (1998) The "Me" Behind the Mask: as well as the asynchronicity noted by others (Schroeder-Davis, 2012): "I have come to the conclusion that the degree of my difference from most people exceeds the average of most people's difference from one another; or, to put it more briefly, that my reactions to many things don't conform to popular patterns" (Joad, 1947, as cited in Gross, 1998, p. 167).

The epigraphs of one of Paul's poems reveals a lot:

"I came to cast fire upon the earth; and what will I, if it is already kindled?"

... *Think ye that I am come to give peace in the earth?"* Luke 12, 49–51.

"And about the ninth hour Jesus cried with a loud voice, saying, — My God, my God, why hast thou forsaken me?" Mat. 27, 46.

And then the poem goes on to say, in his own voice:

Pain rubs and divides compassion:

The blackened limbs of my fight

Are no longer ablaze with rage

Yet like rotting vegetation

It channels somewhere.

(An excerpt from a much longer poem)

Revealing the pain he has suffered from a conflict many would not even notice.

I realise at once how I might be accused of corrupting any data I have collected from Paul by revealing him this way even though he has given me permission to do so. I realise also that I am representing him in a particular way and there may be other possible representations. In mentioning him at all, I represent him; he occupies a place in my mind as I have constructed his "reality through ethnographic recording" (Bourdieu, 2003 p. 282) and his views are not considered less as a result than they might have been had this not been the case. The possible ethical concerns of identification are acknowledged although others will not see Paul in the way I have, who listened to the sound of his voice as well as the messages it both intended and did not intend to convey. Paul lived in front of me and, as much as I have attempted to portray what I saw, the secret of Paul's inner existence remains intact for the same reason it became a secret; his belief in the inability of others to reach out. This guarantees his continued anonymity in the world as well as in this thesis. His voice remains his own unmitigated by editorial. I consider this my attempt at being reflexive (Anderson, 2006)

In establishing the context for his own experience of the course for this study, he tells of how he is "frustrated by the demands of grading" and so "[He] never looks at past results." He then goes on to explain:

Administrators say that the best predictor of results in year eleven and twelve is year nine NAPLAN results. "Statistically it has been proven to predict performance on Western Australian Certificate of Education (WACE) exams", they say, but if testing in year nine is a good predictor of year twelve results, I may as well sit idle for three years. The school keeps files of past student achievement and questions are asked if a student achieves higher in your class than they did in previous years but I don't read the files and I don't care about this process as I don't think they would be a very good predictor of how they will respond to my own teaching style or the material I give them.

He says he believes that the system is giving a message to teachers that their efforts are not going to achieve anything.

He then explains that students are selected for the school Gifted and Talented or Academic Extension programs on the basis of NAPLAN results. I note that his body language suggests that this is a ludicrous proposition. He says, "A one off test is not a very good indicator even though Head Office personnel say differently."

He says that about five out of twenty two students in his year ten class show *some* of the behaviours that could typically be associated with giftedness, but then goes on to say, " In my twenty seven years of teaching, every student t I have taught would show some indicators of "giftedness". When questioned about the indicators of giftedness he means, he clarifies by saying: "Truly gifted students are often wise beyond their years and have the ability to be self-critical. If they are not nurtured at primary school, by the time they get to High School they are disengaged and this shows itself through restlessness. The connection between giftedness, achievement, compliance even, is tenuous at best."

I want to know whether anything in Paul's background would prepare him to present a course in Philosophy/CT.

"I have a PhD in Fine Art Theory and I've read quite widely in Comparative Psychology, Sociology, Philosophy and Religion. I also teach English stage three and was a presenter for DETWA in stage three in literature. I believe that if a student is going to achieve highly in these courses there has to be talk about Philosophy and thinking; you have got to talk about semiotics and binaries and fallacies and you have to use some of the terminology of Philosophy.

I believe the Senior Secondary Academic Support and Standards directorate (SSASS) are right when they look at our criteria and say that English "value adds" to the curriculum as a whole...I don't know how they do it, but they compare our results with like schools and have said that we're one of the best English departments in the state."

I recall that in 1988, Nickerson reviewed the literature dealing with Philosophy/CT and concluded that the success of transferability, that is, teaching a course that allows students to apply skills across the curriculum appears to depend on what is being taught and how it is being taught. A basic hypothesis of this study is that teaching Philosophy/CT in English, has the potential to be transferable to other subject areas as all academic subjects use language as a means of considering subject matter. Paul's comment regarding "value adding [sic] to the curriculum as a whole" seems to support this hypothesis.

He goes on to say, "I'm interested in your course because I believe that the better students need to engage in Philosophy to get the best results, and I don't think I overtly teach it."

"In your opinion, what would be the benefits, if you do believe there are any, of teaching this course?" I ask him.

"Questioning," He replies, "The better students question and engage in dialogue. All the research shows that if you can teach a student to question you have dialogue and therefore an enquiring mind and critical literacy. You also have clarity and well-argued writing and understanding of cause and effect. Students who are middle of the road want to know your answer and then they parrot it and they don't quite understand how to come up with the answer themselves. If you can shift them into using their personal voice based upon text evidence then they're likely to get a high mark. I'm hoping the course you're going to show me will help me shift students into that area of clarification.

I am concerned about terminology and students getting bogged down in it. I do know I have some year ten boys who may get frustrated with the discourse. I guess we'll find out as we go."

The study does indeed go on in Paul's year ten classroom at MCC and he and I have much communication as it does. The following email received on the 8th August is indicative of the content of the rest:

We continue with the course. Students engaged with your short stories. My Education Assistant said it was one of the best lessons she has ever seen with the students fully engaged with the questions. I don't know what/how you went about scaffolding them but the class was fully engaged and very interested in discussing cultural values and stereotypes to a level I have never had before. If you could tease out what you did in sequencing the questions and the story and then repeat it more than twice you'd have a thesis. On the surface they look quite superficial but they encapsulate quite a range of more abstract concepts in a way that enabled students to articulate them. I also found it interesting that students who normally say nothing wanted to speak (I got them to read and answer the questions by themselves and then read each story out aloud and then did the questions orally - with students writing down/modifying their answers after a class discussion on each).

All good wishes,

Paul

His mode of discussion was through the use of the "Risk-Free Critical/Reflective Discussion" (RFCRD) model I had suggested which was based on Lipman's Community of Enquiry (Lipman 1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980). This placed emphasis on social interactions as a means of facilitating cognitive development (as summarized in Dillenbourg et al., 1996)

We meet again late in September in a classroom at the back of the community library. He looks relaxed and confident and the atmosphere is very much characterised as a meeting of minds.

I ask him, "Can you describe your experience of teaching the course I supplied to you last term?"

He replies, "The first part of the course went very, very well and exceeded expectations but, after about the first third, some students became disengaged as they found concepts tricky and questionable. Some of these students became disruptive although five or six boys in particular said, "This is hard but this is good." They became very excited about the work. You remember, I sent you an email about these boys. They enjoyed being pushed even though a few had some mental moments where the questions freaked them out." A deep laugh escapes from his mouth at the delights of intellectual stimulation.

One student in particular who is a truant and seldom ever engaged, thoroughly enjoyed the course, attended regularly. As he engaged in the work, understood and completed it, he mentored other students which was a new experience for him. He was then recommended for a special program in the school and is now successfully engaging. He continues to truant from every other class. I have been speaking

positively about him with executive and they were very surprised that there was a teacher speaking positively about him. The Principal, on the basis of my recommendation, nominated him for a program we share with business in which lawyers help students look at their goals and ambitions. He reported he had been tested as part of this program and, "My weakness is not thinking, it's organisation."

I note that many researchers agree that there are "gifted underachievers" (Bélanger & Gagné, 2006; Reis and McCoach, 2000; Peterson & Colangelo, 1996, Moon et al., 2002a) and the student that Paul is describing may fit into this category.

Paul describes the class as "low ability;" below state standards, with a handful of behaviour problems and many regular truants. He says, "Attendance for a class of thirty is usually eighteen to twenty two," although he smiles wryly when he says, "Unfortunately, hardly ever the same twenty two!"

He goes on to say, "Out of the core group, there were about five students who were switched on to the course and really motivated, one who performed exceptionally well and many of the others just tuned out."

"Would you describe the behaviours of any the students you've mentioned as typical of gifted students?" I ask.

"Yes. When we've spoken during the term, we've talked about the kinds of things gifted students do and at least four or five of the students I mentioned would show a lot of those traits including being able to engage in critical thinking.

With the rest, they got bogged down in the terminology, didn't understand some of the concepts even though I tried hard to find analogies etc to help them, but I think really, they just couldn't be bothered."

I note that writers commenting on the teaching of Philosophy/CT advocate pedagogies that rely on constructivist learning, which are student rather than teacher-centred (Bonk & Smith, 1998; Paul, 1992; Abrami et al., 2008; Bailin et al., 1991; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000). It has also been noted previously that Constructivist instruction could be considered less structured by "traditional teachers" particularly those who have been described by Schön (1995) as preferring knowledge through practice rather than university knowledge. It is reasonable to conclude that, if a constructivist model is rarely used in classrooms, students may have difficulty coming to terms with it during its initial presentation and this could explain Paul's comment.

"At least the lessons let me have a conversation about the school rules both overt and explicit and their formation etc. But this just led to a slagging off of existing school rules and I'd thought this would be a good lesson, as I wanted them to see school rules from the teachers and administrator's perspective. If they could see the values we wanted to engender in the student body and therefore demonstrate out in the community, which would have a positive spin on the way the wider community view them. I might not have achieved that goal but at least the lesson let me have that conversation even if they did have trouble getting to grips with value formation. In this school and this context it was difficult ... The pedagogical changes needed to accommodate that discussion provoked a bravado in students that suggested they would break rules. I managed to convey the notion that governments take actions and not everyone agrees but there are legitimate ways of challenging them. We talked about institutionalisation and capitalism; how do you, as a body politic, react against them?"

They found it a bit lame to talk about adolescent images from forty years ago but it allowed them that reflective distance to talk about themselves."

"Were there other teaching strategies you wouldn't normally use?" I ask.

"I allowed far more talking to occur than I normally would. I stuck with questioning longer than I normally would." He lowers his head in deep remembering. "I had a conversation about Plato's cave and I was able to say well...they understood the notion that our actions are happening within the cave and within what we can see and they liked the idea you can bring consciousness to that ...and I said, "What happens when you step outside the cave-is there a cave?"

"That was not a specific idea in the course," I say, "So that's something you've brought to it. Did you bring other things that sprung from your background in Philosophy?"

"Yes probably", he says. "My teaching style is fairly free range: you start with a stimulus, start with an objective and then respond to whatever arises. I have always focused on ideas as I like focusing on values, attitudes and beliefs but I use a genre based de-constructive approach and I see they haven't really seen how values, attitudes and beliefs are related to ideologies whereas, I now see through your course that, if you start the other way round which is, you say all relationships are about this ideological dialogue, that will lead naturally to analysis at a later stage."

This comment reminds me of Thayer-Bacon's 2000 paper as an example of research suggesting the importance of collaborative learning. In supporting this notion, others such as Bailin et al. (1999) argue that CT involves the ability to respond constructively to others during group discussion.

"My overall feedback is that this course should be taught at an earlier age as group work etc is difficult if students have not had much experience of it. You also can't have students going cold into those sorts of questions. You really need instructional strategies taught early, based on group work and roles in groups so, by the time they get asked those questions they're not just intrigued by them, students were intrigued by them, they're willing to sit and work with them until they bear some sort of fruit. Some of my students were just not patient enough to stay with it."

Paul says he has a disposition towards philosophical approaches anyway. "Teaching it in a highly structured way through a course that is explicit is a good way to go. This course has led to discussions about introducing Philosophy as an upper school course and motivated myself and a colleague to doing Philosophy as a postgrad degree at Murdoch and then coming back and integrating Arts and Philosophy. The other teacher is doing a post grad course in gifted and talented and, after I'd read the book you gave me, he and I started talking and there was a bit of synchronicity in that I then felt confident to join in the conversation. He ended up thinking I knew what I was talking about and was quite smart and he was studying smart people at the time." He punctuates this comment with another wry grin.

"We had quite specific, animated conversation about G and T and then I mentioned the following week that I thought the way to get gifted students engaged was through Philosophy, having had a lot of success with that boy I was telling you about. He agreed and got quite passionate about it! He came back a couple of weeks after that and the conversations have all been about how we can use the ideas in your course to get students to engage and improve the outcomes at our school. He has been an advocate for Philosophy ever since! All as a result of this," he says, in a beaming way with a positive shake of his head.

I ask, "Has all of this added anything to your approach to the classroom, the way you might think about teaching or even your professional knowledge?"

"It has added the fact that we can be much more rigorous in how we explain the conceptual, cultural discourse to students. We should be introducing it at a much earlier age such as year seven year, eight. It wasn't that my students didn't want to learn these concepts, terminologies etc. It was if I persevered beyond about ten minutes that they disengaged for a whole host of reasons. If it was regularly contextualised that this was a dialogic approach to English ... it would intrigue them."

"Were there any ideas in the course that were new to you?"

"Yes, things like epistemology and some of the Cartesian ideas and so on I wasn't familiar with."

"So you said in our earlier interview that you felt fairly confident about teaching the course. Do you feel even more confident now?"

"I feel less confident in doing this as I realise the holes ... this is a good thing ... I didn't need to know about Philosophy in order to do the course. But this gave rise to my conversation with the other teacher in which we agreed we would go and so a post graduate degree in Philosophy and then we'd have more background. Like most courses, the more you know, the more depth and breadth you can speak about it.

The other teacher participant in the school [Marlene] was intrigued to learn about Philosophy and I gave her anecdotal ideas but she lacked confidence to speak authentically. With the behaviour issues and her lack of confidence it just fell in a hole. We had the same Education Assistant who said: "Marlene's about three lessons behind you ... you do more talking but you're willing to let there be silences and encourage kids."

I'm more interested now in language as frameworks for discourse. I've realised I've been vague in explaining things the past and the terms I've taught them have been quite literal tools related to genre and I've attached ideas to those whereas it should be the other way round. They can talk about quite simple codes and realise that, when things become codes, after repetition they become conventions. I see that they haven't understood that this is when they become value laden and subject to overarching ideologies. I realise now they haven't understood that either. You can then ask: What embodied this value? I will find greater clarity in presenting these ideas in the future."

I note that the implied encouragement in the course towards a constructivist, collaborative learning approach (Bonk & Smith, 1998; Paul, 1992; Abrami et al., 2008; Bailin et al., 1991; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000) to teaching the course content, apparently worked for Paul as a result of his tendency to adopt a student centred approach. I speculate that this is due in part to his teaching experience which has led to an attitude in which he acknowledges the inevitable "behaviour problems" that will occur in a year ten class in MCC without allowing them to dominate the lesson content nor his own pedagogical practices.

Paul also reveals during our interviews that he meets the requirements stipulated by some researchers as necessary to teach Philosophy/CT that involve "dispositions" (Facione, 1990). These are defined by Facione (2000) as:

"consistent internal motivations to act toward or respond to persons, events, or circumstances in habitual, yet potentially malleable ways" (p. 64).

7.2.3 Marlene

Marlene is an English teacher at Mudigee Community College (MCC) the social details of which are described in Paul's case study. As a teacher who has served at the school for some time she is asked to teach some of the better students in years eleven and twelve as well as students in years nine and ten. She has volunteered to teach the course in this study to her year ten class however tells me that, due to the nature of the student population at MCC, year ten classes with students of reasonable academic ability are difficult to find at MCC even if the classes were streamed according to ability level in subject English. They are not.

Marlene warns me that the "behaviour problems" in her year ten class will make teaching the course difficult. I assure her that this will provide good data. She believes that there is a correlation between ability level and behaviour and provides this as a reason she has many "behaviour issues" in the year ten class she will teach as a participant in this study. She claims that her students are "highly entertaining in a behavioural sense," and describes them as "playful Labradors" however it is easy to believe that this is professional bravado designed to hide a coping strategy. This is reinforced by the body language she exhibits as she tells me this, which is tight and defensive, as we sit in a quiet area of the library which serves both the school and the community.

On the morning of our first interview, it is a professional development day in the school and she has spent the earlier part of the day with the other teachers in her faculty who have now gone off to lunch. I am concerned that she will not eat but she says she would rather talk with me. We sit in padded armchairs around a small table. Out of earshot, but in view of where we sit, are carrels with high school aged students sitting studying, which strikes me as strange given the profile of the school (ACARA, 2014) and the things Marlene tells me about the students. I could not say for sure that these are students at Mudigee CC, but it seems a reasonable assumption and, as this is the school holidays, it suggests there are *some* conscientious students at the school.

Grey-haired retirees drift by and look at us with interest as they clutch the week's reading consisting mainly of large print books. Occasionally a librarian glares, although the constant movement and activity that pervades the library makes it difficult to guess at the reason for their apparent disapproval. Marlene and I talk in lowered voices nevertheless.

She claims not to be troubled by the unspecified "behaviour problems" in her class however her approach to their management is summed up when she tells me, "Most of my energy is taken up training them to behave..." This neo-Skinnerian approach to discipline (Skinner, 1974), may suggest a pedagogical approach that is not conducive to teaching Philosophy/CT.

I later reflect on Marlene's words and conclude that in using the term "training", Marlene is suggesting that there are a particular and specific set of behaviours that are acceptable in a classroom and she should be the arbiter of what they are. If students do not conform to her demands for these behaviours she tells me, by being. "Creatively disruptive" for example, she will move them from their current sitting places in the class and, in fact, feels a "seating plan" is a behaviour management strategy. She wields the power in her classroom (Peterson, Kelly & Stockton, 2011). She clearly has a particular view of what constitutes "work" and "working" and feels it appropriate to say to students, "I'm not happy with how you're working". This further suggests she feels that making her happy is part of the motivation students should have to perform in her classroom.

It seems relevant that almost fifty years ago, French and Raven (as cited in Cunningham, 1959) identified five specific bases of social power that can be used by educators to influence students. They claimed that social power is exercised in all human contacts. These five bases are defined as coercive, reward, legitimate, referent, and expert power. Marlene seems to occupy a place in French and Raven's Social Bases of Power Framework (1959, as cited in Cunningham, 1959) towards coercion and has an emphasis on control. Marlene's approach is teacher centred as students make few, if any decisions in the classroom, and sanctions are applied if they act outside of Marlene's underpinning Skinnerian paradigm. The Constructivist learning paradigm which has said to be so crucial to teaching Philosophy/CT (Bonk & Smith, 1998; Paul, 1992)) is not a feature of Marlene's approach to teaching.

While effective teachers recognize that students have 'unique learning styles' (Sadler-Smith, 1996) and this understanding calls for different and interesting approaches and teaching methods in the classroom (Mujis, 2001) Marlene appears to be locked into a particular set of activities which she finds difficult to vary even if the tools to do so are supplied.

Marlene assures me that she has volunteered to participate in my study as she has a keen interest in learning more about Philosophy for both "personal reasons" and the fact she believes that "the education system doesn't allow the scope to push and challenge students." She says that the course will allow them to be "stretched" and feels good about that and also believes that "critical thinking skills will set students up for life, particularly in relation to critical literacy and CT for the 21st century." She says, "I think everyone will improve and will challenge their "neural pathways." I consider a discussion about Philosophy of Mind would take our interview off track so I decide not to attempt it, therefore this belief and the assumptions behind it remain unexplored.

It is difficult to know whether Marlene is sincere in her enthusiasm or simply repeating some of the observations I made about this kind of course in introducing it as her body language remains closed and defensive. I am aware that the other participant in the school has put pressure on her to volunteer for reasons he hasn't explained to me. She adopts a professional cool that is so emphatic it suggests a cauldron of stress beneath. When she goes on to say that, "Most students like turning up to her class," I wonder whether she is trying to demonstrate to me she is a good teacher and is offering this as evidence. I also wonder why she feels it necessary to tell me this when the documents she has signed as a participant in the study guarantee anonymity and confidentiality meaning that, even if I were to form an opinion about her teaching skills, I would not be able to communicate this opinion. Not even to the other participant. This consideration is troubling so early in our relationship as it could compromise the validity of our interviews however I resolve to report my concerns and leave them for my readers to ponder on.

Marlene she tells me she has few students in her class who she would characterise as "gifted." In fact, she says that more than a third do not demonstrate any of the characteristics that could be associated with academic potential of any kind. Her tone and manner as she tells me this are those of an authoritative professional. She maintains eye contact across the table and enunciates many of her words.

She does distinguish between students who suggest they may be bright through being "creatively disruptive," and those who are merely "trying to hide the fact they're not bright." I wonder about the nature of unruly behaviours that could be construed as "creative," however she is unable to provide examples. She suggests that "good students" are identified as being "those with very good work habits and who are highly motivated," and does not seem to have a construction of "bright students" that is different from "good students." Marlene explains that the "wide range of abilities" in her class will pose problems for the study and says she, "Will need to rely on the goodwill of the good students to support the less able." She is also concerned at the, "Many social problems such as dyslexia," and the fact there is an independent student in the class who lives alone and therefore has no parental support. These are simply offered as examples to support her statements about the complex makeup of the year ten class. She has few questions to ask about the study beyond a desire to see the course materials which are duly transferred to her computer.

During the course of the study, I have no contact from Marlene even though I send a number of emails which include additional course materials and I occasionally attempt to phone her. I assume that if she needed help or support from me she would at least respond to my emails however, I fear she has withdrawn her consent to participate and failed to tell me. I am surprised when, late in the next school holidays, I receive an email requesting me to contact her to arrange a time to meet.

I meet Marlene again in a room darkened by October gloom at the back of the same library. It is a rainy day, the last of the school holidays and the sound of the rain on the skylights makes it difficult for me to hear even though she sits across from me at a small student desk. She expresses a preference for the lights to remain off. The symbolism of this is troubling.

The main part of the library is almost empty apart from the presence of library staff who hover around the door and occasionally come into the room, ostensibly to give Marlene instructions about how to close the room when we have finished. I wonder why it is necessary to tell her this three different times and suspect they simply want to know what we are doing in the room. I also wonder why Marlene has chosen this room when the library is empty and our earlier comfortable place is available.

I ask her to describe her experience teaching the course during the preceding term. She frowns and tells me that, during the first week of the term she needed to conclude the program she had taught previously. Her tone is apologetic and she seems to have difficulty making eye contact. I remember her attempts to impress me during the previous interview and feel anxious about the responses that are to come that may confirm my suspicion that the course was not actually trialled. She tells me she tried some of the questions from the course to see "how they would respond to discussion. The way they were seated was too difficult. They were seated in rows; I had them specifically placed so there was the least possible interference with each other ... I could see straight away it wasn't going to work."

I remember that a collaborative or cooperative teaching approach is advocated by the literature (Abrami et al., 2008; Bailin et al., 1991; Bonk & Smith, 1998; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000). Also, the connections between these notions, Vygotsky's (1930-1934/1978) "zone of proximal development," and Lipman's approach namely, "community of enquiry" as a means of facilitating cognitive development (as summarized in Dillenbourg et al., (1996). Piaget (1967) suggested that the "cognitive conflict" that could emerge from interacting with others is a desirable feature of a collaborative teaching approach. The course I provided to Marlene advocated this approach and I believe implied classroom practice.

Marlene says she found there were too many distracting elements such as "students who were not going to speak, students who were say dyslexic, one brain injured child, students who were just...(she does not finish this thought) there were thirty three in the class and most of them tended to turn up regularly. There was a couple of students, say Maori students and they...that wasn't a problem except a couple of boys were very disruptive and there was a couple of Australian boys who were very disruptive and it didn't matter there were just not enough places to move them and once we had a discussion it was totally undermined and it was very frustrating." She says, "As soon as you tried to get somewhere, you had the jokes going which was extremely destructive."

She is saying she felt the need to "start from scratch" to accommodate an approach that relied on group discussion and "establish little groups...pretty well throw everything out the window, get them lined up and say, "OK we're going to start something new. I'm not happy with how you're working and you're going to be allocated groups. I already know the ones who are going to work well so we got them distributed." She claims that this worked "pretty well "although "Training was needed to get students to work in groups, then the discussion went well." It is clear that group work and classroom discussion are not part of her usual approach. As I am focused on the content of the course and students and teacher responses to it, I feel this is a strange beginning to our interview and struggle to see the importance of the usual seating arrangements for Marlene as I suspect it may provide an insight into Marlene's approach to teaching. She characterises it as a "behaviour management strategy." She insists that firmer rules are necessary as "they were like a dog with two tails as they had different dynamics," due to what she clearly considered to be, a novel approach to teaching. "That worked much better to start off your course and the initial discussion went reasonably well. I was surprised that one group who were the annoying talkers got the goldfish and the ones who are very industrious didn't, so that was very interesting for me." She is unable to specify the nature of the interest.

Could you say what your standard pedagogical approach is?" I ask her, regretting the use of the word "standard" as it flees from my lips.

"I don't think there is a standard", she says reaching in the air for some hidden support. "I'm trying to understand what you mean", she says.

"What is the basic standpoint from which you approach your classroom practice? The basic assumptions you make that lead you to teach in a particular way?"

I recall that, according to Glasser (1986), a school is a study in group dynamics, a study of how one person (such as a teacher) exerts power over another person (such as a student).

She looks at me blankly and I realise I am not being clear and also that, if I go much further in my explanation, I could prompt her too much, however I ask, "Well, for example, do you usually take a behaviourist, humanist approach? Is your approach student-centred, teacher-centred etc...?", hoping to illustrate what I mean without putting words into her mouth.

"I'm trying to understand what you mean by pedagogica...[sic] I'm not sure..."

"A total mix", she offers, "A judgement call on a particular day on what approach to take ... What's important for me is what a students' needs are...If I can see they haven't produced, that's what they need to do. To be honest, I probably re-invent the day every single day. Most students work because we have a rapport going and I could work emotional blackmail". She smiles in a way that I perceive as uneasy. It certainly tells me she doesn't want me to pursue this topic as does the way she crosses her hands as she says, "I use every toolbox available to me on a particular day; it's like a juggling act. If I feel a boredom; a lull, then I have to take a different perspective. I don't know that you can lump it under anything. What is important to me is every student as an individual and what they need; where they need to get to. At least they turned up at school that day and in the right class.

The students who need to be academically extended need the skills and, the biggest problem for me, was they didn't have the skills to get far enough into the critical literacy to meet your requirements here; I had to teach them first. I needed to work with what the students cared about. The students were very street wise but not skilled in this area."

She moves on by repeating, "The group that was very talkative did better than the one that was "industrious," however she explains that there was a need "to introduce a rewards system to get groups to work; a positive reward that involved some competition between groups; a traditional approach but all of this took time."

I recall that other participants have suggested that the course was about ideas rather than texts and would like to ask what constitutes "work" and "production" in her mind, however realise immediately that she means the written word. "I ended up digressing and produced little booklets of your materials," she says.

Robert Tauber (2007, p. 41) says: "Coercive power and reward power share the common element of manipulation. These two power bases do, in fact, work. But how long do they work? The surprising answer lies in the words "allow" and "perceive. "These power bases are allowed to work only as long as the

students perceive that the teacher controls desired rewards or dreaded punishments. The instant student perceptions change, the teacher's power changes."

She goes on, "They weren't interested in talking about values; we just got into a hole so I did a traditional task about their personal values and we brainstormed that and then they produced their own shield. I found they worked a lot better if it was more hands on," I begin to understand the apologetic tone. I also wonder what she means by the term "went well" in relation to the discussions and what criteria she used to form her views about which groups did "better" and who was "industrious etc. Questioning soon reveals that these words are related to the behaviours Marlene feels are appropriate in the classroom rather than the depth or breadth of discussion. This further suggests to me that Marlene experiences difficulty looking beyond the pedagogical approach she usually adopts.

"This was not a class you could talk to or discuss with, but certainly if you could draw and compare..." she says.

"Did you teach the critical literacy part of the course?" I ask.

"No. I didn't do the videos as they were too dated and anyway, the students had to be taught viewing. This also took time." "There wasn't the time to teach the skills the students needed to evaluate and assess and that was my biggest issue. The discussions I could have with some of the groups at the table but that meant the rest of the groups were not functioning. I did have a lot of help from the aid who maintained the low ability group." As the videos are related to the development of students' understanding of critical literacy and how cultural values, attitudes and beliefs are formed and changed over time, I couldn't help thinking that Marlene had missed the point of the course.

I recall saying in the Literature review of this thesis (Chapter Three):

"It can be seen intuitively that a common cultural belief is that schools exist to convey knowledge from a group who are employed because they possess it to a group who attend in order to acquire it. This traditional pedagogy as demonstrated in many classrooms, sees the teacher as the possessor and teller holding forth before a group of less endowed "students," and has been referred to by Freire (1970) as a "banking" model."

"The aid helped scaffold it down," she says, "For me, I didn't have the time to differentiate the course for all the groups; that was my biggest problem. I see it as about the dynamics of the class; the range of abilities as there is only one small group who I think could be extension material became resistant for some reason

I don't know..." I recall that she had suggested there were few if any "bright" students in her class and puzzle over this newly introduced category "extension material." I can't help thinking that a possible reason for the resistance Marlene perceived was that these students actually understood the reason for the videos. This would suggest a positive outcome for some students in this class although, as it had not been recognised or nurtured could not be treated as positive data.

Tober (2007, p. 41) has a possible explanation of this when he says:

Students cope with repeated punishment in a variety of ways, including rebelling, retaliating (if not at the teacher, at a weaker classmate), lying, cheating, conforming, apple polishing, submitting, and withdrawing (either mentally or physically) from learning. These coping mechanisms, however, are only outward signs of the student's inner anger, frustration, embarrassment, feelings of unworthiness, fear, and vindictiveness.

"What I did have success with after they had completed their personal shields, they got a lot of satisfaction because we looked at symbolism and different cultural symbolism so, in actual fact, I guess I did a lot of this but in a different way about how the meanings arise for them because if you have a couple of cultures...unfortunately they're all mainly Australian; there's a couple of English and a couple of Maoris, it's not the diversity that would be nice to actually explore that but then I found this in searching, that the kids just didn't want to know [about the images and song lyrics of the nineteen fifties]. So I asked myself, what's relevant? I know that studying protest songs actually works and, to me, that's a kind of Philosophy as you've got the moral/ethical dilemma there so I went with that instead and that was really, really good.

Songs such as "I'm only nineteen" were brilliant and we had the trailer and we could discuss the impact and we had this boy who's brain injured whose father is a Vietnam vet, the aid is a mother of a soldier so we had this total other dynamic and we went down the path of what was traumatic for soldiers and a bit of history so my recommendation would be not to go so far back. You need to actually start from what they know and then launch back to say, the Vietnam War as that is so intensely interesting for them. We looked at symbolism, at different cultural symbolism and how the meanings arise for them. We have a couple of cultures, well, they're all mainly Australian. To me that is a kind of moral/ethical dilemma My recommendation would be not to go so far back ... We looked at a song by Pink, "Dear Mr President" and looked at the trailer. They had an understanding of poetic devices and we looked at context and then the hidden meanings and that was their critical literacy; They actually found a lot more, a hell of a lot more, in the ones they knew and they had to be shown to look for it in "I was only Nineteen" and then when they got that, their reward was to watch the trailer and they really enjoyed that so that was positive part too, just me playing with that..." I found Values Attitudes and Beliefs too simplistic, reductionist, random and isolating for critical literacy... my main problem was I didn't read the whole course I just went on Paul's say so (the

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other participant in the school), I should have looked at it from a more personal viewpoint. Better to look at the pre and post 9/11 as well because that has changed so much. Background history timeline and the values..."

Her brow furrows as I ask her, "What do you take critical literacy to mean?"

She clearly thinks hard before replying, "The layers of meaning they interpret from several areas; the whole text, the producer and then the individual choices and selection of detail within the text. It's not just one thing. It's looking at the idea of metaphor. Once they realise that everything's a metaphor it works quite well."

In Luke (2000) we are told: "In relation to Critical Literacy, Foucault's view is that discourse is not the sovereign production of human subjects, but in fact takes on life of its own, constructing peoples' identities, realities, and social relations; that is, that we are produced by discourse as much as we are producers of discourse. Practically, this translates into a classroom focus on identifying the dominant cultural discourses – themes, ideologies – in texts and discussing how these discourses attempt to position and construct readers, their understandings and representations of the world, their social relations, and their identities" (Luke, 2000 in CT Australia).

Bannister-Tyrrell (2012) states:

Critical literacy moves beyond traditional notions of deconstructing meaning in reading, requiring readers to move beyond literal understandings and to comprehend texts at a deeper, analytical level (Luke & Freebody, 1999; McLaughlin & De Voogd 2004; Pearson, 2001).

For example, the following can be found in the "Indicators of Achievement," which are part of the Western Australian Curriculum Council support documents for the new Courses of Study (SCSA, 2013).

The Level 6 Reading Strand states:

Students read a wide range of texts with purpose, understanding and critical awareness

This will be evident when students:

- understand and interpret extended and complex uses of narrative, poetic, dramatic or expository conventions; describe the possible impact of a range of aspects of textual construction on meanings and responses;
- speculate on the immediate social, political or cultural purposes texts may serve; speculate on the influence of context on the construction, content and interpretation of texts; discuss relationships among representations, socio-cultural context and attitudes, values and beliefs in texts; and

Although there are varying versions of "critical literacy", the notion of considering texts as artefacts of a culture appears to be a constant. My contention is that culture consists of the set of values, attitudes and beliefs shared by its participants and these are always embedded in texts in a way that renders them invisible (Lemke, 1995).

"My teaching style is that I do too much...We took time out to create a poster about the school motto and then I used that. What I will take away from this course is the idea that the ideas that you want to teach should be embedded more consciously. I think I do it unconsciously but I'll look at, OK we're going to look at autobiography so what Philosophy will we look at it from. Philosophy is an area I'll keep pursuing."

"Did any students surprise you in their behaviour or the results they achieved?" I asked, feeling mildly despondent about the descriptions of how Marlene had run the course.

"I think the very talkative group who just wanted to outdo each other, they tended to have a better handle on the layers of meaning; they actually could think about and step outside of the box comfortably and confidently and think about the absurd and I think that was interesting to see I would not have thought those boys could do that like the goldfish bowl-they got it right and I'm thinking: OK, I had expected the studious ones who are totally focused and don't get distracted and who just persevere and produce reams to...they had to be a little bit safe. They weren't going to take a risk so...that was interesting. The others weren't quite strong enough in their confidence."

"Did anyone engage who hadn't engaged in your class before?"

"Putting them in groups meant they were actually helping each other and I hadn't seen that before. Normally, I would do think pair share and that's kind of limiting whereas you had a bit more dynamic when they actually had something they enjoyed they tended to help each other and that's possibly an avenue I can explore but it's still limiting for me in that you have to do what they enjoy. The songs they weren't interested in, I was happy just to put that aside. For me, they had the poetic devices and for me that's very,

very important as they are going to be writing and they had to improve their writing skills. For me, I had to teach them at every element to get to the point that they could do that critical literacy, that was my biggest issue; there was no way I was going to finish it all so we just went with whatever and I..."

"Did any students demonstrate attributes that you would associate with giftedness who hadn't shown them before?"

"I would say I was more surprised by a couple of students who I didn't expect to be creative were much more creative. It made me step out of my comfort zone and create an environment where they showed this. There was a boy who came in who didn't come in very often who was able to answer the questions very clearly but, by the time he came to write it down he had forgotten what he just said. He seemed to develop very good insight but it's linking back to the idea that there are a lot of streetwise kids who have a very good understanding of the world who have, I've never noticed it before, demand more mature texts like those in this course, but there's' so much they have to learn with language and literacy to express it. The year elevens would have been much more focused and ready to do this course but it was very difficult to get the discussion going...only in small amounts and then I'd have to move on to the next one. So really the dynamics have to be right and they killed it and the range of abilities killed it. I'm always into problem solving and it's good to try something different."

I know that, following Freire (1970), critical literacies entail not only a reading of the word but also a "reading of the world," processes of naming and renaming the world, seeing its patterns, designs, and complexities (Mey, 1986)

"What was so different about this course?"

"It was challenging and difficult because I'm not used to working to someone else's program. The kids couldn't link to something they could produce at the end. Values are important but it's important for the students to see something concrete they can value as well."

"Perhaps you could share your understanding of what the whole thing was about."

"So students can better interrogate the way the world is constructed. Is that it? No?"

I am bemused by my interviews with Marlene. Putting aside the fact admitted by her that she didn't read the course and therefore attempted to take an approach that forced new ideas into her pre-existing pedagogical approach a number of conclusions that can be gleaned from this case study all of which I found disturbing. For example, Marlene's pedagogical approach does not allow her to model CT/Philosophy. It has been noted by many researchers, that collaborative learning coupled with reflective practice is essential to teaching CT (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001). Marlene showed herself on the occasion of our interviews, unable to incorporate CT into her daily practice or show herself capable of reflection, which is evidenced by her inability to be clear about her pedagogical approach. The connection between CT and reflection originally noted by Dewey (1933) has been long known.

Marlene's case appears to support the notion posited by Facione (1990) that people engaging in CT such as that required by teachers attempting to teach it, should have the disposition to do so. Although Marlene stated that she had limited exposure to Philosophy/CT, she then went on to show she was confusing the common use of the term "Philosophy" with its use as the title of an academic discipline.

I speculated that, if Marlene had read the book that was provided to her and then read the course prior to teaching it, she would have realised its objectives and perhaps resisted the urge to force the exercises into tasks with which she was more familiar. It is reasonable to conclude that Marlene will not be able to develop as a teaching practitioner until she develops the capacity for critical thought and uses this to facilitate a transition into a "reflective practice" paradigm which will see her continually evaluating her pedagogical practices.

7.2.4 Dorothy

The reception area at The Beginning Christian College in the suburb of Wallawee (see case study "Alan" Chapter Seven) is an impressive place: red cedar lined walls punctuated with crowded trophy cases and posters bearing motivational Christian messages. I read the news articles about the achievements of various students while I wait for Dorothy and listen to the patient, long suffering receptionist behind me tirelessly talking to smaller children about lunch money and school uniform and larger ones about early leaving passes. She remains at least superficially charming throughout, although I feel I might detect a frustrated note in her rounded tones. I notice how professionally she conceals it from the children.

Dorothy appears from a passageway of offices, precisely at our appointed time however she is unsmiling and her demeanour suggests I am an unwelcome disruption to her morning. She leads me into an interview room that is so small I feel I could extend my arms and touch two walls at once. She sits and waits expectantly while I fuss with my recorder. It is new and I feel strangely nervous and have difficulty turning it on. I attempt to engage her in a conversation about bright children to mitigate the strained silence. She seems reluctant to talk and, while I try hard to be encouraging, she seems to resist.

Dorothy was the second English teacher to volunteer for participation in my study. Even then, I felt that there were reasons she was agreeing that I didn't understand. Her attitude is unrelentingly serious which can be communicated as disapproving.

I ask her about any academically gifted children she might have recognised in her class. She is stern and emphatic in her response in which she says she feels confident to identify academically gifted students in the year ten class to which she will teach my course. She has to think carefully when I ask her how she would do this however. She says, "I've been asked awkward questions before," and smiles and I am unsure whether she is referring to my interview questions or the questions a gifted student might ask. I laugh nervously and she says, "Yes," emphatically although I cannot see to which questions she may be replying in the affirmative.

I think of the myths examined in relation to Gifted Education by Gentry and Kettle (1999) and wonder whether Dorothy is referring to myths to frame her answer.

I ask her again how she might recognise academically gifted students and she replies, "They are not necessarily the ones who would hand in completed work. Sometimes they only hand a very minimal amount of work in," she umms as she pauses and then says, "They think they have done enough for what they consider they should have done." I am thinking hard about her answer and wonder if it has a profundity I have missed. She goes on, "Quite often they will just do the bare minimum because they find the work too easy." At last I see her point. She umms again before she says, "They will often ask awkward questions. As I said, I have been asked awkward questions in class discussions before." I feel relieved at this clarification and ask her to give me examples, keen to know what might qualify as "awkward" in Dorothy's mind. She says she can't think of an example but says again, "But I have been asked awkward questions."

I reflect on Dorothy's description of gifted students which, rather than describing the positive behaviours of gifted students as means of identification, seems to suggest a deficit model in which underachieving and under stimulated students are the sum total of gifted students. I remember the question posed by Reis namely, "Could it be that the secondary English curriculum is not providing the appropriate challenges required by these [gifted and talented] students? Reis et al. (1995, as cited in Reis, 2008) I realise that this highlights possible problems in Dorothy's own teaching/learning programs that may be addressed through her participation in this study.

She pauses again for thought and offers, "Sometimes they will ask purposely off task questions as well to get...to move class discussions into an area they are more interested in." She stresses many syllables and I realise that, what I had taken as reticence, stems from deep thought. "They manipulate conversations they...sometimes they just waste time in class because they get bored too easily. There are students in class who need more teaching; more explanation because they don't get it. Those who do get it, get bored and want to move on and, when they can't they...you see, as a teacher, you can't move on until all of the have got it. You can actually encourage students to do other things like, sometimes when they've been asking questions, I've asked them to go and find out the answer themselves and come back and tell me even if I've known the answer I've got them to do that because otherwise they will engage the teacher in a long conversation that take you away from other students and it's not a one on one situation it's a classroom situation and you have to be aware that all the other students do need time as well. The struggling students need as much time as the ones who get it quickly and want to move on."

I recall that a number of books that appeared in the late nineteen fifties (Lumsdaine & Glaser, 1960; Frye, 1957) suggest scenarios in which machines are programmed to teach. These state that the fact that the machine will not permit a student to proceed to the next question until he has answered the previous one is a desirable way of proceeding in Education. This notion gives rise to the idea of "programmed learning" which is taught to each beginning teacher and which is implied by Dorothy's comments. Dorothy clearly has a teaching program which has scope and sequence and she intends to pursue it with rigour by ensuring that every student in her class learns every item regardless of their interest or need.

In a critique of this process, Rothwell (1962 p. 245) first attempts to define it namely: "programming" [is]-the construction of sequenced questions which lead a student by "step-increments" into increasingly difficult concepts... " and this further demonstrates the approach Dorothy is taking in her classroom. Arguably, this approach to learning reflects its machine-age origins; the ethos of the factory and the 19th century production line are embedded in it. The delivery model is that of the conveyor-belt. If the system is to work as a whole, the content has to be delivered in a very particular way: It has to be delivered in a linear format which is derived from 19th century models of learning: the bell rings and students take their places for 45 mins of instruction in neat rows. Then they receive mass-produced content that was designed around standardized ideas and standardised tests neither of which accommodate individual learning needs. This clearly antithetical to the collaborative/constructivist approach that is implied by the course so the way this is accommodated in Dorothy's class will be interesting.

"Are there students in your class who you would describe as having a capacity to think outside the square?" I ask.

"Maybe one or two although often I'm not sure whether they're thinking outside the square or just trying to distract the teacher, because some students do that as well." She signals a reluctance to pursue this topic so I ask, "Is there anything in your background or experience that would assist you to run a course in Philosophy/CT?"

"I did a Philosophy unit in first year at Murdoch University which I found quite interesting."

I ask, "What do you think the possible benefits might be of teaching Philosophy/CT to your year ten class?"

"Students may become more focused. I would like to see them be able to look outside of their own experience through studying the course as they are quite insular. I would like them to be able to expand their experience and get them to think about other people's experiences so they can identify with other people's feelings. I want to develop Critical Literacy in my students as there is this push in mainstream society to make children into consumers and they target, especially the advertising agencies, children to turn them into consumers to the detriment of society. ..." A school bell sounds outside the room promoting a flurry of childish activity outside the room. The sound of young voices laughing their ways to the next class fills the air.

Dorothy continues, "I am dismayed at the way lingerie for little girls is commodifying and sexualising daughters at a very young age, that's immoral," she says. "My main interest is in developing critical minds who are able to see that, every piece of text created is created for a purpose by someone who has something to say. I always tell my students that anyway."

I am aware that in defining "Critical Literacy," Bannister-Tyrell cites Luke's (2000) definition of critical literacy "as a socially-critical, discourse/text based approach to literacy..." (Luke, 2000, as cited in Bannister-Tyrrell, 2012, p. 36). This definition seems to describe the approach Dorothy is taking as she wishes to achieve stated social-critical goals through the analysis of texts, even if she is unable to frame such a definition herself.

I write to Dorothy often during the course of the term and receive no replies. I send her various materials and further parts of the course and these remain unacknowledged. When we meet late in September, I am expecting to hear that she had abandoned the course early on. It comes as a surprise to me however, that Dorothy goes out of her way to contact me when I am in the school to make definite time for our interview. She greets me at the reception area when I arrive for this purpose and beams at me. Her demeanour appears dramatically altered to that displayed at our last meeting. She leads me to the staffroom where

teachers are sitting and eating lunch. I realise that her participation in my study no longer has the secrecy that was initially attached to it and speculate about the reasons for this.

I ask her to describe her experience of teaching the program during the course of the previous term and she replies, "Some of it was really interesting. As I teach a low ability class, they got bored with some of the repetition and I had to supplement it with some things and do it different ways. For example, I changed one of the activities to advertising across the ages-the way women have been portrayed and treated since the fifties and we looked at the values, attitudes and beliefs as well, in nineteen fifties advertisements and compared and contrasted them with contemporary advertisements mostly towards women; they were the more stark differences. I used a PowerPoint presentation with those ads on to give them something graphic to look at. We discussed them, annotated them and then wrote about them and they engaged with this activity and found it interesting. They found the idea of values, and attitudes repetitive but they did come to an understanding of critical literacy. "

I say, "Are you able to say how they would describe "critical literacy," that is, how they might define it if I asked them?"

She ponders on this question and finally says, "No." However, she goes on, "We all found the section on epistemology interesting; we had some lengthy discussions about knowledge and one of the least engaged students became engaged. We started talking about the question "what is knowledge?" and that was really good and got them thinking. It was quite a surprise to me that this particular student responded the way he did as he offered the best response to that question I've heard. HE defined knowledge as "the understanding of a concept." The thing is, he didn't say it, another student did but, when I dug deeper, I found they had got it from him. I told him, "That's really good...I'm really impressed. He had always been disengaged before this but he has been engaged in the course ever since. "

I thought about how this gives rise to the question: did the student suddenly begin to engage as a result of a small amount of positive reinforcement or because his interest was awakened by the "novel" course offerings that had engaged his intellect? In fact, it is difficult to believe he had not received positive reinforcement before however it is easy to believe his intellect had not been stimulated in this way before if he was continually subjected to the arguably outmoded pedagogy described earlier.

Dorothy says, "The Values and Ethics section of the course was given more time as the class was interested. We talked so much about the three scenarios in the course, we only got to go to the three but some good discussion came out of that."

I ask her, "Were any of the thinking activities embedded in the course new to you?"

"There were things that weren't exactly new but things I wouldn't have thought about putting into a year ten class before. To get them thinking about ideas was good because we got some good discussion coming out of it. And then, getting them to define words like "knowledge," "values" and "attitudes"; because we teach them about values and attitudes but, actually getting them to think about things like, is the world flat and to question where their knowledge comes from was an interesting concept. . For example, I wouldn't have thought about using the ethical dilemma situations before."

"How equipped did you feel to address these questions with your class?" I enquire.

"Well, as I said, I had never thought about doing it before but I'm glad I did and I certainly will be doing something along these lines in programs in the future. Some of the things we did brought back the stuff I'd done in the compulsory Philosophy unit I'd done at Uni. This allowed me to simplify things a little bit while keeping in the spirit of the things you had planned. I used the RFCRD approach and established the rules early on. I said, "You might not agree with someone else's opinion, but they're entitled to have it; you don't have to agree with it but you need to give them the respect to have that opinion. " I think I'm now more equipped to take this approach to teaching."

"Do you feel you needed to make many pedagogical changes to teach the course?" I ask.

I am already feeling uplifted by the apparently natural move Dorothy has made towards collaborative learning.

"I would add a few more specific assessment tasks. I feel that lower ability groups need more hands on rather than lots of talking. I felt the times that when I did smaller, group oriented activities the lessons flowed more smoothly as it allowed them less time to get distracted. "

"Were there any other students who surprised you apart from the one you have already mentioned?"

"Yes there were several. There was one student who, rather than having a major light bulb go on, contributed a lot over the whole term. And then there were other students who contributed a little bit every

now and then and then also had their own "light bulb" moments as well. There were quite a lot of really good responses to a lot of things in the course. Many of these students showed that they had the ability to think in ways I hadn't seen before when given the opportunity." She smiles and says, "We all wrestled with awkward questions."

In reflecting on Dorothy's experience as a participant in my study, I see that it lends support to the notion that a collaborative or cooperative teaching approach is appropriate to successfully teaching Philosophy/CT (Abrami et al., 2008; Bailin et al., 1991; Bonk & Smith, 1998; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000). In fact, as someone who stated her commitment to "keeping the spirit of the things I [sic] had planned," this commitment caused Dorothy to see the need to abandon the pedagogical approach she had previously described which, in fact, justified holding the more able students back while she ensured that everyone in the class "got it." Her description of student performance in the second interview showed that, she had moved to an appropriate collaborative/constructivist approach and its appropriateness was demonstrated by the results she reports. At this stage, not only was she prepared to allow students to share their own understandings of the concepts that were being discussed, she was also willing to provide positive reinforcement to students whose responses she considered outstanding. She says emphatically she had used the RFCRD model and the links to Lipman's Community of Enquiry (Lipman, 1969, 1974, 1981, 1988, 1988b, 1991, 1995, 1996, 2003, 2004) have already been made clear. The work of Vygotsky (1930-1934/1978), particularly his description of the "zone of proximal development" as the distance between the possible accomplishments of an individual and their accomplishments with the help of a more capable other are acknowledged as assisting to explain the improvement in both class engagement and understanding that Dorothy reports.

When Dorothy reports herself as being more equipped to teach in this way in the future and, in fact, expresses an intention to do so, it can be suggested that the course served its purpose of providing an improvement in her professional knowledge that now provides scope for further content and pedagogical experimentation in the future which moves her towards constructivist learning models.

As previously indicated (Case study Alan) Dorothy was a signatory to the following email which reinforces the early conclusions I have formed from Dorothy's case study:

Hi Steven

In writing our second semester reports, Dorothy [the other participant from this school] and I have noticed improved engagement and understanding in the majority of our students. We figure this has a lot to do with the CT course as we noticed more students taking their ideas further and attempting to justify them in their

exams. So, we have decided this year's Year 9s will benefit from doing the course in Term 1 of Year 10 next year.

Thanks again

Alan and Dorothy

7.3 Home Schoolers

7.3.1 Kathy

According to The Department of Education of Western Australia's Home Education Policy (DETTWA, 2013):

The Western Australia *School Education Act 1999* provides for parents to exercise educational choice, one means of which is registration as home educators who assume responsibility for their children's education during the compulsory years of schooling.

Kathy is a mother who sought and received registration under The School Education Act (1999) to be a "home educator" of her son, Albert.

The Department of Education claims:

Home educators, are currently required to implement the *Curriculum Framework* in accordance with the *Curriculum Council Act 1997* and the *School Education Act 1999*.

The *Framework* provides the learning outcomes expected of all students and for assessment that is fair and contributes to continued learning. Through their contact with the moderators, home educators fulfil their obligations for implementation of the *Framework*. Home educators are given a reasonable amount of time to understand the *Framework* and to develop ways of providing learning experiences best suited to their child's achievement of those outcomes.

I met Kathy after she had contacted me to arrange for me to tutor her son, Albert, as she explained that she didn't feel confident or competent to deliver and assess an appropriate course in English to Albert. Although I was an English teacher for many years in the public school system in Western Australia. After many conversations with Kathy about the assessment requirements of home schooling, I still do not claim to understand what they are as Kathy seemed not to know the specific requirements even though, it may be assumed by the Department's description of the process, she is visited and evaluated by a moderator at least annually and needs to participate in this in order to retain her registration.. Kathy was my first experience of a "Home Schooler" and I knew little or nothing about the process of "home schooling"

beyond the fact that some parents feel they can offer a set of educational experience to their off spring that is superior to that offered by a school. This is not to say they are superior from a teaching or educational sense; they are superior in ways that are valued by the home schooling family and it would seem that often these are difficult to explain to others. It also seems to be the case that, like Kathy, many of these parents are not trained teachers and some, also like Kathy, did not complete High School. These things are acknowledged in the Home Education policy (DETWA, 2013, 2 Background) when it says:

"Parents who choose home education do so for a variety of reasons, and the forms of education that they wish to provide to their children are diverse. In implementing the *Framework* [The Curriculum Framework, School Curriculum and Standards Authority, 2013] home educators structure learning opportunities according to their children's particular needs."

And:

"This right of parents needs to be balanced by the responsibility of the Director General to ensure that every child of compulsory school age receives an appropriate educational course and makes satisfactory educational progress. "

"Satisfactory educational progress" appears to be related to progress on the outcomes of The Curriculum Framework in all curriculum areas.

For various reasons, most of which revolved around the distance I would have to travel to tutor Albert in Kathy's home, I was never employed by Kathy as a tutor. Instead, Kathy agreed to participate in my study and felt that the detailed lesson plans, program and supporting textbook would allow her to do this with minimal support from me as I explained that, in order for my study to be effective, I would need Kathy to rely on the materials I provided.

Over the term the study ran. I oversaw Kathy's delivery of my course in much the same way I did with other participants, however I saw little production of work from Albert and, at times, saw him take an inordinate amount of time over a single assignment. In fact, in one case, a short essay took him over half the school term to write. Neither Albert nor Kathy considered this problematic. As the course used for the study can be linked to outcomes of The Curriculum Framework, this fact seemed to meet the requirements stipulated by The Department in terms of course offerings.

Kathy invited to me to her home to discuss her participation before the term in which I was going to conduct the study had begun. The house she shares with Albert, her husband and an older son who has just enrolled in a local school for year eleven having been home schooled to that point, is a large detached residence on a sprawling bush block. Although she does not have the trappings of the upper echelons of the wealthy classes, Kathy's home is furnished luxuriously and neither she, nor her two children appear to lack anything in the way of material comfort. During our first meeting, we sit out on the veranda with the sound of sleepy cicadas, clearly not aware of the time of year, chirruping in the trees. It has been raining and the smell of eucalyptus is strong in the warmth that is just now beginning to escape from the cold morning and arising in discernible waves from the piles of leaves on the ground. How easy it would be to lean back and enjoy the freshness while we draw pleasure from a discussion of Philosophy, however Kathy is agitated. She sits forward in her chair and smiles disarmingly however I notice her mildly gnashing her teeth and wringing her hands under the table.

Before I have a chance to speak, she says, "It's not that I can't teach Albert English...I taught my other son and he has just returned to school in year eleven and he's achieving straight A's in everything." She looks at me intently to gauge my reaction. I see she wants to go on, so I remain passive and silent.

"I've been in the travel industry most of my life but I'm not stupid..."

"Are you worried about how I might perceive you?" I ask.

"Well...yes, I suppose so. You seem to be so smart, I'm worried I'm going to disappoint you." I can't make out whether she's being ironic but I guess at the cues she is reading as indicators of "smartness."

"I'm just delighted you've agreed to participate in my study," I say, "I can't see any way you might disappoint me."

"But what if I can't do it?" she asks.

"Well, finding out the reasons you can't will provide good data for my study..."

"But will you help me?"

"I'd be happy to give you a small amount of help while the study goes on then, if you haven't completed the course and would like to, I'll be pleased to give you any help you need."

She looks relieved. I say, "You needn't worry about me forming any judgments about you personally as that is simply not the reason I am here."

"I do tend to worry about the thing people think of me, that's just part of me. Albert is the same; he'll do his best just because he wants to please you."

I am aware of "The Hawthorne Effect" (McCarney, Warner, Iliffe, van Haselen, Griffin & Fisher, 2007) which is the suggestion that research can be compromised by issues such as the researcher's relationship with the participants and resolve to discuss possible impacts of this on my research in the final chapter of the thesis (Chapter Eight).

"Well, that has to be a good thing," I say, "but I have made it clear that you are the participant; you are the one I'm studying? I want to know whether you can deliver this course to Albert effectively with minimal help from me beyond the materials I have already given you. For example, I'd strongly suggest you read the book."

Of course, it is obvious that Kathy is aware she could not provide the kind of academic stimulation provided by a good trained teacher therefore she must consider other things about the development of a teenager, more important than this. I am keen to know the answer. I ask.

She replies, "His brother was bored in school and not being extended so we decided to home school him. Albert didn't like having to go to school when brother was at home so we figured it was easier to let him stay home as well. He will be going back for year eleven and twelve as he wants to go to uni."

"Do you think Albert or his brother are academically gifted?"

"We talked briefly about the kinds of things that characterise the academically gifted before we started and I would say that Albert persists in completing tasks; he likes to have goals and usually reaches them. He learns things quickly, sometimes apparently with little effort. On the other hand, he doesn't look for deeper meaning in things and is not particularly interested in language. For example, he's not a reader unless it's

something to do with sport, which is something he's mad about. He would like to be a professional Hockey Player and so focuses on that almost exclusively.

If he enjoys topics he studies really hard and would be way above the level his peers would be at school but that's mainly with his maths and sciences; he's really advanced at that and performs really highly but in English, it's been tricky for me to know what to give him. He has done a few online courses where he's had a teacher and the work has been marked because he does like to be thought highly of so doesn't want to fail anything. He did that through a company called *Home2teach* which is American and they do a six week class every term and then every week they have a *Skype* class.

I am concerned about whether an online course in English delivered from the USA could meet the requirements of The Curriculum Framework but I keep this to myself. I muse about Albert's motivation which appears to be more related to his self-esteem than any intrinsic interest in education or even desire to achieve particular goals in education.

"The main reason I was interested in your study is that it involved you providing a course in English, which is something I've had real problems finding. My other son, Angus, never did much English at home either but, now he's back at school in year eleven and achieving A's in everything including English. This is mainly because he's a big reader; he just pursues topics and can't get enough. In this way he's quite different to Albert. "

"Do you feel there's a connection between being a reader and doing well in English, "I ask.

"I do and I have tried to encourage to encourage Albert's reading by assigning him non-fiction books to read, as he likes to read fiction. I do believe he should read non-fiction more and not keep it all on the fiction side." I question Kathy about this but she is unable to unpack the beliefs she has that underpin this attitude about reading.

I note that The Curriculum Framework (SCSA, 2013) states:

READING

*Students read a **wide range of texts** (emphasis added) with purpose, understanding and critical awareness.*

English Learning Outcomes (1998)

"Albert doesn't like to take ideas further, wouldn't want to debate things; isn't a good arguer mainly because he would be more concerned about what people would think about his opinions and that he would be wrong."

I remember that The Australian Curriculum (ACARA, 2013) says:

CT is at the core of most intellectual activity that involves students in learning to recognise or develop an argument, use evidence in support of that argument, draw reasoned conclusions, and use information to solve problems. Examples of thinking skills are interpreting, analysing, evaluating, explaining, sequencing, reasoning, comparing, questioning, inferring, hypothesising, appraising, testing and generalising

And consider that Albert's ability to develop these intellectual skills seems to be retarded by issues surrounding his self-esteem.

I ask, "Would you say that Albert is able to think outside the square?"

Kathy responds immediately by saying, "No. I don't think he could come up with any novel solutions to problems. I would think that he's more...well, he's quite reserved in that way. It's all about how he's perceived," she says flicking her hair and smiling at me, "It's all about that, which is not good, it's something we try to avoid. But he was like that at school. It's not that he's never been to school."

I ask about her own background interested to know if I can see a connection.

"My working background is that, I worked for a leading international airline and, for the first seven years was PA to the General Manager. And then, after having children, I returned and did check ins, boarding cards etc part time. I only went to year eleven at school as I didn't know what I wanted to do and I wasn't given very good direction. I know I was passing all my subjects but I wasn't acing them all and I wanted to. So, when someone suggested I might do something else, I immediately took their advice and went to Business College and got a diploma. I then worked for some of the leading business people at the time (she names a few) doing general secretarial work. I suppose I have regrets now but it was good for me at

the time. I think if I'd gone to year twelve, I could have done something I had a real passion for. I was never passionate about what I did. I did enjoy working as a PA for the General Manager of the airline but feel I might have done something more hands on; more arty crafty. I would say that, if I had done a course in Philosophy/CT, my schooling may have been less disjointed," she says and looks to see if her comment has pleased me.

I note Kathy's emphasis on her title as Personal Assistant to The General Manager and compare it to the information that she left school when she was doing well, simply because she was "not acing," her subjects. There appears to be a significance in these things that explains Albert's need for the approval of others.

"Do you mind if I just clarify why you took your children down the home schooling route?"

"Apart from the reasons I've already given, it was just a lot easier to have Albert at home. He's thoroughly enjoyed it and doesn't want to go back to school but I think he definitely should for year eleven and twelve. He doesn't really know what he wants to do in relation to uni etc, but just keeping his options open is good."
"

*I note that some researchers agree that, to engage in CT, there needs to be "dispositions" (Facione, 1990). This can loosely be seen as a tendency to engage in CT should one have the capacity to do so. Facione's (2000) attempt to define the term "disposition" also suggests a connection with motivation, for example: "consistent internal **motivations** to act toward or respond to persons, events, or circumstances in habitual, yet potentially malleable ways" (p. 64) (emphasis added)*

It can be said that Facione is attempting to present "motivation" as a precursor to action that is perhaps derived from a disposition that is, in the way that one might have "curiosity" as a disposition of personality which gives rise to a "motivation" to satisfy this dispositional characteristic. It will be interesting to see whether Kathy and Albert's apparent concern with the way they are perceived by others will serve as the necessary motivation to engage in the concepts of the course however, even if it does, they may not be disposed towards critical thought.

Ennis (1985) was among the first to note the apparently obvious claim that those who are equipped through ability to think critically, may not wish to do so unless they possess a personality trait or other motivator. When Ennis gives the following definition: "CT is reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p. 45) and this is considered in light of Kathy's

description of not knowing what to do when she was at school, she may be indicating an inability to think critically. This early hypothesis will be tested as the study goes on.

"Is there anything in your background that would inform your attempts to teach a course in Philosophy/CT?"

"There's nothing I can think of..." she giggles and looks downward obviously feeling uncomfortable."

"What benefits do you think Albert might get from studying the course," I quickly ask in order to mitigate her discomfort.

"I just think it will broaden his horizons. He doesn't think things through. He's very much like me," again she looks shamefaced and I reassure her, "And I really want him to have skills to...it's difficult to explain. I really want him to think more; to look into things more deeply.

I would like to get the same benefits from teaching the course as **I would like to feel more confident** (emphasis added). I'd love to have much more confidence in discussing things with people and give my opinions. I'd like to be able to argue, debate and present my own opinions...that's something I'd love to be able to do. I'm just worried that I'm not going to be able to do it. I feel reassured by the offers of support you've made but I don't want to seem incapable of doing it to you even. Has your program been used in this way before, that is in a one on one situation?"

"As far as I am aware, there has never been an attempt to put Philosophy/CT in an English course and then trial it with home schoolers. Given how many home schoolers you tell me there are throughout WA, I'm very interested in how it works: that is, whether Albert benefits from it but, more importantly, whether you are able to confidently present the course with limited support using only the materials I've provided to you as that is the point of the study."

"I think that the discussion model would be good for Albert as he doesn't verbalise things easily," she says. "If I have problems, I guess you'll want to know what they are."

"That's true, but the more help I give you, the more I'll defeat the aims of my study. I'd be most happy in discussing with you the course content in relation to Albert. So, if you feel you'd like to make changes to suit your son, I'd be content to have conversations with you on that kind of topic."

"Really," she says almost to herself, "I just need to get Albert to talk more. How much time should I spend teaching your course?"

"English is taught in high schools around four hours a week," I tell her, "You'll get the most benefit if you devote that kind of time to it. How much time do you devote to teaching the curriculum at present?"

"In relation to Maths and Science, which are the subjects he loves, we spend around seven hours a week on both. We don't spend much time on other things...I'm very happy to be part of the study, I think it's going to be good."

It would seem that the moderation process for Home Schoolers has failed to detect the fact that Kathy is not meeting the responsibilities of her registration cited earlier namely, "

Home educators, are currently required to implement the Curriculum Framework in accordance with the Curriculum Council Act 1997 and the School Education Act 1999.

The Framework provides the learning outcomes expected of all students and for assessment that is fair and contributes to continued learning. Through their contact with the moderators, home educators fulfil their obligations for implementation of the Framework. Home educators are given a reasonable amount of time to understand the Framework and to develop ways of providing learning experiences best suited to their child's achievement of those outcomes."

I wonder about her motivation to read the materials I have provided as, failure to do so, would have a negative impact on her participation.

The eucalyptus trees on either side of the long, gravel drive, cast their soporific scent into the air as I reverse away. Somehow though, I feel troubled.

I hear from Kathy often during the course of the study and, approximately half way through suggest that she gets Albert to contact me for advice on the assignments he is attempting. I receive two or three tentative emails over the course of the term and he sends me drafts of two written pieces during the ten weeks, which I annotate with corrections to his English expression and return. I fear prejudicing the data by making comments that may provoke critical responses, so I resist. If Kathy has a process in place by which she assesses these pieces, she doesn't inform me of this.

I feel concerned, as my belief is that the language we teach in subject English has the potential to empower students across the curriculum, a view that is borne out by supporting documentation for both The Curriculum Framework and The National Curriculum. I feel that Albert is receiving insufficient help in this area of study even though my detailed lesson plans and program could supply everything he needs for the term of the study at least. I resolve later, to establish the true reasons Kathy has used home schooling as the preferred method of teaching her children.

When we next meet for an interview, I ask her to describe her experience of teaching the course to Albert.

"Well, we haven't got far through it really but, through what we have done, I found it difficult to teach. Not having had experience of this before made it hard for me. If I'd had more information, I could have prompted Albert more. I think prompts would have been handy to give Albert more ideas to get the conversation started. I didn't really have enough ideas..."

I recall Facione's (2000) statement: "The general consensus is that CT per se is judging in a reflective way, what to do, what to believe."

I also note that puzzlement and critical spirit have been said to distinguish Philosophy from all other disciplines. A central premise in Philosophy namely, making everything available to critical challenge and scrutiny (A. Fisher, 2004; R. Fisher, 2003; Lipman, 2003; Milkov, 1992; Talaska, 1992; Walters, 1994) reflects postmodern doubt which is certainly similar to the aims of CT and also the aims of the course used as the instrument for this study. Neither the philosopher nor the critical thinker accepts propositions without a clear and reasonable justification, a factor that it is evident in Cartesian Philosophy when Descartes stated the intention:

"never to accept anything as true if I did not know clearly that it was so; that is, carefully to avoid prejudice and jumping to conclusions, and to include nothing in my judgment apart from whatever appeared so clearly and distinctly to my mind that I had the opportunity to cast doubt on it" (Descartes & Clarke, 1999).

"Did you read the book I gave you before the study began?" I ask.

"I didn't read it all. I did dip into it."

"Did you feel that was of any use in giving you those prompts?"

She draws a long breath. "It did but I still feel I could have done with dot point prompts that led me to the answers. For me, it would have been really useful to know the answers as I was trying to get Albert to find the answers but I didn't really know what I was trying to get to myself."

"How would you respond if I said, there are no answers; in a sense it's like aerobics for your mind but there is no definite end point like there might have been if there were answers?" I ask.

"Yeah, sure," she says staring at the bush scene outside the window, "I can understand that. I don't know if my mind...I don't know if I was doing it justice."

"Can you suggest the reasons you might feel that way?"

"I think it's possibly because I've never thought that way before. It was really new for me. I think it's changed the way I think a little bit but it's certainly changed the way Albert thinks. But for me, I have been questioning things...in my mind, but Albert is questioning a whole lot of things at the moment as a result of studying the course. Like just the other day, we turned on to Thomas Road and I said, "This is such a fast road..." and he said, "Mum, the road is not fast. The cars that are traveling on it are fast..." like he corrects the logic of things that you say all the time." I see the exasperation Kathy is feeling in her tone and body language and wonder myself whether there is any intellectual benefit to this kind of questioning. "He's much more accurate in his expression now, and he certainly wasn't like that before. He questions language in a playful way like, I say, "It's bed time..." and he says, "Bed time; is there a time set aside for beds?" It's just so much and sometimes I've become annoyed. I just think, aaaagh!

When I'm not getting annoyed, I see this as a positive thing. It's just he does it so many times a day. I do see that it will bring about great benefits to his school work however. I think he's no longer taking things at face value and that has got to be a good thing."

"And you," I say, "You said you're doing it in your mind but not otherwise?"

"I find I listen more carefully to things now even though I don't tend to verbalise. I find I don't really teach Albert anymore, it's all self-taught. We've passed the stage where I can keep up with curriculum; I can't keep up, I don't have the time, so I let him teach himself. That's what we did with the older son as well and

he's an A student in every subject. I saw my job as a home schooler to just direct them into things that might help them. In fact, we asked Albert's older brother, Wilf, a couple of questions from your course and he responded immediately. He seemed to be able to think that way."

"Do you mind if we revisit the reasons you took the home schooling pathway?"

"Well, the reasons now are different from the reasons then. Our first son was taken out first but that was because he was a very scared, timid little boy in year five and, when they talked about "stranger danger," he took it very literally. He thought he was going to be the boy who was going to be abducted. It sounds crazy but it was very real for him. He was terrified and it went on for months and he used to ask me whether he had to go to school. I was already providing some of his work at school because they weren't able to extend him to the level he wanted to work at as he was working at a higher level than all the other children at the school, but they weren't able to meet his needs. It was just too difficult with the class size to give him separate work particularly in the Maths Science area which are his areas of strength. Although I can't give you any actual evidence, I think he's gifted as he's very interested in everything; he has a knowledge about many different areas and he's always on the computer looking up things. Albert is not like that at all. I would like him to be different but he's not. That's just nature," she says with a shrug of her shoulders and a resigned smile.

Although the model of learning that is implied by Kathy's description, I reflect, could be dignified and formalised as Self-Directed Learning (SDL) which is often broadly conceived as self-learning in which learners have the primary responsibility for planning, carrying out, and evaluating their own learning experiences (Caffarella, 2000; Hiemstra, 2000; Merriam & Caffarella, 1991, 1999) this is a concept that is found more in adult education institutions than in other education institutions as obviously, it relies on a disposition to engage in study. Had Kathy established a knowledge base across the curriculum for Albert, prior to relying on his motivation to learn, perhaps Albert would have directed his efforts to learn beyond areas in which he had significant interest.

"Albert is now showing some of the things I would see as gifted: his willingness to learn and his Maths and Science are at a very high level but I guess it's not just about that. It's his general outlook and his ability to talk about different things. If I try to compare the two there's just no comparison.

Albert knows that I want him to be more knowledgeable about the world and things, and this has been assisted by his newly acquired tendency to question. He's started to read some blogs and things, just to give him different perspectives on things and that's a new thing that's just started. It's giving him information but I'm not sure he's really that interested though. He loves watching quiz show on the TV; he

likes questions, general knowledge, that kind of thing. He likes playing his musical instruments but does the bare minimum. He happily does his work every day on his own but doesn't follow up or do more than he needs to. I'm enjoying the changes in Albert as a result of the course and the fact that he's writing things down and reflecting on them. All in all, for both of us, the course was really worthwhile."

I feel deeply troubled by the plight of Albert as described by his mother in this case study. His response to the course seems to suggest it is reasonable to believe he has both the disposition (Facione, 1990) and the capacity to engage in behaviours identified as relevant to CT which include asking and answering questions for clarification (Ennis, 1985); defining terms (Ennis, 1985); identifying assumptions (Ennis, 1985; Paul, 1992); interpreting and explaining (Facione, 1990); Reasoning verbally, especially in relation to concepts of likelihood and uncertainty (Halpern, 1998)

The person responsible for his schooling had given up any attempt to lead him in this direction and, in fact, often expresses annoyance at his attempts to do so. Kathy does not demonstrate a disposition or motivation to engage in CT herself, nor does she exhibit a willingness to meet her obligations as a registered home schooler for reasons that seem to relate to inconvenience and a focus on issues to do with her own self-esteem. Had DETWA discharged its duties to monitor Albert's progress conscientiously, this situation could have been remedied but, the fact that Kathy admitted that she does not teach the curriculum yet remains a home schooler is prima facie evidence they did not.

7.3.2 Heather

Like Kathy, whose case study is related elsewhere in this thesis, Heather is also a parent who has chosen to home school her children. I was invited to meet Heather by Kathy after she had decided to participate in my study. I visited Heather in her home and, on this first meeting realised that Heather's circumstances were significantly different to Kathy's. Heather lives in a large suburban home in one of the newer subdivisions in a rapidly growing Perth suburb. As the Kwinana freeway snaked its way south from Perth city, it caused the emergence of these subdivisions which are made up of small blocks of land upon which rows of houses are built in similar architectural styles. Owners personalise them in order to fulfil the cultural myth that we are all individuals, by changing the minor details of stock plans offered by the myriad of project home builders who emerged alongside the freeway driven prosperity. The suburb in which Heather's home is situated is the typical result: a small shopping centre and a primary school amidst a cluster of houses which future populations will recognise as typical of the style of homes of the early twenty first century.

Heather's home is comfortably furnished and we sit on a large leather sofa for our first interview. She leans towards me and has an air of enthusiasm when she speaks about her participation in the study. She tells me she is keen to learn more about Philosophy and CT in a way that suggests she has a thirst for knowledge.

In the background, I can hear young voices that come from the group of children I noticed huddled around the large screened television as I entered. When later I see the directions pasted to the lavatory wall on how to appropriately use the facilities, I conclude that Heather must also be engaged in some kind of child minding activity in addition to being a home schooler but I feel it would be inappropriately intrusive to ask.

In the pre-amble to our interview, Heather tells me that her daughter, Chastity, was selected for a centrally run programs for the academically gifted prior to her withdrawal from the school system. I am aware that there are two programs operating in Western Australian state schools for academically gifted students: the Primary Extension and Challenge Program (PEAC) and the Academic Talent Program (ATP). I wonder for which Chastity was selected however, firstly I ask whether Chastity demonstrates any behaviours that Heather might associate with giftedness. I feel that this will provide some insight to Heather's understanding of this topic.

Heather says, "Chastity can be quite stubborn when it comes to things. She's also sensitive and has a strong senses of justice. She can be very self-critical and she is very creative in her thinking. When she reads something, she'll talk about it weeks later: bits of information, facts etc that she's remembered. She has a very good general knowledge."

I recognise some of the terms Heather is using and ask if she is familiar with the document entitled "Common Behavioural Characteristics of Gifted and Talented Students" (DETTWA, 1996) which can be found on the DETWA website.

She says she has looked at it recently and it appears obvious that Heather believes in the validity of this checklist even though such validity is dubious at best:

The checklist appears on a page of the website that has the heading "Gifted and Talented: Developing the talents of gifted children. It claims its purpose is to: "assist teachers in identifying high-achieving students and alert them to the covertly able, the under-achieving and the high potential students with behavioural problems." The checklist is acknowledged as being from the research of Michael Saylor.

Professor Peter Merrotsy of The University of Western Australia (in press) has this to say about checklists:

When deciding whether to accept any list of characteristics, or indeed any individual characteristic, the first thing you should consider is its origin. Whether the characteristic is derived from research is the first question to ask, but whether that research was well conducted is also very important."

He then goes on to comment specifically on Sayler's checklist, in addition to quoting from Sayler himself on this subject:

Checklists of characteristics derived from the so-called 'Sayler' scale are widely used, and they are in fact promoted by most state Departments of Education for whole-school use or for teacher use in the classroom, and recommended as the primary tool to identify giftedness. Sayler (pers. comm., December 2012) has briefly provided some background information:

"We developed this originally as a service to a local school. We created reports for them and presented the data at a state conference. It was never published. ... I was able to locate the original technical report on the scale.

The technical report notes that the specific behaviours in the scale were solicited from a group of teachers and parents at the local school mentioned; no information is given about how giftedness was understood by the participants."

According to Borland (2005, p.2) the term "gifted": "is usually used to designate an appreciable number of students in a school with a "gifted program" who have been chosen to fill that program's annual quota..." and: "Defining giftedness is a matter of values and policy, not empirical research..." (Borland, 2005 p.8)

Merrotsy (in press) goes on:

A similar critical approach should be used with other checklists. For example, the first version of the Renzulli Hartman Scales for Rating the Behavioral Characteristics of Superior Students (SRBCSS) was published in a non-refereed section of a journal (Renzulli and Hartman, 1971). External validity of the scale is evidently quite weak: individual items are supported by 'studies' by an eclectic list of 'well known contributors to the literature' (Renzulli, Hartman & Callahan, 1971, p. 212), although many of the names are not familiar. Even Renzulli, Hartman and Callahan (1971, p. 213) comment on their own scale that 'caution should be exercised in using this scale.' Nevertheless, the SRBCSS continues to be 'updated', and continues to be used in many educational contexts (Renzulli, Smith, White, Callahan, Hartman & Westberg, 2002)."

I recall attempting to make the Gifted and Talented Education section of DETWA aware of this problem when I first became aware of it. In a response from the Principal Consultant (Pers. Comm; August 2013) interest was expressed in "the inconsistencies in our documentation" although I was informed that "all of our documents have to be approved by Corporate Communications and Marketing."

It is well to question the degree of expertise in gifted education that may exist in the Corporate Communications and Marketing section of DETWA that would allow appropriate judgement of the validity of such a checklist.

I had no further response to communications from this department which, when Heather's belief in this checklist is factored in, could possibly be seen as evidence of the way myths are constructed in education (Treffinger, 2009) however the implications of this are worrying when Borland's (2005) comments are taken into account, and when it is considered that this department is the recipient of a large annual budget in order to cater for "Gifted and Talented" children in Western Australia.

I remember that the report entitled "The education of gifted children" by the Senate Employment, Workplace Relations, Small Business and Education References Committee in 2001 stated: "Gifted and Talented students comprise a significant group within Students at Educational Risk" (Commonwealth of Australia, 2001, p. 20) and fear they are destined to remain so until State Education Departments approach programs for a group that only exists in theory, namely, gifted and talented students, from a theoretical basis that is, with a close eye on research.

"Chastity was selected for an academically talented program at one of the special schools that operate it after she duxed year seven at her primary school. Although she wasn't tested for inclusion in PEAC in primary school, a teacher handpicked her for inclusion. She found the special program totally boring. One of the reasons for this was she already knew a lot of the information that was presented, but she also struggled socially. It was more the social side than the academic side she had problems with. Sometimes she just didn't want to go."

I ask, "Was that her attitude to school in general?"

"No, she liked to go. She was always determined; very motivated to get her schoolwork completed at home. In fact, she was possibly *too* engaged, She used to stay up really late at night making sure that she got it completed, got it right and, if she didn't get it completed, she didn't want to go to school the next day until it was done."

"Did she explain to you why she felt this way?"

"I don't think it had to do with her teachers. She's just so self-critical about her work; it has to be perfect, it has to be right. Even now this is the case. She's recently worked on a project and had a bit of a meltdown saying it was like a grade five had done it."

"And was her effort reflected in her results when she was at school?"

"Yes, she got a straight A report card and, when we had parent interviews, the teachers spoke highly of her work."

"And what about Chastity's view about how she was going at that stage; was her attitude positive about her achievements?"

"No, no it wasn't. Her English was; she loved English, loved what her teacher said about her work, took his comments on board and tried hard to improve. But with Maths, she completely struggled. She didn't understand the teacher, couldn't relate to him or the work. In science and Society and Environment, she seemed to just...well she didn't seem to say much about that at the time so we assumed she was OK."

"Obviously you had more things to observe than just what Chastity and the teachers told you. What were your observations about the school and the curriculum?"

"I had a problem with the fact they were doing extension work in Maths through the day and the homework was the curriculum work. So there was no teaching of the curriculum work in the class, Chastity was expected to do the curriculum work at home and this is where she struggled with that and she also struggled socially with some of the kids in the class. Not just in the gifted class but there were also bullying issues with the kids in the mainstream classes. She was in a scholarship course for music as well..."

"You're describing a differentiation between curriculum and extension work could you tell me a little more about that?" I ask her.

"Yes, the teacher was giving them work that was for students in the higher year level. The teacher explained that the reason for this was that some of the kids in the class needed a challenge but Chastity said that in that class, she felt dumb. Some of the other kids in the class just knew the answers but she hadn't even seen work like that before."

DETWA Gifted and Talented Guidelines March 2011 claims that: "Extension" encourages expansion of knowledge and skills in the regular curriculum." (6.2.2 B, p.9)

By this definition, the extra work provided to Chastity could not be considered "extension" and

I speculate about whether Chastity's teacher had used this term. In fact, Heather's description of the process suggests a process that has more in common with acceleration.

On this subject, DETWA Gifted and Talented Guidelines March 2011 states:

*Decisions regarding full-time acceleration of younger students in the compulsory years of schooling should proceed only after thorough and careful consideration of the implication for the long-term schooling experience of the student. This includes the academic, social, emotional and behavioural needs of the student. In certain situations acceleration may be the best option for a **small number** of exceptionally gifted students. (emphasis added)*

1. Decisions may have to be made on behalf of younger students to address their individual learning needs.

2. The Curriculum Framework and best-practice gifted and talented principles of assessment need to be kept in mind when evaluating the suitability of acceleration: any measure of the child's readiness to accelerate should be valid, educative, explicit, fair, and comprehensive.

(6.2, C, p.10)

It doesn't seem very likely that a "thorough and careful consideration" of Chastity's needs was made before making the decision to accelerate and, considering what followed, it may be suspected that damage was done to her social and emotional well-being by this decision. This document does not make clear the ways in which a teacher attempting to meet their responsibilities under this policy might know "best-practice gifted and talented principles of assessment."

Martin (2004, p.75) observed:

little if any attempt is being made [in WA state schools] to determine whether the structure of the programs was being informed by the published research at all and, as a number of participants commented, it is difficult for a classroom teacher or a head of a subject department to find time to read the central office materials that are designed to inform the structure of the program ... It is reasonable to conclude from this that those same personnel would find it impossible to find the time to read the research even if it was written in a form that was immediately accessible to classroom teachers.

This, in turn, makes it reasonable to believe that teachers obligated to following DETWA guidelines have neither read them in order to understand their obligations nor have the knowledge of theory required to meet them. As in Chastity's case, students can be disadvantaged by this fact.

"So, did the teacher explain how they were supposed to learn the curriculum work?"

"No, I have no idea as Chastity hadn't even seen some of the foundational work so that was one of my queries when I saw the teacher and he said she was fine and didn't have a problem. He also said if she had any questions, she was quite welcome to ask, which she did. But after that, every time they had a class, he would ask, "Do you understand, Chastity?" to the point that one of the other kids in the class piped up and said, "You don't have to treat her like an idiot."

Somewhat ironically in view of Chastity's response to the course in this study, section 6.2.2 A, p. 9 of DETWA Gifted and Talented Guidelines (March, 2011) states:

Enrichment Broadens the Range of Experiences for all Students

Enrichment assists to improve skills such as:

- 1. creative thinking*
- 2. problem solving*
- 3. questioning*

4. independent research

which are at least some of the intended outcomes of this course and which also echo the statements made by ACARA about CT.

"So this was the reason you decided to home school her?"

"Yes."

"And are you teaching Chastity the standard curriculum?"

"Well, I think she might have gone backwards. If year nine had worked out for her, she wouldn't have had to go back and repeat the work, as she was up to scratch at the end of year eight. I would sit with her and do the Maths with her. One long weekend, she was given so much Maths homework that, even though she spent over twenty hours on it, she still didn't finish the range of questions and exercises he set for her. I just said to Chastity, "This is ridiculous, this just isn't the way to spend a long weekend and I've had enough." And that was only Maths. The teachers in that program seemed to believe that gifted kids should be loaded up with homework which meant she had to go to bed at eleven and twelve o'clock at night which is ridiculous. "

Cooper and Valentine, (2001) writing in the Gifted Child Quarterly (53 (4) Fall 2009) explore some of the myths that arise in relation to concepts such as "giftedness" which have no basis in anything that could be considered fact in the way this word is usually construed. That is, they underpin the beliefs and practices of the cultural groups to which the terms are important without any meaningful explanation or research support.

In relation to providing an education for the Academically Gifted, the practise of providing much more homework than is provided for a non-gifted student in the same year group is an example, even though there has been much debate about whether there is a connection or even a correlation between homework and achievement. This practise demonstrates the power of myth in education. Perhaps it is well for educators to remember that gifted children are both gifted and children and each component has its own needs.

I ask, "So when we discussed your participation in my study and Chastity got a taste of my course, what was her response?"

"She was excited; it's different and we can see that it will fit in with the English activities like persuasive writing etc *that she's currently studying* (emphasis added). We're also doing a lot of functional literacy material so she feels like she will be extended with this work which deals with critical ideas."

The Department of Education claims:

"Home educators, are currently required to implement the Curriculum Framework in accordance with the Curriculum Council Act 1997 and the School Education Act 1999.

The Framework provides the learning outcomes expected of all students and for assessment that is fair and contributes to continued learning. Through their contact with the moderators, home educators fulfil their obligations for implementation of the Framework. Home educators are given a reasonable amount of time to understand the Framework and to develop ways of providing learning experiences best suited to their child's achievement of those outcomes."

It is very evident Heather is meeting the obligations imposed by her registration as home schooler.

"Is there anything that you could point to in your background that might assist you to teach a course in Philosophy/CT?" I ask.

"Not really, but I am interested in the thinking processes of Philosophy; not instant thinking but pondering, going into deeper modes of thinking...I don't know if that's a correct interpretation of what Philosophy is because those ideas are new to both Chastity and I. I like to think about things but I find it difficult to come up with answers on the spot. I am reassured that you describe the discussions as risk free."

I think that this may indicate a natural disposition (Facione, 1990)

During the course of the study, I have much communication with Heather. She asks me if I could look at Chastity's work and I agree. I note that the work is not of a particularly high standard and also that there isn't much of it.

On a couple of occasions, I am invited to meet with Heather and Grace to give feedback on their progress through the course. Heather engages with me in an animated fashion during these meetings however Chastity allows her long hair to fall across her downcast face and avoids eye contact. Heather tells me that Chastity's difficulty in understanding some of the concepts of the course has made her "feel stupid." I am concerned about this and attempt to engage Chastity in email communication, not with the intent of explaining the concepts, but rather to give her reassurance that may allow her to feel better. I have very limited success in engaging with Chastity by email or in any other way.

I reflect on Bandura's (1997) seminal article about self-efficacy in which he says:

It is hypothesised that expectations of personal efficacy determine whether coping behaviour will be initiated, how much effort will be expended and how long it will be sustained in the face of obstacles and adverse experiences. (1997, p. 191)

And feel that Chastity's previous experiences may have had a determinedly profound impact on her self-efficacy and very likely, her self-esteem.

In October, I meet with Heather again. We sit on the same leather lounge with the same childish voices in the background. Heather demonstrates the same enthusiastic attitude in her body language and facial expressions. I say, "Heather, could you describe your experience of teaching the course during last term?"

"I actually found it quite difficult. I didn't think I would find it difficult but I did, mainly because I hadn't been taught to critically think. With that in mind, I found it challenging to attempt to teach that skill to Chastity."

"Did you learn anything about CT by engaging with the course?"

"Yes, I found it really challenged many of my views as well as the reasons I do certain things. During the last couple of weeks I've been questioning many things; Chastity has also begun doing the same thing, which at first I thought wasn't going to happen as she didn't seem interested initially. For example, in the media coverage given to the recent election, as a direct result of engaging in the course I started asking myself, "What exactly are they saying and why do we just go along with the things they say without probing deeper?" I would hope that I will go on thinking that way as I know that are some everyday things that we just do because it's easy but I would like to think that I will continue to question things."

"Do you mind if I ask you why you would like to continue doing this; could you explain some benefits that you perceive flow from it?"

"Well, having a son with autism I have begun questioning some of the issues surrounding his condition because I would like him to have better health and services and, maybe not just treat the symptoms but get to the cause and maybe, hopefully, there will be a cure one day. My interest is in health and why and how certain things contribute to it such as lifestyle, eating and things like that and I don't think I think critically enough with this and other areas of life. I feel it will come more naturally to me as I rehearse it."

I see that realising that one doesn't think critically enough is dependent on thinking critically. I feel heartened.

"Could you explain how you think CT might help with your son with autism?"

"I have to interact with Disability Services now as he has only been diagnosed in the last year. Before that it was a complete battle with specialists, doctors and even other parents who objected because he was acting and behaving a certain way. I had to battle with the school even and then to get a diagnosis was hard work and that was an area that CT could have helped. For example I was asking, why is he doing this and I would be answered by statements like, "Research shows this..." which I now believe I could analyse more carefully. Previously I had been dismissed as merely a Mum but finally I was able to get him referred and persuade the mainstream school to write a letter backing up what I was saying about how he wasn't coping and he wasn't at year level which backed up what I had been saying. They had attributed his problems to a different cause maybe Attention Deficit Disorder or something but they were finally convinced when I used my new skills to get the school to write a report addressing the problems I had researched. There were complaints from other parents etc included in their report and the paediatrician to which he was referred tested for autism. This brought about a change in our lifestyle as, I had tried to get that paediatrician to do the test before that but he hadn't listened which meant I hadn't been able to access any services or anything for him. If I'd wanted to get these things before I would have had to pay privately and, if you can't afford it then he just misses out. I think that CT helped me deal with these people and I would have been more successful earlier on if I'd had earlier exposure to it as I would have asked more "why" questions and sought better explanations instead of saying, "They're the specialist and they ought to know..." and taking it at face value."

"Have you noticed changes in Chastity since you've studied the course?"

"Yes, she's been much more questioning even about quite personal things like, why am I so shy...even more to the point, about Maths. Like, why do we have to do this? What's its application and how is it benefiting me? Who uses this and for what? Instead of just doing it. She didn't ask questions like that before, at least not that extent. She would ask questions out of interest if she was researching stuff like, who did this, but certainly not the sort she's asking now. I definitely see this as a positive thing.

She's also been questioning some of the courses she's been studying. For example, she has been doing a commercially available course in which they get her to do certain things and then give her a mark and she's realised that maybe that approach doesn't suit her as it doesn't require any CT. She's results driven but she's been questioning the validity of the results that come from this kind of study where you learn, read answer. There's no research: you're given the work, you find answers in the work you've been given using the one text. There's no broadening of the answers or seeking different perspectives and she's been challenging that. I also think those things are important."

"Have you noticed any changes in Chastity's behaviours that you would describe as gifted?"

"Not really. She's always demonstrated that kind of behaviour except for the questioning."

"Have you any suggestions about how the course could be improved?"

"I think that home schoolers in particular, could benefit from some kind of support. What I mean is, training or something like that maybe a mentor. I found some of the wording difficult at the beginning until I got to lesson three when I thought, yes, I get this now. Even then, some of the concepts like "virtual reality" were difficult and I thought, how am I going to do this and Chastity would ask me questions that I just couldn't answer. I think if you'd run a training session before the course started this would have helped. I knew that you wanted us to try and do it on our own but if we'd been able to ask questions, I think this might have helped. If you'd given more examples that would also have helped. When I asked you for examples, they were just brilliant and really helped Chastity and I to understand. "

"Did you read the book at all?" I ask.

"Not really. I read a couple of chapters but that was all. Maybe I would have found it easier if I had."

"To change the subject a little, would you mind if I asked you about your background. You recall you said that you didn't think there was much in your background that would help you to teach this course but I'm wondering what your background actually is."

"Well, I have a diploma in business and another that qualifies me as a teaching assistant. I've worked in a legal firm as an accounts manager and, when the two girls were little, worked at a Baptist college. I did the teaching assistant diploma and have worked at home with my autistic son since then.

I completed year twelve at high school before doing my business diploma."

I am heartened by Heather's experience. It is very obvious that, although not a trained teacher, she is enthusiastically attempting to cater for her children. As we conclude the interview, Chastity walks into the room. She is beaming and looking me straight in the eye as she thanks me for allowing her to be in my study and hands me a gift.

Heather demonstrates both the disposition to engage in CT (Facione, 1990) but demonstrates that her thinking is now critical by describing thinking that meets the definition given by Ennis as "Thinking that is reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p.45)

The fact that Heather describes experiences of using ,what she describes as "her new skills," that are far removed from the Philosophical problems embedded in the English course that taught her these new skills, also seems to address the "transfer problem" (McPeck, 1990) although more discussion of these issues will ensue in the next chapter..

Chapter Eight: Discussion

8.1 Introduction

This chapter will attempt to interpret the responses of the participant teachers and home schoolers in regards to the research question, before going on to discuss the findings of the study. The research question is:

How do teachers of English describe the value of the course in philosophy/Critical thinking in relation to its success in achieving its goals, specifically:

- (i) How do they perceive their own development of skills to teach Philosophy/CT in a mainstream classroom?
- (ii) How do they perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

It is noted that strictly speaking, the research question as written could not apply to "Home Schoolers" unless the word "teacher" is construed to mean anyone who seeks to teach rather than the meaning it is usually given as a descriptor of a person engaged in a profession for which they are qualified. The term "mainstream classroom" also needs to be construed to mean the children to whom they are delivering lessons. As there were two parents who participated in this study, the question will be so construed in this discussion.

In order to consider participant responses meaningfully, it is necessary to establish a framework that will allow this. In the paragraphs below, I explain my approach to the two components of the research question in order to establish a meaningful framework for interpretation and discussion.

- (i) Development of teaching skills

As has been indicated (Chapter Eight), the course used in this study was designed for delivery in a secondary school classroom in which subject English was being taught. The inclusion of two home schoolers as participants in the study, also provided the opportunity to test the course beyond the purpose of its original design by seeing it delivered by people who not only had no background in Philosophy/CT, but also had neither teaching qualifications nor teaching experience from which they could draw to inform their delivery of the course.

The course was constructed firmly within a Social Constructivist paradigm which may have required pedagogical changes by the teachers who delivered it for various reasons. These reasons relate mainly to the fact that the concept of teaching Philosophy/CT in a secondary classroom, which was derived from Lipman's notion of teaching philosophy to children (1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980), requires knowledge generation through engagement and discussion between students and teacher. Although not overtly asked in the research question, it follows that teachers who have objections for whatever reason to embracing the idea of classroom discussion would find it impossible to deliver the course as it was written. An example of those who might experience difficulties with delivery of the course may be teachers who hold firmly to pedagogical approaches that see themselves and their colleagues as fountains of knowledge whose role is to fill the empty vessels that are their students. Arguably, the positivistic notions of the nature of knowledge that would certainly underpin this kind of pedagogy are contradictory to a Social Constructivist paradigm in which new knowledge is generated (Bauersfeld, 1995; Hunt, 1997; Wertsch, 1997) rather than discovered.

For this reason, the first part of the research question must consider comments from each teacher participant about his or her own development of skills as a practitioner who is able to adapt to approaches similar to those based on Lipman's Community of Enquiry (1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980). This question was not directly asked in the unstructured interviews but will have arisen as the means teachers used to present the course are considered and discussed. The ability to generate knowledge by applying a model whereby the teacher facilitates discussion, rather than dominates it, is a central skill in teaching Philosophy/Critical Thinking.

- (ii) Perception of students' development of thinking skills considered desirable and possibly indicative of academic giftedness?

In order to present meaningful discussion of the responses of teacher participants to this question, it is necessary to clarify the nature of the "thinking skills" that may be considered desirable. The possibility that individual teachers may have individual viewpoints on this subject is acknowledged; however, as members of the sub-culture known as Western Australian teaching, that constructs knowledge in the ways that have been explored earlier, it is highly unlikely that this would be the case.

It is most likely that the "knowledge" that constructs beliefs about "desirable thinking behaviours" is formed from the culture of teaching practice in ways Schön (1995) has demonstrated that "knowing in action" (1995, p. 30) evolves in professions. A document such as *The checklist of common behavioural characteristics of gifted and talented students* published by DETWA (1996) forms an important part of the discourse that constructs such "knowledge" although it is noted that the "thinking behaviours" described on this checklist are few and include the following:

Learning

- 2 Shows insight and reflects on cause–effect relationships
- 8 Constructs and handles high levels of abstraction
- 3 Has strong critical thinking skills and is self-critical
- 4 Has surprising perception and deep insight
- 5 Is a keen and alert observer, notes detail and is quick to see similarities and differences
- 22 Can ask unusual (even awkward) questions or make unusual contributions to class discussions
- 23 Asks many provocative, searching questions which tend to be unlike those asked by other students of the same age
- 24 Has exceptional curiosity and frequently wants to know the reasons why
- 25 Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas

The statement found in item 10 namely, "Has strong critical thinking skills and is self-critical", does not actually assist its audience identify a particular kind of characteristic as it does not state what "critical thinking skills" consist of. In view of this, it is necessary to revisit definitions given earlier in this thesis.

For example, Paul (1992) describes CT as "perfections of thought" (p. 9) whereas other writers include skills such as: asking and answering questions for clarification (Ennis, 1985); defining terms (Ennis, 1985); identifying assumptions (Ennis, 1985; Paul, 1992); interpreting and explaining (Facione, 1990); reasoning verbally, especially in relation to concepts of likelihood and uncertainty (Halpern, 1998); predicting (Tindal & Nolet, 1995); and seeing both sides of an issue (Willingham, 2007).

The American Philosophical Association's (APA) description of a critical thinker is: someone who is "inquisitive in nature", "open-minded", "flexible", "fair-minded", with "a desire to be well-informed", and who "understands diverse viewpoints". Further, Bailin's notion (2002) of "the act of critical thinking" is "engaging in thinking of a particular quality — essentially good thinking... (p. 363) focusing on the adherence to criteria and standards that meets specified criteria or standards of adequacy and accuracy" (p. 368).

The following table is included to further amplify this subject. All descriptions are repeated from Chapter Four:

Table 8.

Descriptions of Critical Thinking

Descriptions of "critical thinking"	Reference
<i>the propensity and skill to engage in an activity with reflective scepticism</i>	McPeck, 1981, p. 8
<i>reflective and reasonable thinking that is focused on deciding what to believe or do</i>	Ennis, 1985, p. 45
<i>skilful, responsible thinking that facilitates good judgement because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context</i>	Lipman, 1988, p. 39
<i>purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgement is based</i>	Facione, 1990, p. 3
<i>disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought</i>	Paul, 1992, p. 9
<i>thinking that is goal-directed and purposeful, thinking aimed at forming a judgement, where the thinking itself meets standards of adequacy and accuracy</i>	Bailin et al., 1999b, p. 287
<i>judging in a reflective way what to do or what to believe</i>	Facione, 2000, p. 61
<i>willing to both suspend judgement and to consider other perspectives</i>	Facione, 1990, p. 13
<i>the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts</i>	Sternberg, 1986, p. 3
<i>the use of those cognitive skills or strategies that increase the probability of a desirable outcome</i>	Halpern, 1998, p. 450
<i>seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth</i>	Willingham, 2007, p. 8
<i>analysing arguments, claims, or evidence</i>	Ennis, 1985; Facione, 1990; Halpern 1998; Paul, 1992
<i>making inferences using inductive or deductive reasoning</i>	Ennis, 1985; Facione, 1990; Paul, 1992; Willingham, 2007
<i>judging or evaluating</i>	Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Tindal and Nolet, 1995
<i>making decisions or solving problems</i>	Ennis, 1985; Halpern, 1998; Willingham, 2007

It can be seen from the comments made in the literature (as presented in Table 8) that the other "thinking skills" mentioned by DETWA can be partly subsumed in favour of the criterion "strong Critical Thinking skills" and it could be considered to be the case that "strong Critical Thinking skills" alone are indicative of

giftedness which is a viewpoint shared by a number of researchers such as Silverman (1993), Clarke (2002) and possibly Renzulli, as will be seen in the conclusion. The following comparisons are made, however, in order to explore findings related to the second research sub-question.

For example, in the DETWA (1996) checklist:

Item 2: *Shows insight and reflects on cause–effect relationships* and item 15: *Is a keen and alert observer, notes detail and is quick to see similarities and differences*, are similar to: "seeing both sides of an issue" (Willingham, 2007); The American Philosophical Association's (APA) description of someone who is "inquisitive in nature", "open-minded", "flexible", "fair-minded", with "a desire to be well-informed", and who "understands diverse viewpoints"; and Facione's (1990) description of someone who is "willing to both suspend judgement and to consider other perspectives".

Item 22: *Can ask unusual (even awkward) questions or make unusual contributions to class discussions* and item 23: *Asks many provocative, searching questions which tend to be unlike those asked by other students of the same age* is similar to "asking and answering questions for clarification" (Ennis, 1985) as it is difficult to know how terms such as "unusual" and "unlike those asked by other students of the same age" can be established.

Item 24: *Has exceptional curiosity and frequently wants to know the reasons why* is similar to the previous two items but is also similar to the items previously listed by the APA as indicators of critical thinkers.

These comparisons leave the following additional "indicators of giftedness" according to DETWA:

8 Constructs and handles high levels of abstraction

6 Has surprising perception and deep insight

25 Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas

I will now go on to consider the case studies in relation to these frameworks and the research question of this study. The context of the following quotations can be found in the case studies described in Chapter Seven.

8.2 Answers to the first Research Sub-Question

The first research sub-question is:

How do teachers perceive their own development of skills to teach Philosophy/Critical Thinking in a mainstream classroom?

In this section, comments from each teacher will be discussed in relation to their own perceptions of the development of skills to teach the philosophy course.

8.2.1 Alan

Alan made the comment, "It was interesting teaching a unit that was based on ideas rather than texts. I think this will provide me with a lot of scope in the future especially with lower ability classes. The idea of using texts rather than teaching texts was a revelation for me." Clearly this shows that Alan believed he had gained professional benefit from teaching the course; however, it is debatable whether the improvement in his knowledge can be considered a "skill" as required by the question. He develops this theme however when he says: "I would definitely run the course again as, from my perspective, this was something that really worked for me in getting students to think."

He then went on to say, "Some of the questioning techniques I've learnt from the course have helped me to refine the way I ask questions ... Sometimes a student will give a good answer but I've realised it's not really a good answer unless they've thought about it. It might be true or it might make sense but the Socratic questioning component really helped me to think about how I might push kids to explain their answers and really think about the answer they've given; to test it further than they do when they just stick up their hands. I now encourage them to use a lot more why questions and do a lot more probing of where the ideas are coming from rather than just accepting them. We've had some really deep discussions as a result of this."

The reference to Socratic Questioning reinforces the notion that, not only has Alan gained an improvement in skills he considers to be worthwhile, but this improvement is linked directly to the Philosophy component of the course. His description of the how students are now engaging in "deep" discussion by asking "a lot more why questions", and "probing" for the origins of ideas reflects McPeck's (1981, p. 8) description of critical thinking as, "The propensity and skill to engage in an activity with reflective scepticism." It is reasonable to believe also that "deep discussions" would require, "interpretation, analysis, evaluation, and inference" which are among the criteria described by Facione, (1990, p. 3) as indicative of CT.

He further explains other benefits of his experience as a participant: "Logic is only one way to argue a point of view; there are different ways of understanding an argument and logic cuts out personal experience and relies on the knowledge on hand. I came to the course with some postmodern doubt and my experience during term three reinforced this", which demonstrates a development in his own skills in CT. For example, Ennis (1985, p. 45) says that CT involves "reflective and reasonable thinking that is focused on deciding what to believe or do" and this is a way of explaining how Alan is applying CT to the matter he is considering.

The literature shows that a crucial element to teaching CT is teacher modelling and a wealth of research suggests that teachers are not able to model critical thinking sufficiently by incorporating it into their daily practice (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001). It is reasonable to conclude that Alan will be capable of modelling CT and therefore has developed the skills to do this. As he did not claim these skills prior to engaging in the course, it is also reasonable to conclude that these skills were developed by his experience of the course.

He reinforces this notion when he says, "I will definitely be less prescriptive than I may have been in the past, not so much in terms of the activities we may do, but in terms of what I want the kids to get out of it. I have realised that what I may want my students to get from a text, may not be what they see as important and I have realised that I want to grow people who can think for themselves. I'm likely to have more skills now to achieve this as well."

Alan appears to be describing his move towards a collaborative or cooperative teaching approach which is advocated by some as essential to teaching CT (Abrami et al., 2008; Bailin et al., 1991; Bonk & Smith, 1998; Heyman, 2008; Nelson, 1994; Paul, 1992; Thayer-Bacon, 2000). This notion is reinforced when he goes on to say, "I will make sure that students are responding for themselves. I think teachers often focus on making sure students know the right things to say in exams; so they can tailor their answers so they will fit into their previous knowledge and hit all these checklists. I feel I want to educate students on how they can get issues out of texts but I don't want to tell them what to say as I think that's possibly dangerous and also it's not much help."

It is clear that Alan is now describing a change in pedagogic outlook which owes much to Constructivism. He confirms this when he says: "I did find I was teaching differently, perhaps putting less effort into reaching pre-determined outcomes or goals and moving towards letting the class move the lesson in the directions they were interested in. I found that I've been less of a teacher and more of a facilitator; more of a person who pokes and prods rather than one who rams stuff down students' throats. In using the group discussion model for the first time, I now feel motivated to reflect on how we might set that up better in the future."

In what is almost a direct description of a Constructivist approach he says, "I guess students were involved in building on each other's knowledge. "

Von Glasersfeld describes Constructivism as "a theory of knowledge with roots in Philosophy, psychology, and cybernetics" (1989, p.162) a view that is consistent with Dewey's (1915; 1938/1963; 1987) notion of the active learner as well as that represented in Vygotsky's (1978/1930) writings. The basic premise of Constructivism that is communicated clearly in Alan's description of his pedagogic change is that "knowledge" is first constructed in a social context and is then taken up by individuals (Bruning et al., 1999; M. Cole, 1991; Eggen & Kauchak, 2004).

Any doubt I may have had about Alan's development of skills as a result of his participation in my study was removed when I received the following email (Pers. Communic., 2nd December 2013):

Hi Steven

In writing our second semester reports, Dorothy [the other participant from this school] and I have noticed improved engagement and understanding in the majority of our students. We figure this has a lot to do with the CT course as we noticed more students taking their ideas further and attempting to justify them in their exams. So, we have decided this year's Year 9s will benefit from doing the course in Term 1 of Year 10 next year.

Thanks again

Alan and Dorothy

8.2.2 Paul

In our interview after the study was completed, Paul said: "I'm more interested now in language as frameworks for discourse. I've realised I've been vague in explaining things in the past and the terms I've taught them have been quite literal tools related to genre and I've attached ideas to those whereas it should be the other way round. They can talk about quite simple codes and realise that, when things become codes, after repetition they become conventions. I see that they haven't understood that this is when they become value laden and subject to overarching ideologies. You can then ask: What embodied this value? I will find greater clarity in presenting these ideas in the future." It is clear that Paul developed his understanding as a result of participating in the study and, in describing how this will impact on his teaching behaviour, also describes an improvement in his skills analogous to the description of CT in Ennis (1985, p. 45) namely, "reflective and reasonable thinking that is focused on deciding what to believe or do". The realisation that Paul refers to about "frameworks for discourse etc" is obviously due to reflection and his comment regarding finding "greater clarity in presenting these ideas in the future" demonstrates that his reflections have led to a decision on what to do. As he attributes this realisation to his participation in the course, he has obviously developed a skill that allows him to present Philosophy/CT more effectively which, as has been previously shown, is central to teaching these skills to his students (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001).

In saying, "We had [he and a colleague] quite a specific, animated conversation about Gifted and Talented students and then I mentioned the following week that I thought the way to get gifted students engaged was through Philosophy, having had a lot of success. He agreed and got quite passionate about it! He came back a couple of weeks after that and the conversations have all been about how we can use the ideas in your course to get students to engage and improve the outcomes at our school. He has been an advocate for Philosophy ever since!" Paul is quite explicit about his attitudinal change and the way this will change his teaching behaviour. He clearly feels enthusiastic about his experience as a participant in the study and is making connections between "Philosophy" and improved outcomes in the school that were not made explicit during the study.

The fact he reports that the school is considering using the idea in the course, he implies that he has had an improvement of confidence in his ability to teach the course.

When I attempted to find specific changes that may have taken place in Paul's classroom practice, he said: "I have always focused on ideas as I like focusing on values, attitudes and beliefs but I use a genre-based de-constructive approach and I see they haven't really seen how values, attitudes and beliefs are related to ideologies whereas, I now see through your course that, if you start the other way round which is, you say all relationships are about this ideological dialogue, that will lead naturally to analysis at a later stage."

He also said: "I allowed far more talking to occur than I normally would. I stuck with questioning longer than I normally would", before going on to say, "I had a conversation about Plato's cave and I was able to say well ... they understood the notion that our actions are happening within the cave and within what we can see and they liked the idea you can bring consciousness to that ... and I said, "What happens when you step outside the cave — is there a cave?" As Plato's cave was not a concept that was presented in the course, this demonstrates that Paul is now seeing how Philosophy can be embedded into a program in English and he is extrapolating the content to suit the interests of his students and himself. As an extremely experienced Head of an English Department, this change certainly points to a development in skills and a change in pedagogy. It is claimed that Lipman's "community of enquiry" (Lipman 1981, 1991, 2003; Lipman and Sharp, 1978; Lipman, Sharp, & Oscanyon, 1980) model which was embedded in the course, encourages interaction and respect for the contributions of others. Lipman claims this approach to have a powerful effect on the development of CT skills when appropriate content (philosophy) is delivered (1988, p. 43). Others such as Bailin et al. (1999) support this notion, arguing that CT involves the ability to respond constructively to others during group discussion and Thayer-Bacon's (2000) paper is an example of research suggesting the importance of collaborative learning such as that Paul has described now takes place in his classroom.

When I asked him if his confidence to teach a course in Philosophy/CT had grown he replied reflectively: "I feel less confident in doing this as I realise the holes ... this is a good thing ... I didn't need to know about Philosophy in order to do the course" which suggested that the design of the course had served its purpose; however, he went on: "But this gave rise to a conversation with the other teacher in which we agreed we would go and do a post-graduate degree in Philosophy and then we'd have more background. Like most courses, the more you know, the more depth and breadth you can speak about it." He went on to clarify this comment further by saying: "This course has led to discussions about introducing Philosophy as an upper-school course and motivated myself and a colleague to doing Philosophy as a post-grad degree at Murdoch and then coming back and integrating Arts and Philosophy. The other teacher is doing a post-grad course in gifted and talented and, after I'd read the book you gave me (*Rescuing Bright Kids*, Martin & Merrotsy, 2013) he and I started talking and there was a bit of synchronicity in that I then felt confident to join in the conversation. He ended up thinking I knew what I was talking about and was quite smart and he was studying smart people at the time." Although this comment cannot be construed as part of a positive answer to this part of the research question which asks about "skills", clearly Paul had been inspired by the course, had seen its potential and decided to act. Presumably his positive reaction was based at least in part on his success in teaching the course. I find it hard to be disappointed in this result.

8.2.3 Marlene

Marlene's answer to this question was summed up when she said: "What I will take away from this course is the idea that the ideas that you want to teach should be embedded more consciously. I think I do it unconsciously but I'll look at — OK we're going to look at autobiography so what Philosophy will we look at it from. Philosophy is an area I'll keep pursuing."

Marlene was intent on providing her students with study material she described as "concrete" namely, "Values are important but it's important for the students to see something concrete they can value as well" and "We took time out to create a poster about the school motto and then I used that".

As a result, it was unlikely she would find the ideas presented in the course concrete enough to satisfy this belief. She did indicate, however, that the ideas that stem from or are embedded in her concrete examples were important, as can be seen from her statement regarding "values".

Unfortunately, she offered no evidence to support her claim that "values are important" and it is clear that she did not facilitate the engagement of her students in philosophical or critical thinking. In fact, in relation to the course, she said: "It was challenging and difficult because I'm not used to working to someone else's program" suggesting that her evaluation of the course owed more to the practical aspects of content planning than the content of the course. As has been stated, her neo-Skinnerian approach to discipline

(Skinner, 1974) suggests a pedagogical approach that is not conducive to teaching Philosophy/critical thinking as it is intensely teacher-centred: "Most of my energy is taken up *training them* to behave" (emphasis added) Marlene says. This at odds with the conclusions Abrami et al. (2008) derived from their meta-analysis which indicated that collaborative learning approaches are important to the development of CT. Although Nelson (1994) points out that CT and collaborative learning are best achieved through a scaffolding process, whether or not Marlene's use of a "poster about the school motto " could be construed as the "scaffolding process" mentioned, it did not lead to collaborative discussions of CT in Marlene's classroom.

In short, although Marlene did claim that her experience with the course enhanced her own "development of skills to teach Philosophy/CT in a mainstream classroom", the misunderstanding of the terms "philosophy" and "critical thinking" reflected in her case study necessarily negate her observations as a positive outcome of this study.

8.2.4 Dorothy

Dorothy was positive about her experience as a participant in this study. For example, she said: "I had never thought about doing it before [teaching Philosophy/CT in subject English] but I'm glad I did and I certainly will be doing something along these lines in courses in the future." This comment suggests a similar attitudinal change to that noted earlier in relation to other participants. Although an attitudinal change was not part of the research question, Dorothy related it to a change in behaviour ("I certainly will be doing something along these lines in courses in the future") which must imply a perceived development in skills in someone who has not taught Philosophy in subject English before and possibly an example of the description many writers give as indicative of CT namely, "making decisions or solving problems" (Ennis, 1985; Halpern, 1998; Willingham, 2007). The decision being: to do "something along these lines...in the future," which is in response to solving the problem of how to use Philosophy to encourage good outcomes for her students.

She developed this idea when she said: "I used the Risk-Free Critical Reflective Discussion approach and established the rules early on. I said, 'You might not agree with someone else's opinion, but they're entitled to have it; you don't have to agree with it but you need to give them the respect to have that opinion.' I think I'm now more equipped to take this approach to teaching." This feedback shows a move towards collaborative learning, an approach noted as essential to teaching CT by some writers (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001). Dorothy makes it clear that her skills have improved, or perhaps developed, by her experience of the course.

She explains how the interest of her students dictated the progress of the lessons in this new collaborative approach: "The Values and Ethics section of the course was given more time as the class was interested. We talked so much about the three scenarios in the course, we only got to go to the three but some good discussion came out of that." Pedagogies that, are student rather than teacher-centred and rely on constructivist learning (Bonk & Smith, 1998), a position also supported by Paul (1992) are noted as desirable in teaching CT and Dorothy's classroom now seems to accommodate this approach according to her description suggesting further development of Dorothy's skills.

Finally, she illustrates her development of skills when she says: "There were things that weren't exactly new but things I wouldn't have thought about putting into a Year Ten class before. To get them thinking about ideas was good because we got some good discussion coming out of it. And then, getting them to define words like "knowledge", "values" and "attitudes"; because we teach them about values and attitudes but, actually getting them to think about things like 'is the world flat?' and to question where their knowledge comes from was an interesting concept. For example, I wouldn't have thought about using the ethical dilemma situations before." "The propensity and skill to engage in an activity with reflective scepticism" required by considering the issues raised by Dorothy characterises CT according to McPeck, (1981, p. 8) as does the willingness "to both suspend judgement and to consider other perspectives" which must be necessary to discuss the proposition that the Earth is flat etc according to Facione (1990, p.13). There can be little doubt that Dorothy's description of the activities in her classroom during this study indicate a move towards CT on both the part of the teacher and the students.

Dorothy confirmed her perceptions of the study when she included herself as a signatory to the email informing me that the CT course would be offered next year to a new cohort of students (quoted above under the section on Alan).

8.3 Home Schoolers

It was of interest to me to investigate whether the course and associated support materials could be given to anyone who wished to teach and produce outcomes similar to those produced by trained teachers of subject English. The results for part one of the research question are reported in the next few pages, and the results of part two are reported on page 287. In order to view the context of these reports, please refer to the relevant case studies.

8.3.1 Kathy

Kathy's perception of her own development of skills to teach Philosophy/CT thinking in a mainstream classroom is summed up when she says: "I think it's changed the way I think a little bit ... I have been questioning things ... in my mind." Although a number of writers describe "judging or evaluating" as

indicative of CT (Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Tindal and Nolet, 1995) it is difficult to establish to what extent Kathy has developed this tendency. Whether this slight change will cause Kathy to model critical thinking in a way that will facilitate Albert's acquisition of it is difficult to tell. She did add, however: "I find I listen more carefully to things now even though I don't tend to verbalise." It is reasonable to believe that, if Kathy has changed her way of thinking, little of value will occur as she teaches Albert if she does not demonstrate this change through speech, as Albert could well remain ignorant of it.

8.3.2 Heather

Heather's statement, "I found it [the course] really challenged many of my views as well as the reasons I do certain things" and the example she gave to demonstrate the way her views were challenged, together suggest that she acquired the ability to think critically by presenting the course to her daughter: "During the last couple of weeks I've been questioning many things; for example, in the media coverage given to the recent election, as a direct result of engaging in the course I started asking myself, 'What exactly are they saying and why do we just go along with the things they say without probing deeper?' I would hope that I will go on thinking that way as I know there are some everyday things that we just do because it's easy but I would like to think that I will continue to question things." Critical thinking has been defined by some as "analysing arguments, claims, or evidence" (Ennis, 1985; Facione, 1990; Halpern, 1998; Paul, 1992) and "judging or evaluating" (Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Tindal & Nolet, 1995). These are exactly the skills being described by Heather. When she goes on to say, "I don't think I think critically enough with this and other areas of life. I feel it will come more naturally to me as I rehearse it", it is easy to see she is being reflective and, in fact, is demonstrating CT skills through this insight.

This claim is further reinforced when she says, "I now believe I could analyse more carefully" and "I used my new skills to get the school to write a report addressing the problems I had researched", which demonstrates both the disposition to engage in CT (Facione, 1990) and also describes thinking that meets the definition given by Ennis as "Thinking that is reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p. 45).

In relation to the research question, however, it must be asked whether developing the skills to engage in CT, when those skills were not present before, can be considered "development of skills to teach CT". As has already been stated, the literature shows that the skills for a teacher to both engage in CT and to model their engagement are crucial to teaching it (Choy & Cheah, 2009; Rudd, 2007; Black, 2005; Vaske, 2001), suggesting that the skills to engage in CT can be considered skills to teach it. The fact that Heather did acquire these skills is further reinforced when she says: "I think that CT helped me deal with people [in authority] and I would have been more successful earlier on if I'd had earlier exposure to it as I would have asked more 'why' questions and sought better explanations instead of saying, "They're the specialist and

they ought to know' and taking it at face value." Considering, for example, Ennis's definition as "thinking that is reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p.45), it is easy to see that Heather perceives that she has acquired these skills, a perception that is confirmed by definition.

The fact that Heather describes experiences of using what she describes as "her new skills" that are far removed from the Philosophical problems embedded in the English course that taught her these new skills, also seems to address the "transfer problem" (McPeck, 1990) although more discussion of issues such as this will ensue in chapter eight.

In relation to home schoolers, however, it is worth considering Heather's suggestion: "I think that home schoolers in particular, could benefit from some kind of support. What I mean is, training or something like that, maybe a mentor. I found some of the wording difficult at the beginning until I got to lesson three when I thought, 'yes, I get this now'."

The preceding discussion has addressed the first research sub-question of how teachers perceive their own development of skills to teach Philosophy/CT in a mainstream classroom. The following section presents teachers' comments in relation to the second research sub-question.

8.4 Answers to the second Research Sub-Question

The second research sub-question is:

How do teachers perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

In this section, comments from each teacher will be discussed in relation to their perceptions of the development of critical thinking skills in their students.

8.4.1 Alan

Alan suggested, from a number of comments he made during our post-study interview that certain thinking behaviours emerged in his students. For example: "There are a number of students in this class who are really reserved but there are quite a few kids who started saying things I didn't expect."

Of course, "saying things" he "didn't expect" does not necessarily entail thinking skills; however, he clarified this comment and related it to thinking behaviours: "It's not that I thought they weren't very deep or anything, it's just that I didn't know how they thought previously so I could see new things. The way they critiqued things they were interested in, for example, war games or violent videos. They were able to identify what the underpinning stories were and where those stories were coming from and whose idea they supported." The insight demonstrated by being able to identify *underpinning* stories and then consider power relationships, which is implied by recognising "whose idea they supported", is evidence that this thinking conforms to Bailin's notion (2002) of "the act of critical thinking" is "engaging in thinking of a particular quality — essentially good thinking... (p. 363) focusing on the adherence to criteria and standards that meets specified criteria or standards of adequacy and accuracy" (p. 368). The components of adequacy and accuracy can be found when the behaviour described is evaluated in relation to definitions of critical literacy, for example:

analysing and critiquing relationships, social issues and power relationships reflect Freirean critical literacy, Australian critical literacy places additional focus on teaching students to understand *how* language works, and how hidden agendas and layers of meaning are constructed (Luke, 2000 as cited in Bannister-Tyrrell, 2013, p. 44).

The definitions of "critical literacy" make it clear that these students had engaged in it without, perhaps, realising that is what they were doing. Demonstrating Critical Literacy necessarily entails thinking critically therefore the thinking behaviours described by Alan at least conform to the items listed on the DETWA checklist as indicators of giftedness namely, 14 Has surprising perception and deep insight and 10 Has strong critical thinking skills. Arguably, they also conform to Facione's (1990, p. 3) definition of critical thinking namely, "purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgement is based" providing further evidence of this being an example of CT. The conclusions drawn about "whose idea they supported" further reflect the ability to "identify assumptions", which Ennis (1985) and Paul (1992) also define as being indicative of critical thinking.

Further evidence of the occurrence of these kinds of "thinking behaviours" can be found in Alan's anecdote of an incident that occurred during the study:

I had feedback from a colleague who is a sports teacher, about a letter written to him from one of my students which dealt with some of the assumptions he had made in choosing to run an A and a B sports team this year. The student said that some of the ideas embedded in that decision that weren't overtly expressed. The student had obviously reflected deeply on that issue and used his new skills to critique his own interest in the subject and I found that interesting.

Alan had related this incident in response to a question I had asked: "Have you seen any behaviours that you could consider consistent with 'giftedness' emerge in students who hadn't shown those kinds of things

before?" Alan's response demonstrates that his perception of the "thinking skills" demonstrated by this student indicate giftedness. It can be seen that these thinking skills are also represented by many of the items on the DETWA checklist and also conform to the descriptions previously given of CT.

Alan confirms this claim in regard to other students when he says:

I suspected that some of my students were gifted but not these ... one or two who have suddenly come out of nowhere...One student, for example, had not handed in a lot of assignments throughout the year for lots of reasons so I hadn't had a real opportunity to see where she's at. But, when some of these topics came up such as the way your values, attitudes and beliefs would be formed if you had grown up focusing on one kind of text found in popular culture, she was quite vocal in a way that showed me she had thought about these issues at a really intellectual level.

Although thinking at a "really intellectual level" is a fairly broad description of the behaviour of the student he gives as an example and therefore it does not conform specifically to the items on the DETWA checklist, clearly it is implied by the descriptions of behaviours that are present on the checklist for example, 2 Shows insight and reflects on cause-effect relationships and 11 Has surprising perception and deep insight.

Most importantly in relation to the research question, Alan perceives this student's development of thinking skills as desirable, considers them to be indicative of giftedness and also attributes their emergence to the course used in the study.

He goes on to confirm these broad conclusions when he gives another example of insight: "Another one was one of those kids who was looking at video games and he said something that caused me to say, 'Can you repeat that so we can bask in the glory of that comment?' because it was at such a different level of anything he'd ever contributed before." It is reasonable to conclude that the difference in "level" was one of intellect which may conform to the indicators referred to above.

Finally, in conclusion, he says: "There was another student who'd recently come from another country so her English skills were quite limited but she showed that she has a strong understanding of the concepts in the course now, even though she may still not be able to put them down in writing. These are just a few examples of the good things that happened in my classroom during the term."

It is clear that the "good things" he describes consist of the emergence of thinking skills in students who had not previously demonstrated them and it is worth repeating his original confirmatory remark: "I would

definitely run the course again as, from my perspective, this was something that really worked for me in getting students to think."

8.4.2 Paul

Paul sets the scene and any possible expectations he might believe me to have when he describes his class as "low ability, below state standards, with a handful of behaviour problems and many regular truants." He says, "Attendance for a class of thirty is usually eighteen to twenty two" although he smiles wryly when he says, "Unfortunately, hardly ever the same twenty two!" The implication is that it may be difficult to evaluate the results of my study in his class as not many of the students would be present for the entire course.

He seems surprised post-study however when he reports:

although five or six boys in particular said, "This is hard but this is good." They became very excited about the work. You remember, I sent you an email about these boys. They enjoyed being pushed even though a few had some mental moments where the questions freaked them out ... At least four or five of the students I mentioned show a lot of the traits that are indicators of giftedness including being able to engage in critical thinking.

The conclusions formed by Paul that are embedded in his comment are that, as a DETWA employee, he is familiar with the DETWA checklist and he has identified a number of students in a "mainstream classroom" he had previously thought to be "low ability" as showing indicators of "giftedness". Although he does not clarify which of the indicator he is referring to beyond mentioning "Critical Thinking", it would appear that the checklist served the purpose for which it was published by DETWA in regards to informing Paul's judgement.

The email he referred to, which I received on the 7th August 2013, included the following:

students fully engaged with the questions. I don't know what/how you went about scaffolding them but the class was fully engaged and very interested in discussing cultural values and stereotypes to a level I have never had before; On the surface they look quite superficial but they encapsulate quite a range of more abstract concepts in a way that enabled students to articulate them.

Item 8 on the DETWA checklist is: constructs and handles high levels of abstraction. Although Paul is not claiming that his students "constructed high levels of abstraction", he is claiming they "handled" such levels through articulation.

Paul goes on to describe one student "who is a truant and seldom ever engaged, thoroughly enjoyed the course and attended regularly. As he engaged in the work, understood and completed it, he mentored

other students which was a new experience for him. He reported he had been tested as part of this course and said, 'My weakness is not thinking it's organisation'. As has been stated previously, the course with which this student engaged, is in Philosophy/CT. Although the student's comment about his own thinking cannot be taken as an accurate answer to this part of the research question, in confirming that the student, "engaged in the work, understood and completed it..." Paul is implying the emergence of skills in Philosophy/CT which are necessary to achieve what Paul has described. The skills needed to achieve in this way are embedded in the DETWA checklist of indicators of giftedness.

Paul goes on to say:

Out of the core group, there were about five students who were switched on to the course and really motivated, and one who performed exceptionally well. I had a conversation about Plato's cave and I was able to say well...they understood the notion that our actions are happening within the cave and within what we can see and they liked the idea you can bring consciousness to that ... and I said, "What happens when you step outside the cave — is there a cave?"

It is necessary to speculate on the skills necessary to "understand the notion that our actions are happening within the cave" as Paul did not specify. Surely however it is reasonable to think that at least one of these skills is "the propensity and skill to engage in an activity with reflective scepticism" which McPeck, (1981, p. 8) has described as being indicative of CT. This situation also demonstrates the ability to handle a high level of abstraction (Item 8) which the DETWA checklist lists as an indicator of giftedness.

8.4.3 Marlene

As has previously been shown, Marlene's participation in this study was problematic at a number of levels. It is interesting to note that, even if this were the case, Marlene still perceived a development of thinking skills in her students that she considered desirable although, given her perspectives on education, was unlikely to consider as possible indicators of academic giftedness.

For example, she said: "I would say I was more surprised by a couple of students who I didn't expect to be creative were much more creative. It made me step out of my comfort zone and create an environment where they showed this. There was a boy who came in who didn't come in very often who was able to answer the questions very clearly but, by the time he came to write it down he had forgotten what he just said. He seemed to develop very good insight..." Item 14 on the DETWA checklist is: Has surprising perception and deep insight, and item 25 is: Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas.

Marlene goes on to say: "I was surprised that one group who were the annoying talkers 'got' the goldfish and the ones who are very industrious didn't, so that was very interesting for me."

If contextualising comments about the "annoying talkers" are taken from Marlene's case study, there are other possible explanations for Marlene's observations. For example, she tells us: her students are "highly entertaining in a behavioural sense," and describes them as "playful Labradors" (p. 219) and that "a couple of boys were very disruptive...and once we had a discussion it was totally undermined and it was very frustrating."

She does explain the nature of the disruption from these boys however when she says, "As soon as you tried to get somewhere, you had the jokes going" (p. 224). If it is borne in mind that she had previously expressed a belief "that there is a correlation between ability level and behaviour and provides this as a reason she has many "behaviour issues" (p. 219)

It could be reasonable to believe that the reason she finds the "talkers" "annoying" is that they conform to item 25 on the DETWA checklist: Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas. Further evidence of this can be found in the fact that they "got the goldfish". The goldfish Marlene is referring to was an analogy constructed in the course that suggested that the culture in which we live is invisible and hems cultural participants in like a goldfish is hemmed in by a transparent bowl. The culture is rendered transparent or invisible owing to its apparent naturalness and the shared values, attitudes and beliefs that are at its basis and that determine the thoughts and behaviours of its participants. It is not difficult to see that to understand and comprehend this complex construction requires many skills that have been described as CT; for example, "purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgement is based", as described by Facione (1990, p. 3). In order to understand the goldfish analogy, the students described would need to engage in CT though this is not acknowledged by Marlene. It is interesting to note also that these behaviours emerged as a result of delivering *parts* of the course rather than the course in its entirety.

8.4.4 Dorothy

Dorothy describes similar perceptions to those of other participants when she says: "We all found the section on epistemology interesting; we had some lengthy discussions about knowledge and one of the least engaged students became engaged. We started talking about the question 'what is knowledge?' and that was really good and got them thinking." It is recorded in Alan's case study that he said, "From my perspective, this was something that really worked for me in getting students to think", and the reasons this has been interpreted to mean *critically think* have already been explored. Getting students thinking was an implied outcome of this study but it is the quality of the thought that is investigated by the research question. It is reasonable however to believe that the thinking skills required to engage in a conversation

about the complex philosophical issue "epistemology" would be critical even though Dorothy does not specifically confirm this.

Dorothy goes on:

It was quite a surprise to me that this particular student responded the way he did as he offered the best response to that question I've heard. He defined knowledge as "the understanding of a concept". He had always been disengaged before this but he has been engaged in the course ever since.

Ennis (1985) describes "defining terms" as an indicator of CT.

In response to the question: "Were there any other students who surprised you apart from the one you have already mentioned?" Dorothy responded: "Yes there were several. There was one student who, rather than having a major light bulb go on, contributed a lot over the whole term. And then there were other students who contributed a little bit every now and then and then also had their own 'light bulb' moments as well. There were quite a lot of really good responses to a lot of things in the course. Many of these students showed that they had the ability to think in ways I hadn't seen before when given the opportunity ... We all wrestled with awkward questions."

The opportunities accorded to students to think provided by the course were opportunities to think critically. Although Dorothy does not specify that students demonstrated the ability to think critically in our post-study interview she had said in the earlier interview that a way of identifying gifted students is that they ask "awkward questions". This comment is supported by item 22 on the DETWA checklist: Can ask unusual (even awkward) questions or make unusual contributions to class discussions.

In explaining how the students in her classroom engaged with the course, it is reasonable to conclude that they engaged in CT which led to the "awkward questions" she had previously described as indicative of giftedness. If they engaged in critical thinking and asked awkward questions, according to the DETWA checklist, there are indicators present suggesting giftedness. While this view is implied by Dorothy's case study rather than confirmed by it, support may be found for this view in the email I received at the end of the study and which is repeated below:

Hi Steven

In writing our second semester reports, Dorothy [the other participant from this school] and I have noticed improved engagement and understanding in the majority of our students. We figure this has a lot to do with the CT course as we noticed more students taking their ideas further and attempting to justify them in their exams. So, we have decided this year's Year 9s will benefit from doing the course in Term 1 of Year 10 next year.

Thanks again

Alan and Dorothy

"Taking ideas further" and "justifying" in relation to CT can be seen as "interpreting and explaining", which is an indicator of CT according to Facione (1990). Dorothy and Alan attribute this "improvement" to the CT course used in the study.

8.5 Home Schoolers

8.5.1 Kathy

Kathy indicated that Albert (her son and student) had developed skills in CT when she said: "Albert is questioning a whole lot of things at the moment as a result of studying the course. Ennis (1985) indicates that "asking and answering questions for clarification" is a skill involved in CT.

She goes on to say: "it's certainly changed the way Albert thinks, like, he corrects the logic of things that you say all the time", which can be seen as evidence of "reasoning verbally, especially in relation to concepts of likelihood and uncertainty" (Halpern, 1998).

Kathy explains: "He's much more accurate in his expression now, and he certainly wasn't like that before. He questions language in a playful way..." Item 25 of DETWA's *Checklist of Learning and Behavioural Characteristics Common to the Gifted* says: Displays intellectual playfulness; is imaginative and is quick to see connections and manipulate ideas. Kathy further tells me: "He's no longer taking things at face value and that has got to be a good thing." Item 11 on the DETWA checklist states that the fact a student 'Has surprising perception and deep insight' is indicative of giftedness.

Albert has clearly developed critical thinking skills as a result of studying the course and, according to the DETWA checklist, is demonstrating a number of indicators of giftedness. The context of Albert's acquisition of these skills as described in Kathy's case study (p. 241) lend support to the course because he was able to demonstrate and develop CT skills in spite of his schooling circumstances.

8.5.2 Heather

Chastity, another student who is being home schooled, is also now showing signs of giftedness according to the DETWA checklist. For example, Heather explained: "She's been much more questioning even about quite personal things like, 'why am I so shy?' ... even more to the point, about Maths. Like, 'why do we have to do this? What's its application and how is it benefiting me? Who uses this and for what?' According to Ennis (1985), "asking and answering questions for clarification" is an indicator of CT. Heather says: "She didn't ask questions like that before, at least not that extent." The DETWA checklists says: Item 22: Can ask unusual (even awkward) questions or make unusual contributions to class discussions, and item 23 Asks many provocative, searching questions which tend to be unlike those asked by other students of the same age, are indicators of giftedness as is : Item 24 Has exceptional curiosity and frequently wants to know the reasons. Ennis further lists "reflective and reasonable thinking that is focused on deciding what to believe or do" (1985, p.45) as being indicative of CT.

According to Heather, Chastity "has been doing a commercially available program in which they get her to do certain things and then give her a mark ... she's realised that maybe that approach doesn't suit her as it doesn't require any CT. She's results driven but she's been questioning the validity of the results that come from this kind of study where you 'learn', read 'answer'. There's no research: you're given the work, you find answers in the work you've been given using the one text. There's no broadening of the answers or seeking different perspectives and she's been challenging that. I also think those things are important." Facione (1990) suggests that Chastity's "willingness to both suspend judgement and to consider other perspectives" demonstrates she is engaging in CT. Ennis (1985), Facione (1990), Halpern (1998), and Paul (1992) agree that her tendency to analyse "arguments, claims, or evidence" is further evidence of CT. Clearly, Kathy's perception is that thinking skills have emerged in Chastity during the course of her participation in the study, skills that are indicative of giftedness, a view that is also supported by the DETWA checklist.

8.6 Limitations, Findings and Conclusion

8.6.1 Limitations of the study

The findings and conclusions reported here have necessary limitations. Firstly, the number of participants in the study was small which makes it difficult to discuss the findings in a way that is generalisable across the population of teachers who teach English as a subject in high schools. This being said, the range of teaching experience of the participants was broad: from virtually none in the case of the home schoolers to many years in other cases (Paul, Marlene). The backgrounds of participants were also varied; for example, Paul holds a PhD, whereas Alan is a young teacher with a marked disposition for critical thinking (case

studies in Chapter Seven). The fact that there was a broad range within the small number of participants adds weight to the findings that would not have been present had the participants had similar backgrounds.

Another limitation of the research conceivably comes from another issue: it is obvious from the case studies that I formed relationships with some of the participants which, had I been using a different research methodology, could have had a significant impact on the findings in what has been described as "The Hawthorne Effect" (McCarney, Warner, Iliffe, van Haselen, Griffin & Fisher, 2007). For example, in Kathy's case study, she told me: "I do tend to worry about the things people think of me, that's just part of me. Albert is the same; he'll do his best just because he wants to please you."

If it hadn't been the case that Kathy's own perceptions were that she showed extremely limited development in her skills to both engage in CT and to teach it to Albert, I might have felt that her report about her concerns about the perceptions of others could have impacted negatively on her participation in the study. It was apparent that she was satisfied to report her limited achievement to me and this undermined any such problem as it suggested that she may have been reassured by my comments at the time or been incorrect in the assertion she was making about herself. The fact that she was reporting her perceptions of Albert's progress to me and that there was not a direct relationship between myself and Albert, also removed concerns about a "Hawthorne Effect" as a result of Albert's desire to please me as he was not present at the interview in which she reported this, nor did I assist in the delivery of the course.

In general, the autoethnographic methodology I used relies on reporting the feelings and perceptions of participants mitigated through my own "lens" as a participant in the culture that contextualises the participants and myself. This fact alone renders consideration of "The Hawthorne Effect" meaningless however it is relevant to note that the conclusion to a significant clinical study on "The Hawthorne Effect" conducted within a positivist paradigm and using a quantitative analysis of data (McCarney, Warner, Iliffe, van Haselen, Griffin & Fisher, 2007, p. 7) reported: "a small 'Hawthorne Effect' ". Even a "small Hawthorne Effect" has no relevance to a study conducted within the methodology I have described.

It is also noted that the students who were taught the course in Philosophy/CT were not participants in this study and their views of the value of the course were not sought. It is the case that teachers are asked on a daily basis to evaluate students and make judgements on their academic progress. It is intuitively true that often the views formed by teachers are in disagreement with the students who are the objects of such views. It is also intuitively true that the culture privileges the teachers' views therefore conceivably, seeking responses from the students would have merely served to cloud the issue.

These issues and others could raise concerns had the methodology used stemmed from what has been described by Ellis, Adams & Bochner (2011, p. 273) as "canonical ways of doing research and representing others".

In relation to generalizability, for example, according to Ellis, Adams & Bochner (2011, p. 283):

Generalisability is ... important to autoethnographers, though not in the traditional, social scientific meaning that stems from, and applies to, large random samples of respondents. In autoethnography, the focus of generalisability moves from respondents to readers, and is always being tested by readers as they determine if a story speaks to them about their experience or about the lives of others they know; it is determined by whether the (specific) autoethnographer is able to illuminate (general) unfamiliar cultural processes (Ellis & Bochner, 2000; Ellis & Ellingson, 2000 as cited in Ellis, Adams & Bochner, 2011, p. 283).

In relation to other possible issues I have alluded to, they then go on to say:

As part ethnography, autoethnography is dismissed for social scientific standards as being insufficiently rigorous, theoretical, and analytical, and too aesthetic, emotional, and therapeutic (Ellis, 2009; hooks, 1994; Keller, 1995 as cited in Ellis, Adams & Bochner, 2011, p. 283).

They go on to explain:

Even though some researchers still assume that research can be done from a neutral, impersonal, and objective stance (Atkinson, 1997; Buzard, 2003; Delamont, 2009 as cited in Ellis, Adams & Bochner, 2011, p. 274), most now recognize that such an assumption is not tenable (Bochner, 2002; Denzin & Lincoln, 2000; Rorty, 1982 as cited in Ellis, Adams & Bochner, 2011, p. 274). Consequently, autoethnography is one of the approaches that acknowledges and accommodates subjectivity, emotionality, and the researcher's influence on research, rather than hiding from these matters or assuming they don't exist.

I would argue that the findings as reported here are valid and capable of being repeated had these been significant concerns in the study. They were not. I have already devoted many words to justifying and explaining the research methodology that was used and would urge readers to read this chapter in light of what I have said before on this subject, particularly in Chapter Six.

8.6.2 Findings

The study investigated the research question: How do teachers of English describe the value of the course in Philosophy/CT in relation to its success in achieving its goals, specifically:

- (i) How do they perceive their own development of skills to teach Philosophy/CT in a mainstream classroom?
- (ii) How do they perceive their students' development of thinking skills that they consider desirable and possibly indicative of academic giftedness?

The answers to these questions were presented and discussed in the previous part of this chapter. They are listed again below as a means of reporting the findings of this study, as they apply to the teachers in the study:

1. The majority of teachers in this study concluded that the course supplied to them in Philosophy/CT together with the resources to deliver it was successful in achieving its goal of assisting them to teach Philosophy/CT in subject English to a class of students who have not been identified as academically gifted.
2. Some teachers perceived that their exposure to Philosophy/CT during the ten weeks this course was delivered to their class was enough to skill them to program and deliver their own courses in Philosophy/CT without further professional development although one participant experienced problems.
3. Teachers who resist a pedagogy derived from Constructivism and/or collaborative learning may have difficulty teaching a course in Philosophy/CT unless they change their pedagogic approach.
4. Unqualified teachers such as those who home school their children, need support at varying levels to teach Philosophy/CT.
5. Some teachers in the study concluded that a course in Philosophy/CT will cause the emergence of skills that can be considered "indicators of giftedness" to emerge in students in mainstream classes.

Examining the findings in relation to the research questions leads to the following conclusions.

8.6.3 Conclusions

Professional development of teachers to engage in Philosophy/CT can be facilitated by participation in the delivery of the English course which forms the instrument for this study providing they have:

- a. the "disposition" (Facione, 1990) to engage in Philosophy/CT

- b. the willingness to adopt the necessary collaborative pedagogical approach suggested by some writers, e.g., Abrami et al. (2008) which is an underpinning feature of Lipman's "Community of Enquiry" (Lipman 1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp & Oscanyon, 1980).

As the Australian Curriculum specifies the importance of critical thinking as has been noted earlier, it is recommended that all Australian teachers of English make it a priority to deliver a course similar to that used in this study in the interests of facilitating their achievement of their professional responsibilities and in the interests of their students.

In explanation of the necessity to teach Philosophy/CT in classrooms where subject English is taught, it is useful to again note Hattie's (2003) meta-analysis of studies of teacher quality which led him to define three categories of teacher, namely, novice, experienced and expert, and his description of the criteria by which he decided how individual teachers should be labelled. For example, in relation to "expert" teachers Hattie (2003, p. 9) says:

Expert teachers aim for more than achievement goals. They also aim to motivate their students to master rather than perform, they enhance students' self-concept and self-efficacy about learning, they set appropriate challenging tasks, and they aim for both **surface** and **deep** outcomes.
(emphasis added)

It can be seen that aiming to motivate students to perform any kind of behaviour of their own volition is counter to the approach some pedagogues might take in telling their students something they claim is an essential piece of knowledge, that students are then required to remember. In fact, although by no means directly parallel to Hattie's notion of "expert teacher" in every way, in many important respects it is arguable that teachers who produced the results in their students which are mentioned in the research question for this study would be likely to display many of the characteristics Hattie describes as defining "expert teachers". It can reasonably be believed that the outcomes demonstrated by students are prima facie evidence of the teaching approach that produced such outcomes as they require more than "surface learning". It can be similarly argued that teachers who are resistant to adopting pedagogies such as those both implied and directly described by Lipman (1981, 1991, 2003; Lipman & Sharp, 1978; Lipman, Sharp, & Oscanyon, 1980), are unlikely to demonstrate the characteristics Hattie describes as being indicative of "expert teachers".

When Hattie states that the most important factor in producing student outcomes is teacher quality (2003, p. 2) and that "expert teachers" have the largest impact of all (2003, p. 5), it is reasonable to conclude that the Social Constructivist model represented in the course and the very fact of teaching Philosophy/CT in a classroom, go some way to producing "expert teachers" even among teachers who may not have taken these approaches to content or pedagogy before. As this study did not deal directly with teacher quality, I

am not claiming that teaching this course in English will transform a teacher into an "expert teacher", however I feel it reasonable to claim that a teacher who embraces the pedagogical approach and the approach to content required to produce behaviours in students that could be described as indicators of "academic giftedness", such as those "deep outcomes" resulting from this course, either were "expert teachers" before they began or will become so if they persist in this approach.

It can be seen that "surface" learning is similar to the descriptions given in Bloom of "lower order" thinking and "deep" thinking similar to "higher order" or, as described by Ennis (1993), "critical thinking". A course designed to engender "critical thinking" therefore also facilitates teacher development of what Hattie has described as a central skill of "expert" teachers (2003, p. 5). While acknowledging that Hattie offers further descriptions of characteristics of "expert teachers" that go beyond the thinking they demonstrate and seek to engender in their students, it is easy to see that one of the qualities they exhibit is the ability to think critically when it is warranted by the context. In this way, Hattie provides support for the value of critical thinking as a component of high quality, "expert" teachers.

In relation to developing the skills of students in Philosophy/CT, it is indisputable that this is a desirable educational outcome. While the DETWA checklist referred to is of dubious validity due to its origins, which are explained on P. 23 there are clearly connections between the ability to apply skills in Philosophy/CT and academic giftedness. These connections are demonstrated convincingly by a study conducted by Trickey & Topping (2007) which showed that programs in CT can result in improved results on a test of cognitive abilities. It has been argued earlier that the construction "intelligence" is synonymous with the results on tests that seek to measure intelligence. Regardless of this, however, researchers such as Silverman (1993) and Clark (2002, pp. 436–437) for example, list the following "intellectual traits" as being indicative of giftedness: "exceptional reasoning ability", "complex thought processes", "analytical thinking", and "capacity for reflection". Renzulli (1978, 1979; Renzulli and Reis, 1997) states that "fluency, flexibility, and originality of thought" characterise the gifted, as well as "high levels of abstract thinking. When the skills described by these writers are considered together, they suggest a degree of agreement among researchers in the field about connections between certain kinds of thinking and giftedness. The conclusion that follows from this is that certain types of thinking behaviours; a particular quality of thought that can be gained by students from learning to engage in Philosophy/CT if they have a disposition to do so, can indicate giftedness. The radical conclusion to this study then is that teaching students to engage in Philosophy/CT will enable hidden giftedness to emerge and will perhaps cause giftedness to develop where it did not exist before.

The approach to professionally developing teachers and teaching students is certainly a convincing response to Borland's (2005) call for *Gifted Education Without Gifted Children: The Case for No Conception of Giftedness* and also a solution to the many problems identified in this thesis that ensue from

the construction of academic giftedness. A practical benefit to this is that the various organisations that spend large amounts of taxpayers' money testing young people and then funding special programs for them, can be released to perform duties that have more demonstrable educational outcomes.

The irresistible conclusion derived from this study, is that developing the skills of Secondary English teachers to deliver courses in Philosophy/CT will improve their quality and lead along the path to becoming "expert teachers" which is a goal that can be supported by the Education community as well as the community at large.

8.7 Recommendations for Future Research

Although more research needs to be conducted, the results of this study were encouraging in regard to establishing whether teaching Philosophy/CT in subject English resolved "The transfer Problem" (McPeck, 1990). As has been explained previously, high school students use the skills learned in subject English to engage in every subject in the academic curriculum therefore it is reasonable to believe that teaching critical thinking in English, will encourage students to see this as simply an additional skill. This question could form part of a future study as could the students' own perceptions of the value of engaging in a course in Philosophy/CT.

In addition to "The transfer problem" however, there is the issue of the length of exposure to Philosophy/CT. In the study conducted by Topping & Trickey (2007) students made gains that were measured quantitatively after being exposed to Philosophy/CT (which they reported as P4C) for an hour a week over sixteen months. It would be interesting to conduct further research that established:

- a. Whether students could make similar gains that is, an average of 6 standard points on a test of cognitive abilities, after having been exposed to Philosophy/CT in the way described in this study.
- b. Whether students exposed to Philosophy/CT in the way described by Topping & Trickey (2007) demonstrated the behaviours that have been listed as being indicative of giftedness (DETTWA, 1996; Silverman, 1993; Clarke, 2002).

Finally, it would be desirable to repeat this study with a much bigger sample size to establish whether similar outcomes are described. Although this study was conducted in the Western Australian context, it would be interesting to run a study across Australia which encompassed rural schools. It would also be of interest to conduct a study using more traditional research methods including quantitative analysis of data.

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Appendix 1: Information Sheet for Participants



School Contact Details
School of Education
University of New England
Armidale NSW 2351 Australia
Phone 02 6773 4221
Fax 02 6773 2445
education@une.edu.au

INFORMATION SHEET **for PARTICIPANTS**

I wish to invite you to participate in my research project, described below.

My name is Steven Martin and I am conducting this research as part of my PhD in the School of Education at the University of New England. My supervisors are Associate Professor Linley Cornish and Dr Ahmed Bawa Kuniya-Abubakar.

Research Project

Using a philosophy programme to explore indicators of giftedness in WA high school students.

Aim of the research

The research aims to explore whether an appropriately written book and supporting course documents can guide teachers to deliver classroom instruction that promotes the emergence of behaviours that point to "giftedness" in typical year nine or ten high school students.

Interview

I would like to conduct a face-to-face interview with you at your school. The interview will take approximately one hour. With your permission, I will make an audio recording of the interview to ensure that I accurately recall the information you provide. Following the interview, a transcript will be provided to you if you wish to see one.

Confidentiality

Any information or personal details gathered in the course of the study will remain confidential. No individual will be identified by name in any publication of the results. All names will be replaced by pseudonyms; this will ensure that you are not identifiable.

Participation is Voluntary

Please understand that your involvement in this study is voluntary and I respect your right to withdraw from the study at any time. You may discontinue the interview at any time without consequence and you do not need to provide any explanation if you decide not to participate or withdraw at any time.

Questions

The interview questions will not be of a sensitive nature: rather they are general, aiming to enable you to enhance my knowledge of the needs of teachers and students in teaching the philosophy-based programme I will provide to you, and your perceptions of the results of delivering such a programme to your class.

Use of information

I will use information from the interview as part of my doctoral thesis, which I expect to complete by September 2014. Information from the interview may also be used in journal articles and conference presentations before and after this date. At all times, I will safeguard your identity by presenting the information in way that will not allow you to be identified.

Upsetting issues

It is unlikely that this research will raise any personal or upsetting issues but if it does you may wish you may wish to access the Prime Psychology Counselling Service Tel. 9492 8900

Storage of information

I will keep hardcopy recordings and notes of the interview in a locked cabinet at the researcher's office at my home. Any electronic data will be kept on a password-protected computer in the same place. Only the research team will have access to the data. All data will be returned to the Principal researcher on the successful submission of the thesis

Disposal of information

All the data collected in this research will be kept for a minimum of five years after successful submission of my thesis, after which it will be disposed of by deleting relevant computer files, and destroying or shredding hardcopy materials.

Approval

Contact details Feel free to contact me with any questions about this research by email at smarti30@une.edu.au or by phone on 0429083480.

You may also contact my supervisors. My Principal supervisor's name is Associate Professor Linley Cornish and she can be contacted at lcornis2@une.edu.au or 02 6773 3458 and my Co-supervisor's name is Dr Ahmed Bawa Kuniya-Abubakar and he can be contacted at kuniya@une.edu.au or 02 6773 3676.

Thank you for considering this request and I look forward to further contact with you.

Regards,

Steven Martin

Complaints Should you have any complaints concerning the manner in which this research is conducted, please contact the Research Ethics Officer at:

Research Services

University of New England

Armidale, NSW 2351

Tel: (02) 6773 3449

Fax: (02) 6773 3543

Email: ethics@une.edu.au

Appendix 2: Consent Form for Participants

**CONSENT FORM
for PARTICIPANTS**

Research Project: Using a philosophy to explore indicators of giftedness in WA high school students.

- I,, have read the information contained in the Information Sheet for Participants and any questions I have asked have been answered to my satisfaction. Yes/No
- I agree to participate in this activity, realising that I may withdraw at any time. Yes/No
- I agree that research data gathered for the study may be published using a pseudonym. Yes/No
- I agree that I may be quoted using a pseudonym. Yes/No
- I agree to having my interview audio recorded and transcribed. Yes/No
- I would like to receive a copy of the transcription of the interview. Yes/No
- I am older than 18 years of age. Yes/No

.....
Participant Date

.....
Researcher Date

Appendix 3:

Rescuing Bright Kids

—by—

Steven Martin M.Ed
University of New England

Professor Peter Merrotsy
University of Western Australia

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Smashwords Edition

ISBN 9781301456352

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About the Authors

Professor Peter Merrotsy is a well respected scholar in the field of Gifted Education both in Australia and internationally. He has published a great number of articles and books on various issues relating to Gifted and Talented students and continues to do this as well as teaching Mathematics at The University of Western Australia. He is editor of the Australian journal *TalentEd* as well as co-editor of the World Council for Gifted and Talented Children journal *Gifted and Talented International*. Peter enjoys bush walking, rock art, chess, and the 'cello, as well as debating philosophical issues with Steven Martin.

Steven Martin holds a Master of Education degree from The University of Western Australia and has taught English in WA high schools since 1985, specialising in students studying in various programmes for the Academically Talented. His textbook *Access English* has sold well in Australia and overseas and he is now a director of a business called Rescuing Bright Kids that offers programmes to parents and students that promotes high achievement across the curriculum. Steven enjoys playing the guitar, creative writing and having the last word when debating philosophical issues with Peter Merrotsy...

Introduction

Before you begin reading this book, let me answer your first question: why do bright kids need rescuing? People who asked that question also asked: who are bright kids anyway, what makes them so and aren't *kids* young goats? I'll answer in the order you asked, or would have asked if I hadn't been putting words into your mouth.

Bright kids need rescuing because they are not getting a very good deal in schools. You're right in saying there are special programs and even special schools for the *gifted* but, putting myself at risk of being controversial, I would ask, "Are the teenagers attending these schools really the brightest of the bunch and how can we be sure?" The true answer is however: probably not.

I apologise if you have a child who is enrolled in one of these programs or attending one of these schools and assure you I'm not referring to your child who, rumour has it, is among the brightest people on the planet.

Think of it like this: a teenager has a lot going on in their life with hormones racing and everything and, whether they're bright or not, are possibly not very interested in school. Often they're only interested in-well, whatever catches their interest. Hmmm...this means that if school doesn't, they switch off. There are ways of switching them back on that are dealt with in future parts.

If they come from family backgrounds that value and promote learning, like yours no doubt, they will be able to see the value of education for its own sake and may work hard. If not, they may not want to work and may even want to amuse themselves by cheeking their teachers. If they happen to be very bright, they may do this very well and they could upset the teachers and maybe even the school administration. If asked, it's unlikely the school would describe a student like that as bright even though their brightness may have the potential to eclipse the sun.

This hypothetical teenager may not even recognise their own potential and, if asked to take a test, could adopt the same attitude as they do to the rest of the things the school asks them to do. So, according to the teacher they're not bright and the testing proves it. Doesn't it? Well, not really. It may prove this but another possibility is that it shows they have little desire to do well; they are unmotivated. This does not mean they don't have the potential if someone were to...rescue them! Read on and find out how that can be you.

Who?

This question answers itself if you read the previous paragraphs carefully. Don't forget you are to be quizzed on your reading later. I don't care if you're not interested enough to answer the questions well-whoops, am I dealing with a bright person? How do you know?

Of course not every teenager who is unmotivated is, by implication, bright. Some are however, and it's difficult for parents and teachers to tell the difference. That's why you need this book. Your child or your student may be bright and neither you, nor they, know it. It's easy to see that, if they are bright enough to achieve great things in their life, they need to be given the opportunity. In short, they need to be rescued from their own boredom and the problems that will ensue. I've included some ideas of how you might do this.

It's very likely they will discover how bright they are at some stage and, if that's later rather than sooner, they may then have an uphill battle to make the most of their own potential. Going from battler to brain surgeon is not that easy I would guess, although I can't say for sure, as I've never tried it.

In short, anyone could be bright and it's impossible to tell by looking at them as this kind of brightness doesn't actually shine; it points inward.

I believe that truly bright people are wired differently. That means they don't have much control over their own responses and we, mere mortals, might find them strange if we don't understand the reasons for their weirdness. They may not understand themselves either. They could be overly sensitive, so intellectually energetic they wear out everyone around them and they may ask strange questions. It's important for parents, teachers and the teenagers themselves to understand the wellspring of potential these things point to, since everyone in the community could benefit from this wonderful resource if it is appropriately nurtured and supported.

Kid?

Yes, the word *kid* does refer to a young goat but it's also used informally in our society to refer to young people. I'm not sure what the connection is between young people and young goats that justifies this description although, as both a parent and a teacher, I'm often butted by the teenagers surrounding me (in a metaphorical sense). If your experience is like mine, take heart in the fact they grow up eventually and then become charming!

Part 1: Seeing the Light

Many bright kids in Australia are hiding in the shadows. If you are the parent or teacher of one of them, chances are you already know this. It's also possible that they have hidden themselves so well few can see how bright they are. Nevertheless they are different in many ways and, although they may resist the idea and attempt to blend into the background by being more ordinary than everyone else, they cannot *choose* not to be.

The very fact that they think differently can cause them to be out of step with their peers, difficult to deal with at home and impossible to cater for in classrooms. Often, they won't see their own special ability as a gift that can enrich their lives. Instead, if they realise the reason for their differences at all, they will be burdened by them. This view can cause them to face many dangers.

Shaun's Torch

Shaun was a misfit. Every day, at least one of his teachers would consign him to the outside of their classroom in frustration. He was lazy, argumentative and simply not the kind of adolescent who was going to achieve well in high school. He would trot off to the Deputy Principal as directed, to have a "Do you know what you're doing wrong?" kind of chat at least twice a week and apparently, he didn't ever know what he was doing wrong, as the cycle repeated itself relentlessly throughout year eight and year nine. The Deputy Principal cringed at his approach and was left exhausted when he departed.

Shaun's parents insisted he was bright and simply bored. School administrators argued that a student who was bright would complete at least some of the work and Shaun did nothing. His parents suggested that Shaun be given a chance to shine in a special program that was running at the school for academically talented students. Although administrators didn't say it in so many words, their position was clear: they were not going to devote scant resources to a student who simply refused to comply, and so Shaun's problems continued, with his failings being constantly reinforced by those who could have helped had they been equipped to do so...

Shaun is not alone. As a teacher of many years experience myself, I know that teachers are caring, dedicated and committed to bringing out the best in their students. I also know that often the competing demands that confront them can be overwhelming. It's very easy to dismiss students like Shaun as irritating fleas intent on distracting everyone from the main goal.

In the culture of schools, busy Educators often have a set of beliefs about the qualities a *bright* or *gifted* student might demonstrate and, although there is a wealth of research evidence that demonstrates that these beliefs are largely founded on myth, most teachers have no access to support or literature that is usable and transferable and are too busy to look, since people like Shaun are rare, aren't they? Anyway, they reason, someone who has a *gift* will surely realise it themselves and it will eventually show through. The facts paint a somewhat different picture.

Searching the Gloom

While some bright students succeed at the highest level in school, history is studded with stories of people who rose from failure in the classroom to achieve great things in the world, producing ideas that changed it forever. Einstein is often cited as a case in point but there are many, many others so why is it that we treat school performance and brightness, giftedness etc as synonymous? Can it only be because we like labels?

Look at it like this: intelligence itself is invisible. Neither you nor I can see from looking at someone whether they are bright or not. It would be much more useful if *brightness* was not a metaphor when it comes to intelligence. If the brightest teenager in the class wore a halo of light, then perhaps Shaun and his intelligent peers would remain inside the classroom more often. In fact, maybe those responsible for identifying intelligence would spend more time looking for the light's source. In reality, often it's impossible to see easily.

Instead, what we look at is the behaviour of individuals and we have an unspoken set of criteria that, to most people, signifies intelligence. Doing well at school is right up there.

IQ tests, such as those administered by school authorities to allow entry into the special programs they offer, make this explicit. The theories that underpin these ideas however have major flaws which can be seen in Shaun's story.

Shadows Emerge

Parenting Shaun was not easy. As they had two other children before Shaun, his parents thought they knew the ropes but, almost from birth, he seemed different to his older brother and sister. He was a fretful baby and, as he grew, would be troubled by trivial things. The label in the back of his vest would irritate him to distraction; he wouldn't sleep if there was a crease in his bed sheet.

Sometimes, he would seem wise beyond his years as he would cry and comfort his mother when she was disturbed by a problem as if somehow, he could feel as she felt. His sensitivity meant that

the family had to be careful in what they said. A chance comment could wound Shaun deeply, causing him to be upset for days.

Like many children, Shaun began school at age five. He was enthusiastic about this major event in his life to the extent that, on his first day, he amazed his Mother by not even noticing her silently sneaking away. Instead, Shaun sat on the floor oblivious to the children who cried for their own mothers, engrossed in a book he'd found on the classroom bench, as he had taught himself to read a year before he began school. While the chaos of twenty excited and anxious children exploded around him, Shaun was lost in the world of fiction.

At first, when he was picked up from school each day, he would be full of stories about his new excursions into learning to the extent that his mother quietly wished he would pause for breath. She was to get her wish as, within a few short years she saw her son's demeanour change until, by the beginning of year four, it was obvious Shaun felt that going to school was an unpleasant chore. In fact, it was almost as if someone had dimmed the light. In a very real sense they had.

The Gift to Shine

Schools often use the term *gifted* to describe students of exceptional ability however, to suggest that someone is intellectually gifted, implies they have been given something of worth, they are aware they have received this special something and they simply have to utilise it to succeed.

As far as Shaun was aware, beyond birthdays and Christmas, he hadn't received a gift. He simply knew by year four that he was bored by lessons. As a child, he didn't stop to consider why he was bored and what he could do about it, he simply amused himself in ways the school considered inappropriate. Sitting in the cupboard during Maths lessons was a favourite: not malicious, simply distracting.

He also found it difficult to get along with others, preferring instead to spend his time with a few close friends who seemed to have similar problems. They often had group meetings outside the various classrooms they had been eliminated from. If only a teacher had overheard the sophistication of their chatter.

By the time he reached high school, the pattern of misbehaviour and punishment had been firmly established and even teachers who were skilled at recognising strong potential in students, were influenced by the school culture which labelled Shaun a miscreant. To all, the suggestion that Shaun was bright was laughable; there was simply no evidence to support it. In a society that needs proof, there is no room for *perhaps*.

Other students achieved well in school, were compliant and got along well with their teachers yet Shaun lacked both the discipline and motivation to follow suit. To Shaun, school had become a place that attempted to force him to think about the same uniform concepts as everyone else and instead, he sat and fantasised about other possibilities. Others described this as *daydreaming* and Shaun as *inattentive*.

If he had been tested for a special program he had no motivation to perform well in the tests as, being an efficient learner, he had learnt very well what his relationship was with school and saw nothing to gain in doing so. Shaun was set to languish until a knowledgeable person came to offer a lifeline.

Finding the Glow

Although Shaun's story is true, it also serves as an example of how many bright students in high schools spend their school careers, to the great detriment of their lives. Education Departments are often intent on finding and labelling gifted students as they attempt to follow their own, well intentioned, policies of catering for all. The many millions that goes into *gifted education* needs to be accounted for they argue, and rightly so.

The fact that individuals like Shaun are alienated further by the testing and their failure to qualify for special provision is overlooked. Undoubtedly, some who fail the tests will perceive themselves as failures from then on after all, think about the things you learned about yourself at school that you continue to believe. In schools, as in society as a whole, performance is everything. Students who have potential they are not showing, are relegated to academic theories the culture considers impractical.

There is a wealth of academic literature about the education and parenting of the gifted. There are studies going on throughout the world as you read. The conclusions reached are many, varied and often contradictory. Most agree however that there are individuals who have potential to do well who don't succeed, much in the way that an eagle in captivity has the potential to soar if it is loosed of the perch and left to find an air current. Unfortunately, many educators do not realise they are tying their students to the perch and wouldn't know how to loose them if they did for reasons that are not their fault as teacher training institutions seldom run comprehensive courses in this area and the power of the myths that surround the subject are great and more easily accessible.

In high school classrooms everywhere there is the possibility of a low-achieving genius who is in need of rescue. They may not complete work, they may fail tests and they may appear lethargic and uninterested. They certainly will not fit the mythical profile of an intellectually gifted individual and, for this reason, they may remain unidentified. They may only emerge when parents and teachers stimulate them effectively and, is it not appropriate to stimulate all young people in ways that will benefit them? In fact, stimulating all to see what potential emerges appears to be the only way of helping all to reach the levels of which they are capable. There is good evidence to support the proposition that everyone will benefit from a program that does this and no one will suffer so "What's the problem?" I hear you ask and I must admit I'm unable to say.

Perhaps there are ways that parents and schools can "value add" to the education and life skills of teenagers; this book would certainly suggest that. In future parts, I not only explore more of the issues that parents and teachers have to work through to get the best from their bright charges, I also present real, practical ideas of how bright kids can be stimulated, motivated and therefore rescued from the risks they face in their lives. My argument is that there's no need to identify brightness through testing etc, as it will shine through itself as teenagers engage with the ideas presented.

Shaun's Brightness

Shaun ended up being one of the lucky ones. A caring teacher who had a firm understanding of how to rescue bright kids, performed a timely intervention. In consultation with Shaun's parents, who had always believed he was bright, the teacher advocated with the school on his behalf and negotiated an individual education plan for Shaun which saw him work outside the classroom for a proportion of each school day. For Shaun, this simply meant the addition of *work*, he had often been out of the classroom.

Shaun completed a PhD by age 21 and currently holds an eminent position in government which sees him travel the world. It is arguable whether he has yet produced definitive evidence of brightness but at least he's happy, engaged with life and feels both extended and challenged each day. He now does most of his reading on aircraft on the way to meetings!

Discussion Points

What are the possible consequences for teachers, parents and the teenager themselves of NOT recognising their brightness?

How might schools be different if they acknowledged that every teenager may have the potential both to be bright and to excel, given appropriate opportunities?

Since thinking is a pre-requisite for achievement at the highest level in any of the academic subjects taught in schools, what possible objections could there be for not encouraging every student to take a course devoted to teaching thinking as a skill?

What strategies might you use to advocate for the inclusion of a thinking program in your local community school?

Part 2: Fanning the Embers

Before we go on to explore some of the practical ways of helping bright kids shine, let's spend a little more time looking at what's happening in the community now. It's as well to know what the issues are since historically, parents who believe their children to be bright often have to wrestle with schools such as in Shaun's case and to do this with confidence, a parent needs to have a working knowledge of some of the central issues.

There is plenty of research that shows that many teachers have a negative view of gifted children which is based on a belief that giving precious school resources to those who have more already, is unjust. In fact, this research also shows that this attitude only changes when teachers are given education about giftedness that dispels the myths and spells out how at risk these bright kids really are.

Taking the temperature

These are testing times indeed. There are tests for all kinds of things from emotional health to how well we put the garbage out and, like others, many people involved in educating bright people, rely on various tests to separate the bright from the not so. Having been separated, they can then be divided into two groups: those who are going to be given something educationally extra and those who are not.

Everyone seems to be happy about this: Ministers of Education, Government Departments, Schools that offer special programs for the gifted and the parents and students who feel special because they're involved in the programs. The programs have an aura of prestige about them so parents crowd the examination halls and wait with bated breath while their progeny perform. In fact, the only people who are not happy are the parents of the kids who did not pass and some of the students themselves. They are destined to wear the brand of failure from then on, but not justifiably so.

It's not hard to understand why tests are so important to many of the key players in the game of "Education of the Gifted." Those who work in universities and write and publish theory for example, need a way of making something which is invisible viz. intelligence, appear visible as was said in Part One. To some, testing seems a good way of doing this since, as a community, we put a lot of faith in anything that seems scientific. Count how many times the term, *scientifically tested* appears in advertising to convince people to buy and you'll get the idea.

Seldom does anyone stop to think about the circular argument of testing which Plato might have expressed like this:

"What does the test measure?"

"Intelligence, or potential to achieve highly..."

"How can a student show that they have intelligence or potential to achieve highly?"

"By doing well on the test."

"How can we know that the test measures this?"

"People who have intelligence or the potential to achieve highly, score well..."

And so on until the tester and their supporters disappear into a dark orifice where the light refuses to shine!

It is obviously a fact that tests rely on a basic set of assumptions or criteria about how intelligence or potential manifests itself. There is no independent way of establishing whether these assumptions are correct. In a world that didn't value Maths or Physics, would Einstein still have been considered a genius? Would he have applied his intelligence and/or potential to a field of endeavour that was valued in that world? We have no way of knowing and, even though his brain was preserved for study, we might well ask what researchers are looking for. Like a child putting sugar on a tooth that has fallen out so they can see it ache, can anyone be sure that what they are seeing has any connection with what we observed when it was in situ?

And does what we observed in situ have any meaning other than the meaning we place on it within our culture? Although it appears it does not, there are many who would like to argue that intelligence has an objective existence but often this is for reasons that can be identified (unlike the giftedness they refer to).

To go back to our example of University academics: If researchers can't point to a scientific explanation of the phenomenon they want to label, *intelligence*, *giftedness*, *brightness*, etc they are left exploring the apparent symptoms of something unseen; something they have faith in and which they believe shows itself, but which cannot be *empirically* proven. In fact, their endeavours would then seem to have more in common with religion than science and, given the amount of money they wish to attract in research grants, the number of conferences in which they wish to present their ideas and the number of academic papers they wish to write, this is not a concept most can readily embrace. They don't wish to address the question of whether they're looking at

the glory of God, as the community dictates that the glory of science is superior, not to mention more accessible.

On the Rise

Government run education departments have other reasons for wishing to test young people. It is clear that their main aim is to show that governments care; that they cater for the needs of the community they serve whatever they may be. In order to do this, their actions must be able to be seen such as is the case when they establish and *fund*, special programs. They must account for how they spend the money in their budgets and therefore they must be selective about who they cater for. What better way of doing this than to be able to point to test results in which some students passed and others failed?

One government education department in Australia was still using a test written in the nineteen thirties to select young people for its extension programs as this text was being written and, since the test involved questions related to language as well as asking its questions in English, its accuracy in achieving its objectives in a 21st century multi-cultural society must be questioned by any thinking person. Students who pass the test are labelled *gifted* and most people believe this to be true including those who pass and those who fail. But, in the great testing bluff, how many parents stop to question the validity of the test that ruled their children out or in? What would be the response of bureaucracy if they did? The answers are easy to see.

Mary's Torch

Mary was a precocious child. Her parents were pleased about this and encouraged it. The school administrators and teachers felt differently.

In Primary school, she would often question the material presented by the teacher by asking, "How do you know that?" "What proves that true?"

Unfortunately, as a child, Mary did not have the social skills to know when it was appropriate to raise such questions and when it wasn't. According to her teachers talking across the staffroom table at recess, *never* was the best time. In fact, they would argue, there is a time when it's most appropriate for a child just to accept what an older person says without question. "Don't her parents tell her things they don't have to explain?" they asked. The answer, if they could have known it, was "No they didn't."

Mary's parents believed that she should be encouraged to question everything as this is how real knowledge is acquired. The discussions between parent and school never reached the philosophical level however. Most often they involved a teacher complaining about Mary's *disruptive behaviour*, and Mary's parents becoming defensive and then angry.

Although after much parental badgering Mary was invited to sit the test for the school district's *extension program*, teachers were not surprised when she failed and therefore did not qualify for the enrichment programs on offer. The complaints of Mary's parents were lost on the wind since the school claimed to have actual evidence now that Mary was not bright. No one noticed that Mary had spent her time during the test, questioning the validity of the questions, as what could an eleven year old know about that?

If parents are disgruntled when their children fail a test, they are labelled as such and their views largely dismissed. The views that a disgruntled person might express are easy to predict as are the reasons for them, the argument goes. The parent might think they know there's something different about their child but, when the scientific testing doesn't show it, how can they successfully request extra help without being dismissed as troublemakers? There are hundreds of case studies that show they can't.

Mary's parents took her off to an educational psychologist so she could take a standardised IQ test. It's not hard to guess that this test showed Mary to be highly intelligent. It was also not hard to guess that the school preferred its own conclusions and so the fight went on. It's clear that Mary was motivated to perform well on the test her loving parents had arranged and was not so motivated when it came to the school's test. Perhaps this factor alone influences the outcome but motivation was not tested as it usually isn't. As most of us have days when we're highly motivated and others when we're not why label people on the basis of their performance at any particular time? The answer of course is that this is the easiest way.

So what can be done? The answer is lots.

If you have ever known a person who behaved in ways you couldn't understand, you probably already know that people are wired differently. It would be a sad old world if we were all the same...the saying goes. Mostly, we expect people to control their behaviours and act in accordance with society's norms. But what if they're wired so differently that their whole nervous system lights up in response to things that most would just dismiss?

When Shaun complained about irritation from the label in the back of his shirt; the crease in his sheet, it may have been that his entire system was so troubled by these things, it wasn't him making a choice to allow himself to become distracted, his body wouldn't allow him to do otherwise.

Mary would become so distracted by the sight of beams of sunlight highlighting an ever moving cloud of dust particles in her school room that she found it difficult to hide her excitement, or her desire to know the cause of this fascinating and beautiful phenomenon. She appeared distracted to her teachers and it was true she was engaged with something she found more interesting than the grammar lesson.

There are a large number of people involved in the study of intelligence who believe theories such as those of *Dabrowski* (see explanation) who felt he had observed a connection between intelligence and personality traits. A parent may say, "So what?" and the answer is that someone, the parent, who observed the child throughout their early childhood would know whether the child possessed traits such as those described by Dabrowski and, if these theories hold true, they are a strong indicator of high intelligence; brightness.

The exciting thing about this concept is that this kind of identification needs no testing although, if a valid *Dabrowski test* was administered, it would need no motivation on the part of the participant since personality traits such as Dabrowski's *overexcitabilities* can be observed without a *performance* aspect. In fact, arguably this is information that parents gather intuitively and, hopefully, knowledge of Dabrowski's ideas can give validity to a parent's beliefs about their child even though we have not reached the stage yet where decision makers will accept arguments based on them. I might point out that Dabrowski is just one such theorist but an explanation of his work provides an example of alternative thinking in this area.

Kazimierz Dabrowski (1902 - 1980) was a Polish Psychiatrist and Psychologist who worked with creative adults and adolescents. Creativity is easy to observe since it is manifested by a creation such as a painting, poem, sculpture etc. As a result of this work, he constructed a number of theories of personality development in which the concept of Overexcitabilities played a key part.

Overexcitability is a sensitivity of the nervous system that is well beyond the usual or average in intensity and duration. It can include a heightened response to stimuli such as noise, light, smell, touch etc. These responses could theoretically be measured by scientific instruments should anyone have an inclination to do so.

They also, in turn, show themselves as an abundance of physical, sensual, creative, intellectual and emotional energy that can result in creative endeavours as well as advanced emotional and ethical development in adulthood. Dabrowski's theories say that the overexcitabilities feed, enrich, empower and amplify talent. In other words, they cause individuals to have more intense than usual experiences of life. This sometimes shows itself in achievement however the theory suggests that people who have strong overexcitabilities have a high potential to achieve and therefore there is a correlation between overexcitabilities and intelligence even though this potential may not be realised.

According to Dabrowski, Overexcitabilities appear in five forms:

Psychomotor - surplus of energy: rapid speech, pressure for action, restlessness impulsive actions, nervous habits & tics, competitiveness, sleeplessness. In fact, this overexcitability is often wrongly diagnosed as a condition such as ADHD.

Sensual – sensory and aesthetic pleasure: heightened sensory awareness eg sights, smells, tastes, textures, sounds, appreciation of beautiful objects, music, nature, sensitivity to foods and pollutants, intense dislike of certain clothing, craving for pleasure.

Intellectual – learning, problem solving: curiosity, concentration, theoretical & analytical thinking, questioning, introspection, love of learning and problem solving, moral concern, thinking about personal and social moral values.

Imaginational – vivid imagination: creative & inventive, a rich and active fantasy life, superb visual memory, elaborate dreams, day dreams, love of poetry, music and drama, fears of the unknown, mixing of truth and fantasy, great sense of humour.

Emotional – intensity of feeling: complex emotions, extremes of emotion, empathy with others, sensitivity in relationships, strong memory for feelings, difficulty adjusting to change, fears and anxieties, inhibition, timidity, shyness, self-judgment, feelings of inadequacy and inferiority, heightened awareness of injustice and hypocrisy. Quite often this is wrongly diagnosed as depression.

So far, the purpose of this text has been to inform the reader of the various issues involved in rescuing bright kids in order to empower them when confronting those who would claim to know better. In part three, I will go on to give some practical ways in which parents can extend their children at home and teachers can do the same in their individual classrooms. I would point out

that the thinking exercises in this book are aimed at teenagers and no responsibility is taken for the all questioning, knowledge hungry monster you may release when you use them!

Discussion Points

Why would schools do what is easy rather than what is accurate in identifying bright kids?

Give that there is an issue that relates to who has the most power in a parent's interaction with their child's school, how can a parent improve their bargaining position in the interests of their child?

How can schools be encouraged to adopt research driven thinking programs into the curriculum?

What are some of the reasons that Education departments prefer performance based tests to measure potential rather than instruments that do not require a child to be motivated to perform?

Is the emphasis on performance at the expense of personal satisfaction of individuals?

Part Three: Extending the Beam

If you are a driver, it would be easy to think that thinking has lost popularity as a way to fill idle moments such as those spent in the Freeway traffic at peak hour. Caught up in the new reality seen on screens around the world, I've heard young people say there's no need to think when you have computers and televisions to do it for you. I'm not sure they're right as our experiences of the world are the result of thinking. That is, we experience a range of events and respond to them, and the end result is that all of this information ends up in our minds where it is processed and left to influence our interpretations of the next set of experiences.

For example, if our first experience of dogs is being bitten, we will be fearful of dogs until a more pleasant experience changes this response. This is one of the ways we *know* things.

Experience of the world can come from books, movies and other forms of text as well as our direct experiences. As well as providing new information, these experiences limit the things we think about to the things we've experienced as it's obvious that the things we tend to think about are the things we know. Think about it!

Let's see if we can think about some things we may not have thought about before. The term that's commonly used for this is *thinking outside the square*...

illuminating the Square

A common belief is that the world is as it seems. We experience it everyday so there's little time to think about how it might be different. And even science fiction and fantasy use versions of the world that are familiar enough for us to recognise them. But if we did not have the constraints to our thinking that currently exist, how the world might be different.

Clothes are a good example. In the warm, tropical climate of Australia, why aren't men as free to wear skirts which allow the cool currents to flow, as women? Ask any teenage boy this question and, after cringing, blushing every shade of puce known to art and then looking to see if you really want him to answer he'll probably say words to the effect of, "It's not appropriate as it *says* something about the wearer they might not want to *say* about themselves..." Listen clearly to the answer as, it might not sound like that's what they're saying but that's what it comes down to. This is an example of how it's hard to think about things in ways that are different to the norm.

OK, so clothes speak? It's clearly the case they do! But what gives them the words? It's the culture! Our way of life is shaped by a set of attitudes, values and beliefs that we have learned

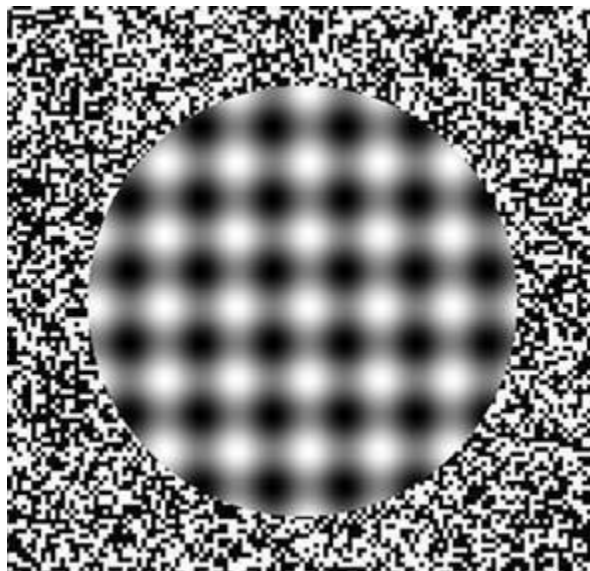
even though we may not be able to say how. Teenage boys in Australia have learned that wearing a skirt to school could endanger their health. Errr...it's only a piece of fabric wrapped around the body, so why is this so? It has something to do with the meaning of the fabric.

It's obviously OK to wear a garment that's similar to a skirt in some cultures such as, dare I say, Scotland? I know it's not a skirt it's a kilt but, what's in a name? Or other cultures that have hot climates accept men wearing cloth wrappings that are analogous to skirts as they are cooler, so why is Australia different?

We can explore this subject together in greater depth in later parts but, it's clear that the culture hems in our thinking and our behaviour as a result. It's also the case that we may not be aware of the constraints to our thinking the culture insists upon until we begin thinking about them. Culture forms some of the sides to the box so what about some of the others?

Re-focusing the Light

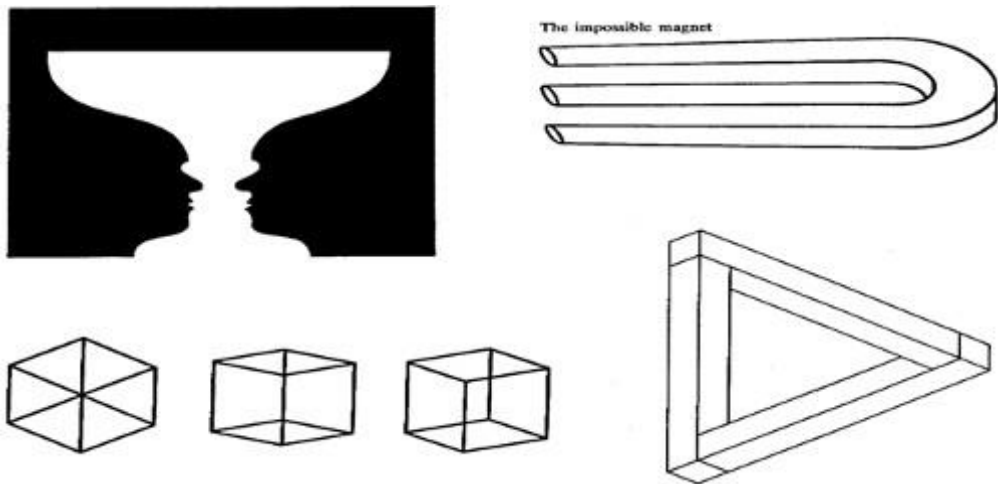
I'll have to ask you to forgive me for attempting to make the world disappear this early in the book but how can we know for sure what's outside ourselves at all? It seems fairly reasonable to believe that we exist; well, at least I do even if I can't be sure about you, but what about everything else we see, taste, touch, feel and hear? Our senses sometimes give us wrong information about the world such as in the examples below, so how can we know when to depend on them?



I'm going to remind you that this is a book. The image above is flat and on a white background. Even though you know this, you still see the image moving and in 3D right? Why is that? Have I

discovered a way of incorporating depth into a white page or are you being fooled? Which answer do you prefer and why? Are your senses part of the box as well?

Now take a look at these images. Each has a secret that will boggle your mind. Mainly, the effect comes from your mind attempting to use information it has gained earlier to make sense of what you're observing now however, it fails to make perfect sense. Why is this so? Can you think about a world in which a magnet sometimes has two prongs and others three depending on the way you look at it? In the box, it would always be the same. I think we may have stepped outside.



If we knew when our senses were lying, we wouldn't be fooled. We don't. Since we rely on our senses to provide information about the world, and we can't trust them, what else is left?

In considering the answer, it may be that you are already thinking about things that hadn't occurred to you before. Perhaps you are taking your first tentative steps out of that box; more likely you're thinking, this is strange!

If simple things such as the way we gather information about the world is open to question, is there anything that isn't? The answer is probably no, but we might find ourselves in a real fix if we questioned everything. If we couldn't put our feet on the floor every morning for fear it may have ceased to exist in the night we might have a few problems going through the day. It's obvious that we have to accept some things so, what is the value of the questions? When they are asked of bright kids, they set them free.

Building Brighter Minds

Although I understand that the brain is not a muscle, we might find an analogy between the two. It's a well known phenomenon that muscles that are not used wither to the extent that, after a long

period of time, they become unusable. There's some good evidence that the same holds true for the brain. Research into various kinds of dementia for example, suggests that actively thinking throughout life can retard the onset of this condition. I would suggest that *actively thinking* involves more than remembering information that someone else tells you. More likely it's thinking things through yourself.

There is also research that shows that pursuing the kind of thinking exercises I have introduced in this part can actually increase IQ. This is certainly a notion that anyone would have found hard to accept until recently.

The rest of this part and the book will be spent exploring ideas that you, your bright teenager or the kids in your class may not have come across before. The lofty goal in all of this is that they may arrive at questions that no-one has come across before.

My experience has been that bright kids who begin these thinking exercises soon become more motivated, more interested and usually downright annoying as they seek the answers to every question they can think of. Even though this is the case, I've yet to find anyone who would say that this is not the key to future success in any field and, it's an excellent way to rescue any bright kid you may know. In fact, thinking exercises cause the light to shine and become bright. Errr...it also tends to improve a student's performance across the curriculum although most of the material here can be covered as part of a course in English and I am happy to supply a teaching program and lesson plans to teachers who request it which allows the essential areas of subject English to be covered while you are doing so. Please drop me an email to the address at the end of the book if you would like this.

As preparation for the coming parts, discuss the following questions with someone you suspect may be bright:

Was Australia invented or discovered?

Is there evidence to support the idea that the mind is in the brain?

If you can get a clear *picture* in your mind of someone you care about, where and how does this image exist?

What is the difference between *belief* and *knowledge*?

If someone knows something that is later proven untrue, did they ever know it?

What can we know for sure? How do you know this?

How can we transform belief into knowledge?

How much evidence do we need to claim that we know something and can prove it?

If our senses sometime lie, in what other ways can we gather information about the world?

If there was a being who was so powerful they could do anything, could they create a rock that is so heavy they could not lift it?

As dreams are sometimes very real, what evidence is there that you are not dreaming now?

If a tree falls in the forest when there is no one to hear it, does it still make a sound?

I'd like to say that the answers are on page... but for many of the questions there are no answers. Hmm...if there are, I don't know what they are. Finding the answers isn't important. Thinking about the questions and exploring possible answers is. As you read on, I will try to provide opportunities to acquire the skills necessary to consider them as this is a central means of rescuing bright kids.

Discussion Points

How can we encourage young people to find new solutions to problems rather than attempting to *jemmy* new problems into pre-existing solutions?

If young people can be encouraged to think *outside the box*, what are some of the ways they and the community in which they live may benefit?

To what extent is the world we inhabit as individuals, a function of our own experiences?

As a community, we tend to judge people according to a set common held criteria that may not even be overtly expressed; discuss some areas in which this is so.

How might our community be different if we abandoned some of the norms of our society by which we judge others?

Section Two: Outside the Main Spotlight

Part 4: Trick of the Light

This part isn't really about goldfish but a discussion which includes them as a subject may cast light on what it's really about so, here goes: I'm not sure if like me, you've ever wondered why over time it has been common to keep these wet pets in bowls rather than tanks. An obvious reason must be that owners think that goldfish are fooled by swimming in an endless circle into thinking, if they think at all, that they enjoy the freedom of being in an endless waterway. The sides of the bowl are transparent and the goldfish has poor eyesight, so they may as well be invisible. For a goldfish the bowl is so invisible it is non-existent.

Although the sides hem them in, if they had awareness, they wouldn't be aware of this and they perhaps believe that they are completely free to act however they see fit. In fact, they may feel the same as many people in our society.

It's true that we defend the freedom of our society often vehemently, without ever considering whether the freedom we appear to have is an illusion; in fact, it may be possible that we occupy a place in something so transparent it has become invisible yet it limits our behaviours in ways we may not have considered in much the same way swimming in a glass bowl might.

A good example of something that constrains our actions was mentioned in passing in a previous part; it is the unspoken/unwritten set of rules that dictates the clothes we wear, the employment we can choose and the way we behave in every aspect of our lives. It is the set of values, attitudes and beliefs that forms our *culture*.

Unless we live on alone on an island and rely on our own labour to survive, we have to interact with other people and, in order to do this, we need rules. For example, imagine the chaotic danger on the roads if everyone exercised freedom of choice about where on the road they would drive and at what speed. In fact, if you've ever attempted to drive through central London, Rome, Sydney etc it wouldn't be hard for you to imagine this by looking at how chaotic things can become *with* rules.

It's easy to find written versions of the rules that govern behaviours on the roads and, if you forget even briefly, a helpful passing motorist or two is likely to wind down their car window and remind you.

However, when you get out of the car and take to the pavement, you are still expected to know the rules even though it is difficult, if not impossible, to find anywhere they're written.

For example, if you decide to take a rest and sit in the middle of the walkway, you will quickly find this is against the rules, especially during peak hour. If you choose to do so wearing a purple jumpsuit with large pink spots, while rubbing peanut butter into your hair with a spatula borrowed from the local sandwich shop, you may find that caring people will attempt to take you to a place where you can do this peacefully; they may even try to persuade you it's not in society's best interests or your own to do this; in fact, they may not say so per se, but it's against the invisible rules and it's easy to think that we won't have real freedom in our society until it's not!!!

Errr...sorry for the rant but I feel strongly about this for reasons I hope will become clear. They do not include anything to do with jump suits of any colour or peanut butter.

Shadowy Rules

The serious question is how we learn the unwritten and largely unspoken rules that spring from a culture's *values*, *attitudes* and *beliefs* and, if you're currently thinking how they're just natural; how things are, you're beginning to see the sides of the glass bowl, as they're not really, evidence of which is that they change over time. If you don't believe this, take off the purple jumpsuit and go into town dressed like the people in the picture below and you will definitely provoke a reaction.

Most people will recognise this as fashion from a by-gone era and some will ask why you are wearing it whereas, in the 16th century, it would have been considered as normal as the clothes you are wearing now (I said, change out of the purple jumpsuit!) although strangely, through its symbolism, it may also have made a statement about your social position.



It isn't only fashion that has changed since the 16th century, it's also beliefs about how the universe originated, attitudes about desirable body shape, values about the worth of actors and playwrights and many other things. It's unlikely that there were meetings held to make decisions about these issues or that votes were taken as my secretary would have told me, so how did they change in ways that most people agreed on? The answer is through *texts*.

Although the word *text* can have a variety of meanings, if we accept a definition that says that anything that conveys information can be considered a text, we will see that things that we have previously alluded to such as clothes, convey information about the wearer and therefore, both the clothes and the way they are worn can be considered texts. The meanings that they are given are constructed through the culture and generally agreed on: business people dress in particular ways, teenagers dress differently to this and most of us know where we stand, convenient eh?

Shape to Shine

Car manufacturers have found many ways to bend steel into various shapes some of which appeal to some portions of our society and some to others. The main reason for this variation in appeal is not the shape of this means of transport; it's the symbolism we attach to it. Often we make the weird claim that cars say something about the people who drive them and, in this way, a car is a

text, albeit a valuable one that heaps many people in debt so they may drive one of a particular shape: amazing!

In our culture we are surrounded by texts and they all have the values, attitudes and beliefs of the culture embedded in them therefore, having learnt the rules that spring from these things, we are constantly reminded of them and this is especially the case in popular culture.

For example the picture below portrays Buddy Holly who was a rock and roller from the fifties.



Like all *stars* even today, Holly had his followers who were mainly teenagers as his kind of music was developed to appeal to this new market that had been created after world war two as one that businesses would be able to exploit as the world moved into a period of prosperity and relative security. This was in contrast to the way people felt during and immediately after two world wars and probably a response to it.

People had always gone through years that could be counted in teens however until the fifties *teenagers* were not treated as a discrete group that was separate from adults. It was the texts found in popular culture that shaped this construction most notably white rock and roll music which has arguably shaped it ever since; the changes in the images of music stars can be equated with changes in the lyrics of their songs and these in turn, both shaped and reflected the attitudes, values and beliefs that had currency in the culture. Popular music created a divide between teenagers and adults and gradually portrayed the divide as wider and wider: as one star lost their

shock value as a teenage icon through acceptance, another more shocking, took their place each continually challenging the more stable and less changeable adult values, attitudes and beliefs. If you've heard a teenager comment on how little adults such as parents and teachers know about the world, you're observing this process in action.

The teenagers in the picture below may well have been dancing to Holly's records as they partied and it's not hard to see that the audience looks very much like the entertainer in their mode of dress.



Their manner of dress seems similar to that associated with adults in its formality even today however, as teenagers had only recently been grouped, there was little difference between them and adult groups. The lyrics of Holly's songs reflected the concerns of his audience for example:

Peggy Sue

<http://www.sing365.com/music> accessed January 2013

If you knew, Peggy Sue
Then you'd know why I feel blue
About Peggy, my Peggy Sue
Oh well, I love you, gal
and I love you Peggy Sue
Peggy Sue, Peggy Sue
Oh how my heart yearns for you.
Oh P-e-ggy... P-e-ggy Sue
Oh, well, I love you gal
Yes I love you Peggy Sue
Peggy Sue Peggy Sue
Pretty pretty pretty pretty Peggy Sue
Peggy oh Peggy Sue
Oh well I love you gal and I need you Peggy Sue
I love you Peggy Sue
With a love so rare and true
Oh, Peggy, my Peggy Sue-ue-ue-ue-ue-ue-ue-ue
Oh, well, I love you gal
I want you, Peggy Sue

Compare Holly's image with that of Elvis Presley below whose wildly gyrating movements were seen as shocking at the time in a way that Holly's movements were not. His clothes are also different to those worn by adults of his time.

Of course both his pelvic thrusting and his clothes seem tame now as we have become used to this form of expression which demonstrates how values, attitudes and beliefs change over time. It's hard for us to believe that Presley was condemned in the media, hated by the parents of teenagers and forced to restrain his movements on television which further demonstrates how changing values, attitudes and beliefs make that which was once shocking now appear safe and tame.

Evidently, teenagers like to view themselves as rebellious and a little *wild* so the representations of these traits need to become more and more so as time goes on.



On the face of it, Presley's lyrics were about similar subjects to Holly's but a close reading of both Presley's image and his lyrics show that he was leading the teenage culture into thinking about things that the adult culture found threatening. In 1958, a young girl's parents may have welcomed Holly into their home when introduced by their daughter but I doubt the same would hold true for Presley.

All Shook Up

<http://www.sing365.com> accessed January 2013

Well bless my soul

What's wrong with me?

I'm itching like a man on a fuzzy tree

My friends say I'm actin' wild as a bug

I'm in love

I'm all shook up

Uh huh ohh yeah, yeah!

Well my hands are shaky and my knees are weak

I can't seem to stand on my own two feet

Now who do you thank when you have such luck?

I'm in love

I'm all shook up

Uh huh ohh yeah, yeah!

Well please don't ask me what's on my mind

I'm a little mixed up, but I'm feelin' fine

When I'm near the girl that I love best

My heart beats so and it scares me to death!

She touched my hand what a chill I got

Her lips are like a volcano that's hot

I'm proud to say she's my buttercup

I'm in love

I'm all shook up

Uh huh ohh yeah, yeah!

My tongue gets tied when I try to speak

My insides shake like a leaf on a tree

There's only one cure for this body of mine

That's to have that girl that I love so fine!

She touched my hand what a chill I got

Her lips are like a volcano that's hot

I'm proud to say she's my buttercup

I'm in love

I'm all shook up

Uh huh ohh yeah, yeah, yeah!

Uh huh ohh, ohh, yeah, yeah!

I'm all shook up!

Now closely compare the images and lyrics of Holly and Presley with those of David Bowie and The Sex Pistols and it will be easy to see the cultural changes that have taken place over time.

David Bowie

www.bbc.co.uk accessed January 2013



Life on Mars

<http://www.songmeanings.net/songs/view/16902> accessed January 2013

It's a god-awful small affair

To the girl with the mousy hair

But her mummy is yelling, "No!"
And her daddy has told her to go
But her friend is nowhere to be seen
Now she walks through her sunken dream
To the seat with the clearest view
And she's hooked to the silver screen
But the film is a saddening bore
For she's lived it ten times or more
She could spit in the eyes of fools
As they ask her to focus on:
Sailors fighting in the dance hall
Oh man! Look at those cavemen go
It's the freakiest show
Take a look at the lawman
Beating up the wrong guy
Oh man! Wonder if he'll ever know
He's in the best selling show
Is there life on Mars?
It's on America's tortured brow
That Mickey Mouse has grown up a cow
Now the workers have struck for fame
Because Lennon's on sale again
See the mice in their million hordes
From Ibeza to the Norfolk Broads
Rule Britannia is out of bounds
To my mother, my dog, and clowns
But the film is a saddening bore

Because I wrote it ten times or more
It's about to be writ again
As I ask you to focus on:
Sailors fighting in the dance hall
Oh man! Look at those cavemen go
It's the freakiest show
Take a look at the lawman
Beating up the wrong guy
Oh man! Wonder if he'll ever know
He's in the best selling show
Is there life on Mars?

Sex Pistols

www.last.fm accessed January 2013



Anarchy in the UK

<http://www.sing365.com> accessed January 2013

Right! NOW! ha ha ha ha ha

I am an anti-Christ

I am an *anarchist*

Don't know what I want but

I know how to get it

I wanna destroy the passer by cos I

I wanna BE anarchy!

No dogs body!

Anarchy for the U.K it's coming

sometime and maybe

I give a wrong time stop a traffic line

your future dream is a shopping scheme

cos I, I wanna BE anarchy!

In the city

How many ways to get what you want

I use the best I use the rest

I use the enemy

I use anarchy cos I

I wanna BE anarchy!

THE ONLY WAY TO BE!

Is this the M.P.L.A (*People's Movement for the Liberation of Angola*)

Or is this the U.D.A (*Ulster Defence Association*)

Or is this the I.R.A (*Irish Republican Army*)

I thought it was the U.K or just

another country

another council tenancy

I wanna be anarchy

and I wanna be anarchy

Know what I mean

And I wanna be anarchist!

Get PISSED DESTROY !

Some of the older people reading this text may remember Bowie's influence in the seventies which saw a number of young people walking around the streets on a day to day basis dressed like him complete with the unusual make-up which varied often. Generally speaking, they did so unimpeded and without comment...well without *much* comment anyway.

If a male was to wear such make-up today a variety of interesting and uncomfortable situations could arise although it is reasonable to ask for an explanation of this as why should anyone have an opinion on the way another presents themselves? The answer of course, is that it's against the cultural rules unless it's in particular contexts that allow it such as being in a play etc.

The Sex Pistols suggested in many ways including their lyrics that society should change and the result, which was achieved by all the popular singers featured here, was that it did. As the youth culture is changed by youth culture, they then grow up and it all begins again: As one idea pops up, cultural forces set up opposition to it until eventually the ensuing conflict results in the culture accepting it so the whole process needs to begin again.

In the music of popular culture, this usually results in artistes who try to be more and more shocking yet, as shocking as they begin, the culture always swallows them whole. For example, ***The Rolling Stones*** were considered a rock band that challenged the culture and endangered teenagers in the nineteen sixties yet 2003 saw their lead singer, Mick Jagger, receiving a knighthood from the Queen of England and in 2012 he performed at The White House for the President of the United States. Both of these events show how much the culture now accepts that which had so much negative publicity as a corrupting force earlier on. It is reasonable to ask whether the culture was corrupted in the process but again, this is a matter for the values, attitudes and beliefs to explain.

Candles for Young Kids

If you have been brought up reading traditional children's' stories, you may realise that tales you knew and loved such as *Snow White* would have shaped the cultural ideas of where females fit into the world. They also reminded males that it's better to be handsome than a dwarf who owns a

gold mine. I never could figure out how a woman, whose sole quality in the story is beauty, could live in the woods with such a variety of personalities all of whom were rich without becoming romantically involved with any of them: I guess size matters after all!

Other texts such as Thomas the Tank engine, who is undoubtedly a male as signified by his name and blueness, gives his carriages a *bump* if they grumble about following him thus suggesting an oft used and completely inappropriate strategy to deal with the relationship problems that arise within traditional couples; is this really how male/female relationships should go and are children aware that gender roles are being constructed this way in the text?

In fact, try as they might, authors find it almost impossible not to reinforce traditional values, attitudes and beliefs in their texts. Here is an excerpt from a short story published in Australia in 1892. Gender roles are clearly established in the culture and reinforced in its texts:

The Drover's Wife by Henry Lawson

www.readbooksonline.com accessed January 2013

The two-roomed house is built of round timber, slabs, and stringy-bark, and floored with split slabs. A big bark kitchen standing at one end is larger than the house itself, veranda included.

Bush all round--bush with no horizon, for the country is flat. No ranges in the distance. The bush consists of stunted, rotten native apple-trees. No undergrowth. Nothing to relieve the eye save the darker green of a few she-oaks which are sighing above the narrow, almost waterless creek. Nineteen miles to the nearest sign of civilization--a shanty on the main road.

The drover, an ex-squatter, is away with sheep. His wife and children are left here alone.

Four ragged, dried-up-looking children are playing about the house. Suddenly one of them yells: "Snake! Mother, here's a snake!"

The gaunt, sun-browned bushwoman dashes from the kitchen, snatches her baby from the ground, holds it on her left hip, and reaches for a stick.

"Where is it?"

"Here! gone into the wood-heap!" yells the eldest boy--a sharp-faced urchin of eleven. "Stop there, mother! I'll have him. Stand back! I'll have the beggar!"

"Tommy, come here, or you'll be bit. Come here at once when I tell you, you little wretch!"

The youngster comes reluctantly, carrying a stick bigger than himself. Then he yells, triumphantly:

"There it goes--under the house!" and darts away with club uplifted.

Here is an attempt to update it however the gender roles remain the same as, to do otherwise would change at least one of the story's themes:

Away on Business

The afternoon breeze turns its attentions on the canals, sending gentle ripples which cause the yachts to strain and complain at their moorings. The clinking of rigging sings across the water and rattles the windows of the waterside mansion. She looks languidly through the glass startled for a moment, and then returns to her cup of tea and leather sofa.

The children have already left for school. She knows they have as she waved them off herself, watching as the small navy blue procession disappeared lethargically at the end of the road. They too feel burdened by the pall of despair that has fallen on the house since he has gone away.

He is hidden behind a trail of business meetings which seemed to go on interminably as the weeks extended to months and the months threatened to go on without end. They have not heard from him in a long time; a time too long to remember, and now she struggles to remember his face. She wonders if he will ever return and then wonders if she really cares.

The flow of money that had waned with the tides at the best of times has now ceased completely, drowning the hall tiles in a flood of red letters. She has given up opening them now and the children wade through them each afternoon, silently muttering their worries to each other when they should be sleeping.

A pod of dolphins slides by her back veranda but she is too far gone now to be awed. She stares at them through sightless eyes, smothered under the blanket of apathy he has left for her. She hasn't even showered or dressed herself for the last three days and she feels she will soon slip away forever unnoticed.

She stays sprawled on the sofa, eyes half open or half closed she isn't sure which. When the doorbell rings, she isn't even sure she hears it. But it rings again insistently so she forces herself into the hall to see. A strange, disjointed face is pressed against the glass.

Having seen it, she returns to the sofa forgetting even to consider its identity. And then she hears the side gate creaking and sees a grey flannelled figure push through. He is tall and so thin, she

has the impression he has slithered through the bars of the fence. His eyes cast furtively around and she can see his whole body is coiled tight ready to be challenged and defend...

The process of establishing values, attitudes and beliefs that determine the behaviours of all of the participants in our culture unsurprisingly continues. Whatever your goals are for the future and whatever you rule out as not possible, you can be sure they stem from the *rules* of the culture. In short, we are all restrained in our actions by the set of values, attitudes and beliefs that are so natural to us they are rendered invisible and discussions of whether these are the only possible alternatives seem strange as many consider this is simply the way the world is. In fact, these people have very much in common in their thinking to the goldfish who put in an appearance at the beginning of this part. Whether you're inside the box or the goldfish bowl doesn't seem to matter as now you're beginning to see both, you can make a choice: stay inside where it's safe or step outside where things are a little risky...

Activities

Identify the connection between the choices you have made both present and future and the attitudes, values and beliefs of our culture. E.g. If you would like to have a highly paid job or win the lottery it's because:

Our culture values the material possessions we can acquire if we have wealth.

We hold an attitude that those who have wealth are more important or more respected than those who do not.

A commonly held belief in our culture is that money can buy happiness

Carefully consider the logic of the attitudes, values and beliefs that underpin the things you have identified e.g. Is money essential or even important in being happy? Are there other things that can bring happiness that are not as strongly valued in our culture?

If we abandoned many of the central values, attitudes and beliefs in the culture, what would replace them? E.g. we could replace money with a system of barter however this still requires an emphasis on the value of goods, beliefs about what is intrinsically important and attitudes related to material possessions.

As teenagers and adults are all people, explain why there is a need for them to have different, sometimes competing, values, attitudes and beliefs? Are there advantages and disadvantages to constructing the world in this way?

Discussion Points

Is the way that the culture is shaped by popular *art* a good or bad thing?

How can young people be encouraged to resist cultural notions of behaviour especially when they relate to actions that are considered destructively negative?

Can you identify attempts in the past to manipulate the fact that culture determines behaviour and, if so, what have been the motives for this?

If we later accept behaviours that were once considered anti-social, what does this reveal about our cultural expectations?

What cultural myths can you describe that relate to education and schooling?

Part 5: Focus on Words

In part four, we learned we are in danger of drowning in our own culture if we don't learn to swim underwater or climb out of the bowl. Once out of the bowl however, we face a more insidious danger: language.

Parents sometimes say, "Sticks and stones may break your bones but words cannot harm you..." but, at the risk of giving away a closely guarded secret, I will reveal that not even they believe it! See how they react when someone calls them something unpleasant for sitting on the pavement during rush hour and you'll see this for yourself.

If objects such as clothes and cars have *symbolic significance* in our culture, that's nothing compared to the words that describe them. Every good advertiser knows the value of a set of carefully constructed words in order to bring about the set of behaviours they desire, which mainly involves transferring large amounts of money from wherever you keep it to wherever they want to put it. For example, describe that good looking car as a *freedom machine* and some people will certainly consider buying it on the strength of that description. Consider what *freedom machine* means and you may arrive at the conclusion that it means the car can actually move you from one place to another which is what cars do isn't it?

The freedom comes from your ability to choose where to drive. Why then, does the description *freedom*, when attached to *machine* which is nothing more than a statement of what a car is, motivate some people more than *moveable car*? The answer is to more to do with what is associated with the words than what they mean.

Light of the Word

It's true that language has power and a whole branch of study known as *semiotics* suggests that our individual worlds are actually constructed through the meanings we apply to words. This means that words have meanings which change according to their *contexts* and over time, rather than being the concrete, objective and immovable constructs some may have thought.

An easy and oft used example is the word *gay*. Are people who are gay in the modern sense of the word still gay in the old fashioned sense of the word? This is an interesting question to which I will never have more than a second hand version of the answer. It is an example of how words change their meaning over time though.

I recall the Principal of a school at which I worked explaining to the student population in an assembly that *bullying* can include such behaviours as looking at people in a strange way. Students were counselled to report bullying so the Principal's inbox was filled with reports about people looking at others, as the Principal had redefined the word bullying in the school culture and no one really knew for sure what constituted *a strange way*. I would guess you could think of many more examples of how culture has changed as a result of the way words are defined, redefined and sometimes left *ambiguously* undefined.

For example, take the word *knowing*. Does it mean the same when someone says they *know* they are loved by their partner as it does when they say they *know* Africa exists? Do they *know* someone who can fix their car in the same way they *know* he/she can fix their car? And if that person fails to fix their car, does that mean they were in error when they said they *knew* they could?

I don't think that *semioticians* think that physical objects are constructed from the sounds words represent; more likely, it is the case that the important things about the concepts we deal with everyday have meanings that come from the language we use to talk about them. The suggestion is that the things we *associate* with words are more powerful than their *literal* meaning. In the same way that usually, we're more interested in the meaning that's communicated to others about our personalities through the clothes we wear and the cars we drive, the concepts we express in words are defined by the meanings that surround them; that is their *connotations* rather than their *denotation*.

For example, how do we know the meaning of words such as *beautiful* or *handsome*? Probably the same people who informed us of the inability of words to hurt us as much as a stone thrown would say something to the effect that, *Beauty* (or handsomeness) is in the eye of the person looking (the beholder)." If this is so, how is it that attractive actors and models are considered as such by most people in our culture? There must be some agreement in meaning and surely this means that there is a set of criteria in the back of our cultural mind that tells us how to respond when we're confronted by certain characteristics.

Unenlight

I'm sorry to disillusion you if you had already constructed an image of me from reading this text but, I'm short and relatively round and I don't see many people attempting to look like me. My wife thinks I'm attractive but I don't need to conduct a survey to find out that not many people

would agree, as qualities such as *short* and *round* are not high on the list of attractive qualities possessed by people in our culture. Other qualities are but, I would ask, "According to whom; who made that decision?" I certainly don't remember participating in the meeting that voted on those things and arrived at the various conclusions we are all aware of! Perhaps this could be changed by a focused campaign of advertising: "Get the freedom of being able to roll down a hill today: Roundness is where it's at!"...or perhaps not.

As I believe in the same cultural ideas as others, being short and round could make me unhappy as I know that the qualities I see in the mirror are not considered attractive. Although I could become less round through an ordered regime of semi-starvation, as I am already an adult I am unlikely to get much taller.

Rather than allowing myself to be disadvantaged by a cultural idea of attractiveness that I didn't help to construct, I could choose to think for myself and choose personal ways of looking at the world that don't rely on the cultural construction of words that define concepts that relate to me. In doing this, I'm moving away from the bowl altogether since, if I reject *shared cultural understandings*, I don't need to choose a car, clothes or employment that suits the cultural ideas about what I should do: I'll simply put on my purple jumpsuit, sit on the sidewalk and suit myself! If I feel sad, I might cry and, in doing so, resist the notion of what it means to be *manly*. I may become a true freedom fighter by singing in the street when I feel happy, although those who lack insight may try to stop me as it's against the cultural rules unless I'm with a choir or it's Christmas; I may cry when I feel...errr...like crying and, in this way, I'll move towards freedom without a machine's help. I'll continue to make those strange movements when music plays that I have labelled *dancing*.

Flashing Red Light

I must warn that choosing to resist cultural notions is a brave thing to do as both the bowl and box are very strong even though both are transparent and will try hard to keep you and the goldfish inside to the point of mocking those who choose to be different. In history, free thinkers such as Galileo, Bill Gates and many others, gritted their teeth and dared to do this and did well as a result. I am aware that *doing well*, is also a cultural notion so you may wish to substitute the names of people you admire to replace my examples.

Of course, choosing free thought wouldn't help me to avoid the ways others use language. As we do need to agree on the more or less precise meanings of some words in order to communicate,

we can't avoid the problems with language entirely. Imagine the confusion if the meaning of all words was the result of personal decisions: I'd ask you to hand me an apple and who knows what I might get dependent on what you chose the word *apple* to signify. Would it fit in the fruit bowl?

We'd all get into real trouble if *love* had meanings that we didn't consider culturally clear, even though they are not. Sometimes, we need to pretend.

It seems to me that we all exploit the lack of clarity in language to some extent, such as when friends ask us about an event that we were involved in; it's amazing how we use words that exaggerate in our descriptions and use a variety of techniques to position our listener to view us in the ways we would like to be seen even though they may not be pure fact. In this way and others, *subjective* elements are introduced in texts we may have wished to present as *objective*.

A bright kid on their way to being rescued may ask whether recounts of events that have been embroidered this way are fact or fiction, but we will explore that idea later.

In the thick of day to day living, often it's useful to have the skills that allow you to be critically analytical about language use and what follows attempts to help some of those skills to be developed.

Directing the Beam

Most statements people make are arguments. For example, that last sentence definitely was. Even something as simple as, "It's a nice day today..." leaves the potential for someone else to disagree viz:

Person One: It's a nice today because the sky's blue, the sun's shining and it's pleasantly warm for this time of the year...

Bright kid who's being rescued (RBK): When you state you think it's a nice day, this is obviously your opinion, even though you do not point this out. Perhaps this is because opinions in our culture do not have the weight of statements of fact. The evidence you provide to support your notion of niceness e.g. blue sky, shining sun and ambient temperature, are *cultural assumptions* that are open to challenge; it's possible to believe that there are people who believe that these things do not indicate niceness when applied to *day* even if I can't say who and therefore they do not support your initial proposition...

Person One: You can be very annoying sometimes...

RBK: Again, I would point out that your statement about my capacity for being annoying is your opinion and therefore has no basis in fact...

Person One: Please go away...

RBK: (sadly walks away feeling misunderstood)

I am not advocating you apply any skills you develop through reading and reflecting on this text in this way but, the basic ideas are sound. When someone wishes to convince us of the particular side of a serious issue, they will make a series of statements which can be looked at analytically. We can do this by asking ourselves questions about what is being said such as:

Is the statement being made factual or opinionative?

Sometimes it is difficult to see what is factual and what is pure opinion. It may be more difficult than it seems at first to define exactly what the words *opinion* and *fact* mean as cultural assumptions often seem to support opinions in our society that only have validity because they are widely believed. If they are only believed, they have more in common with opinion than fact although it is obvious that a fact must be believed as well as having evidence to support it. Earlier in history, most people believed the Earth was flat. This is not widely believed today but it may be useful to consider how good the evidence is that the Earth is a globe. Could it be a cube?

b. Is it supported by *sound evidence*?

Facts are widely believed to be statements that are supported by evidence but often it's hard to judge how good the evidence is. For example, there seems to be evidence that the Earth is flat in front of our noses when we look at a wide sweeping plain. Usually, when balls are placed on round surfaces they roll. This would cause many problems on Soccer pitches at the beginning of games so the Earth's flatness is an asset and this is evidence of it.

Other people would argue that this is explained by the fact that the Earth is such a large globe, things that look flat are so slightly rounded we cannot detect it through our normal senses; they are so slightly round, they don't affect balls. I'm not sure how good the evidence is that supports this statement but photographs from space and journeys across the horizon don't appear to be conclusive as, like you, I can think of a dozen explanations of these things that don't rely on the Earth's roundness.

Perhaps we need evidence that the evidence that supports a fact is enough...or evidence that supports the enoughness of the evidence that supports the enoughness of the evidence that

supports the...and so on until you disappear up that familiar dark space. Perhaps you can think of how we can be sure that evidence supports a fact.

Does the argument use devices such as *emotive language, generalisation or rhetoric* to support its key points?

Very often, in our quest to gain the loving respect of others, we use sensationally, descriptive prose which rolls off our tongues like liquid gold and insinuates itself into the ears of the listeners so subtly they are entranced by our eloquence; there's nothing wrong with that is there? I'm sure that if we listened carefully to many fine speakers we would find they all do the same. In fact, five score years ago... our ancestors were seared in the flames of withering injustice...(Martin Luther King)

<http://www.americanrhetoric.com/speeches/mlkhaveadream.htm>

Attempts to engage an audience's emotions can obscure the facts and imply the response that we would like rather than supplying the information necessary for our audience to form their own opinion. *Positioning audiences* in this way is appropriate at times but this must be considered very carefully.

Read the following argument and see if it stands up to scrutiny when you look for the items that have been mentioned above.

Whale of a Meal

Frankly, I don't understand the preoccupation that some people have with dolphins. Sure, they're interesting to look at but why is their welfare more important than other animals? In fact, most of the do-gooders to whom I've posed this question have mumbled something about the level of intelligence of dolphins. My reply has always been: what reason is there for IQ testing our food or even considering its level of intelligence?

Most of us will happily eat cows, pigs, sheep and other animals without guilt, provided we don't see the Disneyesque pictures that characterise them as four legged humans with feelings and it must be the case that all these creatures have a certain level of intelligence. Why would the fact that dolphins apparently have a superior level of intelligence prevent us from feeding tuna, and the dolphins that get caught by accident in the nets of tuna fishermen, to hungry people? Why is it inhumane to kill intelligent animals yet not inhumane to kill animals we classify as unintelligent? I don't believe that corporate burger chains undertake standardised testing of the creatures that end

up in their world acclaimed burgers, yet the public beats a path to their door apparently unconcerned by this fact.

Does this argument imply that there are levels of inhumanity that are linked to differing degrees of intelligence since, surely the intelligence of animals must range along a continuum in the same way human intelligence does. Is it more inhumane to eat a cow than it is to eat a sheep because a sheep is less intelligent?

I'm told that even radishes scream when they're pulled from the ground, suggesting a self concept; are vegetarians also relatively inhumane and what are the implications of this for human behaviour and, particularly, the human diet? Is the logical end of this argument that it's OK to eat some humans if their intelligence level proves to be lower than the average level of an animal we commonly eat?

It's quite clear that the whole argument is ridiculous. Dolphins are animals and humans eat animals are the only two relevant facts. Whales are also animals and, removing all the qualms we have about picking and choosing which species we eat and which we don't will make it easier to solve the problem of world hunger. It will be interesting to see how the world reacts to a McWhale, but my guess is that they will sell by the million!

Analyse the text and you may see that it loses much of its impact when reduced to personal opinion rather than being the factual argument it appeared at first? Why am I asking you that, when I know you won't answer me?

Enlightened or Un...?

When you walk into the public library, you will see that there are sections labelled *Fiction* and *Non-Fiction*. Before you were rescued, you may have thought that the *Non-fiction* label indicated that you would be reading truth or fact. We've looked at some of the problems with these notions but I know you want more!

Consider the example of autobiographies. An *autobiography* is usually written by a person who is looking back on their life. It wouldn't make sense if they were at the beginning of their lives writing about what *will* happen would it? And if they did do this, under which section would it fit in the library? Imagine the distress about not being able to categorise it felt by those trying.

Let's see

We have already seen that people often present things to others according to how they would want themselves seen. They don't actually lie but they might edit their texts a little, taking out things that don't seem important and exaggerating things that do. They may also use a fair amount of descriptive language and, as we already know, words have connotations. Some of these connotations may assist the writer to position their audiences. If they had chosen alternative words, the *facts* may have appeared differently.

In addition to this, their memories may play tricks on them as some of the events they are describing could have happened a long time ago and, when they originally filed the memory away in that inner memory cabinet contained in their mind, they could have edited it quite a bit in the way we have seen. It doesn't seem to qualify for the category Non-fiction in the same way as a reference book might; it doesn't seem to be truth or fact unless we alter what is meant by those terms to include it.

On the other hand, a reference book which uses language in a way that emphatically shows that it is authoritative and knows what it is talking about, seems to be Non-fiction when we first look.

Take a book about a war for example: if it had been written by someone on the victorious side, would it be the same account as if it had been written by someone on the side of the country that had been beaten? Who decides who has been beaten and who won in the case of a war; is this something that can be debated? And then, what if the author chooses language that is emotive and descriptive to outline the events being narrated-does it remain non-fiction or do all reference books, encyclopaedias etc have a subjective element? Is it possible there is no Non-fiction writing in the way we first thought; is all writing *relatively* fictitious or non-fictitious?

But of course, fiction is fiction is fiction right? If as an author, I choose to write about something in a fictional way and I decide to base it on a personal experience-as it happened, even though not in exactly the way I describe it, does it still qualify as fiction? Of course authors can only write about what they know about as it seems illogical to say, "I'm writing about something I don't know about..." therefore does all fiction have a non-fiction element in the same way that non-fiction has a fiction element? What is the impact on our culture if we begin to think that way? I'll tiptoe away while you boggle over that, and I'll write about something else. Try these activities:

Activities

Discuss the following ideas either in writing or with others:

Most people gain much of their information about world events from television news. A close study of the news reveals that reports use language in ways more associated with fiction than objective writing. Does this mean the audience is not well informed?

When a historical event is portrayed in a movie, is this fact or fiction? Given that all many people know about some historical events comes from such movies, are there ways in which the movies shape history?

How can we be sure that the arguments that stem from the opinions we state are accurate and factual when this is necessary?

There are many issues in our society that require societal participants to make decisions for example, whether we should hang people for capital crimes and, if we should, how we can be sure they are guilty. Construct a case in support of a particular view on one of these issues that cannot be challenged.

Discussion Points

As the word *fact* plays such an important part in our culture, how would a belief that all facts are *relative* rather than *absolute* impact on it?

If our understanding of history is shaped by the re-telling of events, can we ever be sure of what happened in the past even if we were present?

Are there any ways in which non-fiction texts deserve to be characterised this way?

Identify the set of criteria that underpins a claim to victory in any kind of battle with which you are familiar

It appears to be the case that the media through which we are made aware of current events in the world is inaccurate: what ramifications does this have for our values, attitudes and beliefs about other cultures?

Part 6: Light of the Moon

Imagine a distant and unknown tropical island apparently floating in a jade sea far from any other civilisation. The island is small and its inhabitants enjoy a paradisiacal lifestyle lounging on the white, sandy beaches soothed by the lapping sea, between lazily gathering fruit, and diving for fish in the crystalline, shallow pools that are created by the reef that surrounds the island.

Every evening, they light fires against the perfect rose sky and dance in an animated fashion expressing their pleasure in life, before feasting on the food they have gathered during the day.

You think back on how fortuitous it was that your yacht was swept off course by a storm and the winds pushed you to this beautiful coast; the same storm that damaged all of the electronic equipment that may have allowed you to communicate with the places you knew before. But then, as you lie with the islanders and feel the warm breezes stroking your weathered cheeks, you wonder if you ever want to go back to the civilisation you know, when everything you have ever dreamed about is here on this remote island, untroubled by illness or conflict. In an instant, you decide to stay here forever.

New to this culture it takes a while for you to realise that the large population seems to consist entirely of the young and healthy; in fact, you are the oldest person in sight at any of the congregations to which you are welcomed by the tanned, youthful islanders.

After being in this paradise for a week, the lack of any aged islanders begins to trouble you and you attempt to ask about it through strained attempts to communicate, using muttered words and hand gestures. With horror, you feel that you are beginning to understand the explanation, but recoil in disgust at the thought of it and think you must have misunderstood.

You are gaining more knowledge of their language all the time which seems to resemble a language you once knew and, one fateful night, you are invited to a ceremony that appears to be a highpoint in the island's calendar, conducted with much merriment and singing. You watch as a man of a similar age to yourself who you hadn't seen before sits in a shallow trench, his smiles competing with the tears in his eyes to convey to you the emotions he is feeling. On either side of him stands a young man who you are told, are the man's sons. Carefully, a rope made from vines from the trees on the beach is wrapped around his throat and then, each holding an end of the rope, they begin to dance and chant words you do not understand. The light in their eyes never dims and they appear to be experiencing great joy as they dance further and further from the man

in the trench, each step causing the rope to tighten until finally, the man falls back into the trench, a smile still etched on his lifeless face.

The islanders begin to dance together in what appears to be a celebration and, it is then that you notice that a second trench has been prepared and two young men are walking towards you. You struggle to hear their explanation as they wrap the soft vine around your neck but, finally you understand: it is the custom of the islanders to enjoy lives as lavish as the resources of the island will allow. To enable this, it is also the custom that everyone over forty must give up their lives as, if they did not, the islanders would not be able to enjoy the lifestyle that their culture and custom has dictated is their right.

You know that culture is a powerful force and you realise there is no point in struggling; since you had decided to live among the islanders, you have a moral duty to comply with their customs until death...

We have explored how powerful culture is as a force that dictates all of our behaviours through its construction of the values, attitudes and beliefs that shape our every thought and action. These same forces, also tell us what is right and wrong and, safe inside the cultural bowl, we feel that this set of codes is natural, condemning any individual or any other culture that doesn't have similar codes to those we share.

In the culture of the island in the story, there are different values, attitudes and beliefs. At least one of these is shocking to the person who is the main character of the story i.e. you.

Extinguishing the Glow

In western culture we believe, with a few exceptions, that killing others is wrong, although it is debatable whether it is wrong in an *objective* way or just wrong because our values, attitudes and beliefs say so. Many appear to condone killing others in war and some believe that capital punishment is valid. This means that someone could be killing others in another land one day and perhaps earning medals for doing so and then, being charged with murder and imprisoned or capitally punished the day after for similar behaviour in their own country. This suggests that killing is not objectively wrong it is only wrong in a relative sense that depends on its context although some people, such as those who are religious, may think differently.

Gas Powered Lamps

In both of the major wars that occurred in the first half of the 20th century, it was not uncommon for those who *did not* want to go to war for whatever reason to be branded cowards and despised.

In later wars, such as the one that occurred in Vietnam in the later years of the century, the changing culture branded the soldiers who *did* go to war cowards for not resisting the government's orders. It seems difficult to believe that objectively, people can be cowards both for doing a particular thing and for not doing it, which demonstrates the relative nature of the set of values, attitudes and beliefs that are known as *morals* and *ethics*.

Generally speaking, the difference between a moral and an ethic is that, while both inform a set of behaviours by individuals, ethics usually relate to the actions of a person during the course of their profession. For example, an individual may believe it is morally wrong to kill, but a doctor may need to decide where they stand on *euthanasia* which involves making a medical decision to kill in a country where that is legal. As an individual, the doctor may have a moral position on killing but in the course of their profession, will need to make ethical decisions about this which could potentially conflict with their morals.

On the island, there are obviously competing morals and ethics when viewed through western eyes, however they have resolved this problem quite well for themselves. Their culture dictates that they should enjoy a lavish lifestyle in much the same way that many people in our culture believe we should. Unfortunately, the population of their island would put too much strain on the island's resources if they had not developed a way of dealing with their problem and the solution they have hit upon has been embedded in their culture through their customs making debates about its rightness or wrongness redundant; the population embraces it and this is what counts. There is no argument about the objective wrongness of killing on the island and, in fact, they might argue that an older person who did not subject themselves to this cultural practice was acting wrongly: If an aged person doesn't want to be killed, they hold a culturally incorrect view.

You could argue that, as an outsider, you should not be subject to their customs but, they would possibly argue in return, "When you chose to live in our culture, you chose to embrace it." It has been argued that choosing to live in a culture dictates that a person should subject themselves to its laws even if particular laws are considered to be misguided by many.

This also applies to people who are born in a particular culture. If they consider the laws of the country to be onerous, they may have the choice to leave. If they do not leave, arguably they should be bound by the laws.

In the western world, if a person visits a country, they are subject to the laws of that country as is demonstrated by the number of visitors who are convicted in countries such as Malaysia for smuggling drugs. It is easy to see that a culture that does not wish its people to be damaged by drug taking and makes laws to prevent this cannot allow others who don't belong to that culture to break those laws as the end result could be the same as if the laws had never been passed.

Laws are often underpinned by things that the culture of the country dictates as valuable: If the country *values* the health of its people, *believes* that drugs are damaging to their health and has an *attitude* that drug pushers should be capitally punished or sent to gaol to prevent their activities, they have a cultural responsibility to uphold their laws in relation to anyone who might break them.

Another example can be found in the fact that many countries believe that property is important therefore they have laws that make stealing illegal. It seems to be true that laws have a circular relationship with the *ethics* and *morals* of the society: we create laws to support the things we value, have an attitude towards and believe and, in attempting to be law abiding, we see that those values attitudes and beliefs are reinforced. If you're unable to even contemplate a society in which stealing is legal, you will see how entrenched the values, attitudes and beliefs of your culture are.

Moving Shapes

In Upper Molangradigal, which is a small country somewhere between Australia and everywhere else, stealing is not only legal, the population encourage it. If you visit, don't make the mistake of saying to a resident, "Ooh I like your tie," because he will then say to you, "Wait until I'm not watching and take it!"

You may be tempted to ask, "If you want me to have it, why don't you just give it to me?"

To which the reply will be, "Giving things away is illegal and I am a law abiding person. If one gives things away, it shows ingratitude for the health and strength that allowed a person to generate enough money to buy their possessions.

If you steal it, you can be grateful for the health and strength you had that allowed you to take it from me when I wasn't looking and still own it, which is the reason giving is illegal and stealing isn't. I'm sure you can see the logic in that."

If later you steal a meal together, you may talk about other subjects such as whether taking someone's life is stealing and therefore legal or not, although take care that Upper Molangradigal is still there when you do as it tends to disappear when people question its moral code.

In seeing Upper Molangradigal as silly in its morals regarding stealing, you are reinforcing the notion that the moral eyes through which you are viewing the scene are natural. What a shame, you're back in the bowl.

In history, many of the conflicts between countries can be explained in this way: one country that believed its moral codes were natural; the way of nature, attacked other countries that had different moral codes. Listen to the way people describe the actions of some countries during war time as an example and you'll understand that, underpinning their comments, are a set of morals that they consider to be objectively right.

The way *primitive* people have been dealt with by those who consider themselves more *civilised* is another example: Judgements are made about the morals of the primitive group that are based on observations that are measured against the observer's own moral viewpoint and, the observer who was often more powerful than the observed, took action to protect the primitive people against their own cultural practices. In discussion with others, you should be able to identify many issues which fit this description.

Clearly, a culture needs morals and ethics to facilitate its smooth running however morals and ethics may be *relative* and not as *objective* as some groups in our culture would have us believe.

It is interesting to consider how moral and ethics are formed and, as sure as the fact that down is opposite to up, you will be forced to make many moral and ethical choices in your life whoever you are.

Light Within and Without

Whether you know it or not, that piece of paper in your pocket that has numbers on it is not worth the numbers. It costs a very small amount of money to make paper currency meaning the *intrinsic* value is low. Their extrinsic value is set through a range of complex economic laws that I do not understand which is why I won't try to tell you about them. This is probably the reason I am poor

well, that and the fact I have been collecting silver coins and melting them down for scrap hoping to get more than their extrinsic value. As soon as I can work out how to make the process of melting them down cost less than their face value I should begin to make money. Pssst...this is against the law so don't tell anyone.

The complex economic laws seem to consist mainly of agreeing and pretending. Let's agree that a piece of paper with ten on it is worth ten even though the same piece of paper with five on it is intrinsically worth about the same. We can pretend they are worth what they say to the point of presenting them to someone who has goods or services intrinsically worth more than the pieces of paper we have and swapping them for the paper. In this way I can acquire lots of high value material possessions for low worth paper which is useful as people in our culture tend to like those who have possessions. One word of caution, the pieces of paper are simply that but they are printed in particular ways that contribute to their extrinsic value and, if you try to print your own, you're likely to fall afoul of some of those morals and ethics that underpin the laws of forgery. The government can print extrinsically valuable pieces of paper but, we the people who elected them, are not allowed to do so!

If you've ever been into an art gallery, you will have seen further examples of this process at work. The large canvas that occupies most of the West wall looks as if a centipede on some kind of drug ran across it with blue and red paint on its feet while being chased by a gaggle of demented geese continually pecking and scratching at the canvas and the centipede.

Art critics describe the artist's technique as *innovative* and the composition as overflowing with life contrasted by the colours, which act as a stark reminder of the ever continuing conflict and contrast between humankind and the obscure landscapes that repress our primeval urges.

The intrinsic value of the canvas, paint and the artist's labour is fairly low. The cultural response to the painting which was constructed by the various art critics who said unintelligible things about it, somehow adds huge amounts to its extrinsic value; therefore, the extrinsic value is mainly shaped by the values, attitudes and beliefs of the culture which strangely values the critic's words. It's almost immoral relatively speaking.

Then there are the ethics of using animals in ways that suit some humans such as scientific experimentation which seem to be debated between groups that have varying views on whether animals have feelings or not:

"How would you like perfume to burn *your* eyes?"

"Animals neither *like* nor *dislike* things as this is an emotional response felt by humans..."

"How do you know that? Animals can feel pain..."

The following is an edited version of an online news story on which readers were invited to comment:

Two young graffiti artists say they will never go onto railway tracks again after seeing their friend killed by a train.

An 18-year-old apprentice tradesperson was killed in a railway underpass while he was "tagging" on a January night last year.

The deceased person was with two friends, who were both 17 at the time, when they decided to tag a freshly painted wall near a railway station.

The Coroners Court was told he may not have heard the train coming and been caught off guard near the wall he was tagging or in the underpass.

One of the taggers, now 18, told the inquest the deceased was highly regarded for his tag which was well known in the local area. He said that he and one of the others had just passed through the underpass tunnel when a train suddenly came through, surprising both of them.

"I couldn't hear it until I saw it ... It was right there, " he said. They both began calling out to their third friend and ran back into the underpass to find him.

"I saw he was dead... I told my friend not to look," one of them said.

The other person, also now 18, told the court the train came "out of nowhere" and, when it had gone, their shouts for their friend were met with silence.

"I looked on the tracks, and saw he was dead."

When asked by the Coroner what his attitude to graffiti was now, he said he was "over all the illegal stuff...I never, ever would get on a railway track again."

He went on to say that a lot of taggers who had heard about the accident now chose less dangerous sites.

The coroner asked both young men, who are now doing trade apprenticeships, to get the message out about how dangerous tagging along railway lines is.

The inquest heard that a Railway education program in schools spread the message trains were like "grey ghosts" that could not be heard until they were on top of you.

Outside court the deceased person's mother told AAP she didn't want another parent to go through what she had, so she wanted to see measures to prevent further track deaths.

"I go there at night, I spotlight, I try to stop all these kids ... I speak to them, tell them to stop doing it because of how dangerous it is," she said.

The inquest continues.

There were nearly a thousand comments made on this story and they can be divided into two main categories: those who thought someone breaking the law this way deserved their fate, and those who believed that young people sometimes do stupid things and that this death was tragic. The large number of comments consisted largely of people arguing this view and, as is often the case in online discussions, telling those who disagreed with them how stupid they are.

It's not necessary to read the comments in detail to realise that there are moral views underpinning them all and, certainly on one side of the debate, the moral views being expressed are out of step with laws that uphold the society's views on this.

Activities:

1. Could there be reasons to believe that graffiti is art and therefore valuable?
2. In your opinion, do online forums accurately represent the feelings of the community? Why?
3. Make a list of the most common moral/ethical views held in society that inform people's behaviours.
4. Identify how policy makers could identify the feelings of the community in regards to the moral views expressed in online forums so that laws more closely match the morals and ethics of society.
5. Discuss, in writing or with others, the relationship between our day to day actions and our ethical and moral beliefs.
6. Write a story which describes the behaviour of people after a major disaster has destroyed the current structures of government, police etc. Since people's behaviour is usually dependent on the Values, attitudes and beliefs held in the culture, don't forget to detail how and why these change after the disaster.
7. Consider your own actions in the following circumstances:
 - i. While walking along a quiet street early one morning, you notice that an elderly, shabbily dressed woman immediately ahead of you takes out her purse to check its contents without noticing that she has dropped a fifty dollar note onto the pavement while doing so. No one witnesses you picking it up as there is no one else present: what do you do?*
 - ii. Amazingly, the same thing happens the following morning however this time, the person who dropped the note had just stepped out of an expensive European car which remained parked at the side of the road. Also, unlike the shabbily dressed person yesterday, this person is dressed in an expensive Italian suit. Are your actions after picking up the note the same as those of yesterday? Why?*
 - a. What set of morals and/or ethics do your actions reveal?
 - b. If there are others who would have acted differently to you in either of these circumstances, how are their personal morals/ethics different to yours?
 - c. Which set of moral/ethics do you believe is more common in the society and why do you think this is?
 - d. What factors in your life shaped your moral and ethical views?

Discussion Points

Are most of the laws of your society based on extrinsic or intrinsic moral views?

If morals are relative to their context, speculate on how the dominant moral views in your culture have evolved

Can you mount an argument that a moral or ethical view of which you are aware is objectively true regardless of context?

Discuss the ways in which moral and ethical views are transmitted between generations in our culture

Describe and evaluate the dominant issues in your culture that underpin most moral and ethical views

Part 7: Whaddya See?



The picture above is of *The Comet* which was the first jet powered aircraft to enter commercial service. That is, it was the first to fly fare paying passengers around. I'm sure you would agree with me that it is attractive as aircraft go, the main reason being the incorporation of jet engines into the wings which give the aircraft a neat and sleek appearance. This feature isn't seen in aircraft of today and we can learn a lot about how knowledge functions in our culture when we think about the reasons for this.

It seems to be true that most people know everything, with the exception of what they don't know and, if they knew what they don't know, they'd know it. It sounds complex doesn't it but the Comet's story illustrates this truism very well.

After years of testing in order to get a license that allowed the aircraft to fly with passengers, it flew its first commercial flight in 1952 and had the first of a series of serious crashes a year later. Obviously the designers and manufacturers had good reasons to think it was safe after all those tests and it's unlikely that they stopped to think that, in a changing world, the laws of aerodynamics might suddenly change. In fact, the laws of aerodynamics don't seem to have changed but, investigations revealed knowledge that the designers didn't have that explained the crashes.

It's the case that they didn't need to find the missing knowledge prior to the crashes as they thought they knew everything that would impact on whether the plane would fly safely for the long term; people seldom look for solutions to problems they don't know exist or if they are satisfied with their current solutions. This seems to suggest that all new knowledge is built on old

knowledge and the implications are that there is a lot of knowledge waiting to be known if people were motivated to look.

Some things change suddenly in our world but, if we worried that the basics might suddenly change we would have many problems living from day to day; we must believe that the world that was outside the door the last time we looked will still be there the next time we look and that it continued to exist when we weren't looking for example, so it's reasonable to think things will stay the same even though many times they don't. If the world was like the light in the fridge that is: only on when we look, it may create a few problems...

Unfortunately, our need to make sense of the world, often leads to beliefs that are not warranted by the observations that seem to lead to them. If we then go further and say that these beliefs are facts or knowledge, further problems can arise or rapidly descend as in the case of the comet.

Many years ago, if you had a problem with your leg, a *surgeon* who spent most of his time giving people haircuts, had just the solution: cut it off! Some people had their lives saved by this, as they were suffering from gangrene which would have spread throughout their body resulting in death. Others were unnecessarily provided with a new way of making a living, as their leg would have healed without surgical intervention but they now had the opportunity to claim money from others as a result of their newly acquired disability, by sitting at the side of the road with a sign indicating their missing leg. Most of these would have preferred not to have been provided with this business opportunity.

Some, became very hot after the surgery, then became delirious and finally died although the surgery itself went well. The surgeons couldn't really explain the reasons for this except to say, "Ce'st la vie" which wasn't very comforting to the legless patient's family as they couldn't understand French. Finally, someone who had been thinking about why some people reacted badly to the saw and the whiskey, said, "What if there were tigers so tiny we couldn't see them on the saw, which were transferred to the patient when his leg was cut off which then feasted on his flesh, causing his death?"

"Don't be silly," said the people around her, there couldn't be creatures so small we couldn't see them.

"Don't be silly," said the scientific community, there is no valid evidence that such things exist.

"Take a look through my new invention the microscope," said Antonie van Leeuwenhoek and sure enough, the whole world saw something new which changed the way they viewed reality from

then on. They soon gave the tiny tigers a set of new names so they could be differentiated from their larger, carnivorous counterparts and asked, "If tiny things exist apparently in a world of their own, what else could there be that we can't see?"

"Don't be silly," said the same people as before, still reeling from the invention of the microscope and not yet possessive of enquiring minds and all the insecurities that come from them.

In the same way that the designers and engineers of the Comet had learned something they hadn't been able to take into account in the construction of their wondrous aircraft, the discoverers of *Bacteria* had found something else to take into account in human endeavor.

The world learned that the Earth was not necessarily flat nor the centre of the universe then and today scientists are continually making new discoveries that change the way we all view reality. See how the last sentence will be true throughout history, neat huh?

Sometimes in fact, the old incorrect views worked perfectly well in ways that counted on them being true such as in early marine navigation. By taking readings of the position of the stars in relation to the Earth mariners could tell where they were fairly accurately, even though their basic assumptions were still not true in the absolute way many scientists view *knowledge*.

In the same way though, sometimes new discoveries disprove other things that we thought were true for example, just when we thought we had figured out for sure how the physical world behaves and stated laws to explain it, quarks were discovered. Quarks are particles of matter smaller than atoms which behave differently than larger particles and so disprove laws of science that had been believed to be absolute for all matter since, to say otherwise would suggest they are not really *laws*.

For hundreds of years, thinking people have been pondering over what there is to know in our world and how we can know it. In part three we explored the idea that our primary means of gaining information about the world that is, our senses, sometime lie. If that wasn't the case, chip manufacturers wouldn't be able to claim that a packet of chips that had never been anywhere near a chicken, was *chicken flavoured* when, what they had really achieved was ways to find the chemicals that cause your mind to say *chicken* when they appear on your tongue. But, if our senses sometimes lie and therefore can't be trusted, what's left?

A person writing in the 17th century named Descartes (pronounced Day Cart) said, "Cogito ergo sum." It's possible that he wrote it in Latin to make sure that only scholars who could understand Latin could see what he meant but it roughly translates to, "I think therefore I am," meaning that

the fact that he consciously thinks proves that he has some existence even if he can't say for sure what form that existence took. I only point this out so that you don't end up believing the somewhat snobbish idea that those who don't think don't exist and therefore are not worthy of your consideration as, when you're a RBK, you have extreme responsibilities to those who remain in the shadows.

Descartes also said that we all need to doubt everything at some point in our lives and, although you may doubt this, this is what he was attempting to do immediately prior to writing "Cogito ergo sum." In other words, he had dismissed any information that came from his senses as unreliable and felt that the only thing he could know for sure was that he existed. He apparently doesn't exist now as, if he did, he would be more than three hundred years old and it is a common belief in our culture that people don't live that long so it is impossible to know what he would say on the subject today. Even the words he left have problems and, I would like you to cover the text and try to figure out what they are before I go on to tell you. Hopefully, you'll see some problems I can't!

Before I do this, let's look at other ways that have been used to find *truth* such as *reasoning*.

An early Greek named Aristotle, used a reasoning method known as *sylogism*, which has worked pretty well ever since. If you recall from a previous part, every statement is an argument. For example the statement "All humans are mortal" could have people such as part Rescued Bright Kids disagreeing. Of course they wouldn't do so in an annoying manner even if someone's degree of annoyingness is a *subjective* matter.

If, for the purposes of avoiding argument, we accepted that "all humans are mortal" is true and added another statement and a conclusion that follows logically from the two statements, we have a syllogism:

All humans are mortal

Socrates is human

Conclusion: Socrates is mortal.

As you can see, a syllogism has a particular structure which leads to logically convincing conclusions which Ancient Greeks, and the people they are arguing with, can accept as true.

When syllogisms are discussed, the statements are called *premises* rather than arguments or statements. For example:

All books written by Martin are readable (premise 1)

Rescuing Bright Kids is written by Martin (Premise 2)

Rescuing Bright Kids is readable. (conclusion)

Of course if people actually spoke and wrote like this, syllogism would be very useful. Unfortunately, they usually make statements that need to be constructed into syllogisms if this form of argument is to be any use.

e.g. "Sorry I was late, I was on the other side of the school..."

Syllogism:

All students on the other side of the school are late

I was on the other side of the school

I was late.

Seeing that the statement "all students on the other side of the school are late" is incorrect is easier than seeing whether "all humans are mortal" is correct but, when we do see that the first premise is incorrect, we can see that, although the conclusion does follow from the premises logically, it's not a good argument because the premises are not true.

What about:

All birds have feathers (P1)

I am observing something with feathers (P2)

Conclusion: it is a bird... (c)

And, if it is, why is my wife wearing it?

I don't need to tell you what's wrong with this syllogism to allow confusion between feather hats and birds; it's that, even *if all birds have feathers* is a true statement, it isn't saying: *everything with feathers is a bird*. While having feathers may be a **necessary** part of being a bird, it isn't a **sufficient** part.

I would ask you to bear syllogism in mind next time you have to construct an argument and suggest that, "I was late because I was sitting on the pavement rubbing peanut butter into my hair," is possibly a better argument than the one offered by the student in the example.

Getting back to Descartes' claim however, you will see we can make it into a syllogism:

All people who think, exist (P1)

I think (P2)

I exist (C)

It will be obvious to you that, in doubting everything, Descartes couldn't have claimed to know that "All people who think, exist," so a problem with this argument reveals itself immediately. You may also have noticed that, at the beginning of the original statement, he refers to himself as "I." This personal *pronoun* prefaces a verb, which is a description of an action performed by the person referred to by the pronoun therefore Descartes has a belief that he exists before he begins which again causes his argument to fall in a heap. If you think that writing syllogisms that are both meaningful and logically true is easy, I would invite you to have a go and then try the following activities:

Activities:

Discuss the effectiveness of syllogism as a means of finding truth, taking care to highlight both its strengths and weaknesses

Convert a few statements that are commonly made e.g. Scottish people are mean and evaluate their worth as statements of truth

Explore how the syllogistic form underpins many of the negative stereotypes in our community and write about the process necessary to replace them

Find a text in the media or on the internet and critically analyse it in terms of the truth of its basic assumptions

Discussion Points

How can claims of truth be evaluated in a real sense within our culture?

Define and list the skills necessary to be a critically aware participant in the democratic process

Examine the ways in which young people can be equipped with this set of skills

A leading world body has stated that being skilled to be critically aware in the 21st century is as important as being taught to be literate was in the 19th Are there reasons that you support or reject this view

Are there ways other than those described by Descartes in which you can know anything with certainty? What can be known and how?

Part 8: Light of your Mind?

As a young boy I had a very active imagination. As a result, the mundane world became an interesting place that was never as it seemed to others as, to me every object was alive and deserving of my consideration: had I played with one toy more than the others and were the others offended as a result? Was one cream cake offended that I had chosen to eat its companion and, do cream cakes really *want* to be eaten anyway?

I was particularly concerned about the tiny actors who populated the family television set and, on the rare occasions I was present when the television was switched off, I would wait for them to emerge from the back headed home, so I could thank them for the entertainment they had provided. I don't recall them ever emerging however, to a young mind, it was easy to believe they were there as how else could I see them?

Much later, I learned about radio waves and how information can travel through the air and be displayed on my television receiver in a way that made it seem I had a window on the world and could sometimes even see events as they were occurring great distances away. This idea told me that the actors were a long way from our television and their images were beamed to us by invisible waves. Perhaps this explanation even has some truth to it even though it relies on believing in something that can't be seen.

Much, much later, it occurred to me that our minds may be like that: we feel present when we are witnessing events as the instruments we use to witness them such as our eyes and ears are mounted on our heads. This also gives us an impression that our minds are in our heads which it seems, many people believe: the mind is inside the brain that is inside the head. In fact, in the world in which we live where science is king, *Fred and Jill Everyperson* prefer to believe anything that science confirms even though they don't necessarily recognise the contradictions and limitations of science that we have already discussed in earlier parts.

Now, I am well aware that there appears to be evidence to support the idea that our minds and their associated consciousness are produced by brain activity. For example, those who have access to the electronic instruments that are available to people who are specialist in this field claim they can measure various kinds of brain waves that demonstrate this. That is, the person who is being studied reports they are thinking about certain things and the meters and dials click indicating a form of brain activity that the experts claim is associated with those thoughts. They claim that the fact that these things occur at the same time is excellent proof they are connected.

We might consider the idea that the instruments are reading brain activity in much the same way that we could monitor activity in a television set when it is receiving information from elsewhere. That is, the picture on the television in no way proves that the activity is *in* the television as it is occurring elsewhere, yet the activity that is occurring always *correlates* with the activity in the television set when it is switched on. They both occur at the same time and, have a relationship in that one causes the other, however they are not evidence of one being the other. The brain in this *analogy* could have the same relationship with thoughts as a TV does with transmitted information.

Some could argue that when people are brain damaged, their thought processes are disrupted and there is no doubt this is true. I'm not sure that their conclusion that this proves that the mind is in the brain is valid though as, when a television is damaged, its ability to display a picture is impaired but this does not mean that the transmission itself has been altered.

Invariably, people like you and I who really think things through and then lean towards the notion that the mind is in the brain, construct arguments that suggest that the mind or consciousness is the result of various mechanical things that occur in the brain such as chemical interactions; they argue that all our personality features are the result of things occurring in the brain that can be observed even if we can't say at this stage, exactly what observed event has produced a thought or feeling that could be reported. The argument is that the conscious mind is a *product* of the mechanical processes and can't exist without them.

On or Off?

Science has recently become aware of a phenomenon that has been reported over a long period of human history: *near death experiences (NDE)*. This may cast a different light on the subject.

A near death experience is where a person says they remain conscious after they have been declared clinically dead according to the current criteria medicine relies on to prove death, the central one of which is the cessation of brain activity. Some scientists have studied this phenomenon and concluded that a mechanism that is still not understood, suggests that the criterion of the cessation of brain activity to indicate death is not accurate. For those who believe that the mind has material existence inside the brain however, a near death experience is nothing more than random activity in the brain prior to its cessation giving the illusion of continuing activity or the product of imagination.

It is possible that, as in the instances of Comets and quarks, science has more to know about the mind and the brain before it can legitimately make any claims of knowledge and there are good reasons to believe that this may not be possible as attempts by conscious minds to study themselves appear destined to have problems.

In relation to other aspects of the mind, some argue that the brain only has two states: *aroused* and not aroused and all emotions are a result of our observations of the context of an aroused state. For example, if we are confronted by someone scary, we identify the arousal as fear; someone attractive and we label it love or something... These experiences certainly seem real but hey, what's reality anyway, right? Our consciousness is always present when we're awake and it resists efforts by others to say it's not how we feel it is.

It is true that both you and I can bring to mind clear images of people we know well but it is equally true that, if in a fit of pique I decided to open your brain, I couldn't find the pictures so where are they? I could find a lot of messy grey matter which has been named *brain* but I couldn't find your memories or your personality; errr...it's probably better if you don't ask how I know; this may be one of those extremely rare times when you just need to accept it at face value! If I had the instruments mentioned earlier, which didn't include a chainsaw, I could find electrical activity, but I couldn't find you.

It could be that, in using terms such as *pictures* and *you* in this context, we are using language in a way that is at least as misleading as language usually is. Perhaps there are various ways of both *you* and *pictures* existing and, in using the terms the way we usually use them, that is to refer to phenomena we can observe, we are just confusing the issue.

It's hard to be sure but, it's difficult to imagine what evidence we could find that the mind is in the brain if we discount correlating brain and mind activity. Perhaps the word *mind* is a different type of word to *brain*. Undoubtedly, brain refers to something with physical existence but it's possible the *mind*, if it has existence at all, has different qualities. Claiming to lose your mind because you're reading this text doesn't help the discussion at all since it still doesn't clarify what you've lost in a way that would allow you to find it like your glasses when you dropped them under the bed.

If I ask you, "How's your day been?" you can probably answer but if I say, "How has your *hippocampus* been today?" it may be a different kind of question. I wouldn't try this out on others

unless you need to provide them with the final piece of evidence that you're either bright or odd, depending on whom you're addressing.

In terms of a definition of *reality*, perhaps this word doesn't relate to a concrete, material world in the way we would usually believe. Maybe it is a description of the set of perceptions that we seem to have and which, as a community, we seem to share, even though I can't be sure that what you mean when you say, *Red*, or anything else for that matter, is the same as the phenomenon I am perceiving and language doesn't help does it? I can't even be sure you exist and sometimes have problems being sure that I do. Maybe thinking would help!

Light of the Computer Screen

Will reality be any different when we are all linked to supercomputers that generate virtual reality in ways that make it indistinguishable from whatever it is we mean when we use the word *reality* when we're not connected to a supercomputer? Even the world inside our heads is not as straightforward as we thought. If reality itself is problematic, what about the things that seem spring from it such as *freedom*?

We can agree on whether we have freedom or not in a cultural context. For example, we say convincingly that people who are not allowed to move around according to their will or cannot elect governments of their choice are not free but what about the freedom that seems to exist inside us?

Strobing Will

Welcome to this page. I know when you began reading this book and came to this page you felt you were making choices. The question is: could you have decided not to pick up the book, not to open it and not to arrive at this page? I know you thought you could but, we have seen many things that seemed to be obvious suddenly become less so...

While I am quite sure you'll enjoy the page, which has been hand crafted and especially tailored to fit into this part of the book, you would have to wonder what evidence would be enough to support the idea that you made choices that resulted in you arriving here reading this instead of doing something else. The fact that you might feel like doing something else is not evidence of anything. I should point out that the words are in the right order even if you may need to read them a few times to see this.

It feels to both of us that you made a choice that brought you here. You may have been thinking: I'll take a few minutes to read some of that bright stuff instead of watching TV, before picking up the book but, what if you didn't choose to think that thought or go through whatever events led you here; would that have resulted in you doing something else? Good evidence that you could have chosen *not* to do what you did, would be that you didn't do it but, this may have been because you couldn't do otherwise than what you actually did do even though you thought you could.

I know this seems pretty complicated so let's use the following example:

Imagine a robot that had been programmed to run a maze. Somehow, as its maker, you had given the robot the ability to think that it could make decisions however really, whenever it came to a fork in the maze that had right and left choices, it could only go right. The robot would make its way through the maze and pause at each fork before turning right.

The communication ability you built into the robot allowed it to explain the reasons it always turned right and, being the kind of robot that may have read a page like this given the opportunity, it offered justification such as, "I felt it was the right thing to do..." without being able to adequately explain the reasons for this.

Because it was resistant to the belief it had been programmed however and, because it wanted to believe it had free will, it would never even contemplate the notion it didn't and so, it continued to turn right as this was...right.

Unfortunately, the society of other robots that had grown up around the maze had passed laws. The most serious offence against these laws, was turning right in the maze. The robot was charged with turning right and required to plead guilty or not guilty as, even the robot itself felt it could have chosen to go left.

As the robot couldn't have chosen to go left, there is a moral dilemma for others, such as you who had programmed it, as you knew the robot was programmed to break the law and could have done nothing else.

Dark Side

In our culture, the issues that arise from the idea of whether we have free will or not are not usually that clear cut. If you want to try this for yourself, commit a serious crime and then argue in court, "As my personality is a result of mechanical processes in my brain that only gave me the

illusion of free will, I couldn't have done anything other than commit the crime for which I'm charged and didn't really make a moral decision to do it, although I may have thought I did." Please don't hold me responsible when you get locked up as I only made a suggestion and you, who probably feels they have freewill, didn't need to do as I suggested...or did you?

It may be the case that our minds exist inside our brains and the various chemical interactions that take place there predispose us to a certain set of actions while also fooling us into thinking they don't. While many people in our culture might also believe this, the culture doesn't acknowledge it as, absence of free will is not a defence for any crime I'm aware of. Insanity can be a defence but surely this means that, either temporarily or permanently, someone is suffering from something that makes them choose courses of action that are different to those they would usually choose. In short, they have been robbed of the right to choose instead of never having had it. Hopefully through this example, you can see how morals and ethics link to ideas of mind and freewill.

Activities

Is there possible evidence that hasn't been presented in this part that supports the idea individuals have *freewill*? If there is, state what it is before critically examining it.

In your opinion, is the mind in the brain? Explain the reasons for your view.

Some people who have studied Near Death Experiences have concluded that these experiences are a set of perceptions caused by the closing down of the brain. Give the reasons you find this a compelling explanation or not.

If your society accepted that people are *determined* in their actions and therefore do not have freewill, describe some of the significant changes that would be required. Explain how these changes would work.

Discussion Points

Apart from the examples given, are there times when we accept that people were not completely responsible for their actions? What are the differences between these times and others when we hold them responsible?

Is any evidence that may be produced that individuals do have freewill enough to prove this?

Critically evaluate the common belief that the mind is the result of brain function and comment on this proposition

What are the implications for a society in believing that individuals do not have freewill?

Can you identify ways in which science has been able to manipulate thoughts and other kinds of behaviour by causing changes in the brain? Is this good evidence that the mind is in the brain?

Part 9: New Patterns of Light

By now, the box should be in the same place as the bowl: a long way from you unless you have exercised your right to choose to remain inside. This could be a good choice as it's difficult to be different and, if you've ever tried, you'd know how hard.

I would like to tell the story of Jack who, having heard my lesson about how clothes are dictated by the culture, arrived at school the next day wearing a dress. Jack, at aged fifteen, was tall for his age and his journey into manhood was already well signalled by a large amount of hair visible on his head, face, chest and legs; he simply looked ridiculous in a dress. I am well aware that my view of this is shaped by my own cultural conditioning and I'm extremely pleased you're aware of it also.

The real problem was that the school itself was in an area where many of the teenagers didn't value education, if you get my drift. It may have been easy to believe that they didn't value anything for that matter, but I'm well aware that our observations of others leading to such judgements are a result of the values, attitudes and beliefs of the culture. I'm still frightened of two metre tall year tens with five ear rings and seven tattoos regardless of this knowledge, which belies the idea that people always act in accordance with their beliefs.

For example, just the day before Jack arrived out of school uniform, I had needed to break up a fight in the schoolyard during which a person who turned out to be a fourteen year old girl had sent the son of a member of an outlaw motorcycle gang to the sick bay holding his nose; I'm sure you get the idea of the kind of school this was. The fourteen year old girl had obviously been present at some of my lessons on culture as she didn't seem to be wearing any of the symbols that our culture identifies as representing femininity and it's possible that this was what the boy with the bloody nose had objected to.

I wondered how many of this boy's friends might object to the dress worn by Jack and secretly feared for him despite his fearless teenage bravado. I also worried that I hadn't made clear the dangers of attempting to move outside the box and would be held responsible. Let me make it clear:

In 1564 a man named Galileo was born into a culture that strongly believed that the Earth was a motionless body in space around which the other planets in the universe moved. In fact, they believed it so strongly, they claimed to know it. As you know, it's hard to shake people from what

they know. Copernicus had tried in 1543 which was the year he died, but was dismissed as a loony by people who didn't realise that it was possible to be both a loony and right.

Anyway, Galileo became interesting as he grew older by building telescopes and telling others he had proof that Copernicus was right. Perhaps he wasn't as careful about who he told as Copernicus had been or perhaps he sought more publicity for the books he published but the end result was that he got himself into dire trouble with the church and other people in the culture whose opinions he had previously respected. As he wasn't willing to recant his beliefs, he led an unhappy life until his death in 1642 with many people subjecting him to scorn and ridicule and sometimes worse.

If you're saying to yourself, "That couldn't happen in these enlightened modern times..." let me remind you of the sad stories of Frederick E Nethicend, William H Gates and Sir Richard C N Branson.

Fred Nethicend, as he was known to his friends, realised what the meaning of everything in the world is while he was in the shower one morning. At last, a piece of information that would make a Theory of Everything possible. Scientists had been struggling for years to formulate a Theory of Everything, Fred thought and, without any training in professional thinking or anything else, at age 55, Fred had got it.

There's something about the calming effect of hot water running down the back of a person's neck that makes thinking easier and Fred had hit the knowledge jackpot. He felt uplifted and inspired that he had hit upon this wonderful and very useful piece of information until he mentioned it to his wife over breakfast:

"Guess what darling, I've discovered the meaning of everything."

"That's nice dear, but I wouldn't mention it to anyone at the office as they'll think you're weird."

Fred knew he was weird but that wasn't the point.

"What do you mean? They already think I'm weird, but they'll want to know this piece of information."

"I'm not sure they will dear and, if you want to have an easy life, I'd just keep that lovely little piece of information to yourself."

"But it's very useful information; think how it could change the world."

"I'm not sure that understanding anything ever changed the world my love, but you must do what you think is right."

Realising himself that he was a little nerdy and quite unpopular with others, Fred didn't want to make this worse so he kept that particular piece of information to himself which is the main reason you haven't heard of him or his discovery. Well, there's that and also the fact that you're not a member of his immediate family...

Meanwhile the search for a Theory of Everything goes on.

In contrast to Nethicend, who felt he would not be able to resist the pressure of the culture, stand both Bill Gates and Richard Branson. Many felt it strange stupid even, for Gates to suggest a new kind of operating system for computers. If you've had anything to do with computers, you'd know that people spring out of the woodwork to show you where you're going wrong if you utter a single sigh when you have a hand on one. Gates was sure to have been given much well meant and downright annoying advice. Perhaps things were different for Gates when he began, but it's unlikely.

It would seem that if you have a vision that is not in accordance with everyone else's vision, the unvisionaries will make life difficult. To resist is usually to cause yourself problems but sometimes, there can be great rewards. For Bill Gates, he can see his name in print in magazines that list the very wealthy and how gratifying it must be to be told you have large numbers of things the culture considers valuable; and all because he persevered.

Branson, began a company which he called *Virgin* to signify the fact he hadn't been in business before. He then began to break most of the rules of business established by the values, attitudes and beliefs (mainly values, in business) of generations of business people risking bankruptcy on more than one occasion to do so. Perhaps, like the bumble bee, he didn't know what he couldn't do. No doubt many accountants, lawyers and mental health professionals doubted his sanity when he did things like opening a business in close proximity to the most successful business in his country in the field but it obviously paid off as his bank manager now uses telephone numbers to describe the contents of his account. Like me, the bumblebee and Branson, you'll be pleased to know that science proved the bumblebee could fly after all, after famously proving it couldn't and Branson proved he could make money by making his own rules as he went along. I'm pleased because I love it when Science is proved wrong although I do believe nature has a manufacturing department that produces things such as Quarks and icebergs upon hearing about laws of physics,

giant ships and other pronouncements from arrogant humans who don't know their place in the cosmos.

Presumably for Branson and Gates and many others, those coloured pieces of paper are very important so they achieved success as it is determined inside the culture, by thinking outside the bowl, box and their minds according to some. Others demonstrate their rejection of shared cultural assumptions and are simply put through the mill by others for doing so-be warned.

The Rules of Shining

If you've been to school, it's possible that an art teacher has told you some of the rules of art, an English teacher has told you the rules of the literary arts such as novel, short story and poetry writing when, according to some, art breaks the rules and this is what makes it art. Many people have speculated about the meaning of the word art; the sign, signified pointed to by this signifier as a semiotician would put it and I would ask you to do the same.

Like many things, this seemed to be an unproblematic concept many years ago when, men and women dressed in white smocks would sit in forests and fields all around the land, painting what they saw on the canvas mounted in front of them. Although the results were variable, whatever they painted usually looked something like the view they had observed once the viewer had taken into account the fact that paint on a one dimensional canvas was attempting to represent something three dimensional.

It wasn't unheard of that people needed to be taught to *see* depth in flat paintings and this is analogous to the way we have learnt to taste that yukky yellow stuff represented as banana ice cream by advertisers, and to recognise the same taste as *banana* when it has been as close to a fruit as I am sitting in my study writing this. Then, photography was invented, and things changed.

We have been raised viewing flat images and seeing depth in them so we didn't need to be taught but the fact that some did need this training shows how the cultural beliefs can even dictate the way we see things i.e. not how they actually occur (flat) but how they're interpreted (3D).

So the question then arose, is a photograph art and, if it is, what makes it so? The question that attaches itself to this is: if a photograph isn't art, is representational painting art, as it is attempting to get as true a likeness as possible like a photograph does?

If a true likeness of an object, person or landscape is art, then is the object, person or landscape art before it's painted, sculpted or otherwise depicted? If it isn't then what is the difference between the thing being represented and the thing itself that changes when it is represented?

Am I a work of art as I sit here or do I need someone to paint me? If they paint me as I look, is that less art than if they painted me in Picasso's style for example, which is how I don't look?

I'm sure you will agree these are interesting questions and I'm also sure you will agree you would like more.

Please read the following short story:

End of Creation

"Hi."

"Not yet, but the day's young."

"Whaddya mean?"

"Hardly anything I say."

"Huh?"

"What is meaning anyway except an artificially generated framework imposed on a set of random sounds."

"What does *random* mean?"

"Good question. But what you're really asking is: what is the nature of reality?"

"I am? I didn't know I even thought about things like that."

"Yes..."

"And you're going to give me the answer, right?"

"I would, if I thought there was an answer. Here we are, stranded on this page wondering whether it's real or not."

"Seems real to me."

"Aah but you don't know of any other kind of existence."

"Is there life on other pages?"

"Who knows? There may not be any life on this one. Maybe we're just figments of someone's imagination. For all you know, there could be someone who is directing your thoughts; telling you what to say. Maybe you don't even exist."

"I seem real. I can hear myself speak."

"Yeah, but are your words your own? And if they are, are you free to say what you want to?"

"I'm pretty sure that I can damn well say what I like."

"Can you be sure? What if there's a creator and you're part of his grand plan?"

"I'd be plenty angry."

"Why?"

"I don't want someone to put words in my mouth...anyway, wouldn't he put better words in my mouth than these? These words make me seem pretty idiotic."

"Idiocy is just a state of mind."

"I can't use big words like *artificially* and *framework* like you do."

"But you just did."

"Yeah, I did didn't I? Maybe I can be whoever I want to. Maybe I can use words like *dialectic*...and *conceptualisation*..."

"If you did, would you know what they mean?"

"I don't give a damn what they mean. I just like to use 'em."

"You really are stupid aren't you?"

"Who are you calling stupid?"

"Let's not go down that hackneyed exchange of insults path and spoil a good story..."

"But you said idiocy was a state of mind..."

"You can't figure it out can you?"

"Figure what out?"

"You don't have a mind. You are just a set of black marks on a sheet of paper."

"No. It can't be true. I won't accept it."

"Look at the evidence. Where is your body? Where are your limbs?"

"Oh no...it is true. It's true. I'm not real. I'm not real. But, wait. I have consciousness. I can think. If I think then I exist."

"Where is evidence of thought?"

"I am speaking, I must be thinking."

"Have you never heard of politicians?"

"What do they have to do with it?"

"They speak but don't think."

"Oh no, you're right. **I'm** a politician. Whatever will I do...I can't go on. My life has come to a full stop."

If there are English teachers in here, they're now screwing their faces up horrified; shocked on many levels I should think. This short story breaks many of the rules of short story writing and, if that is so, what makes it a short story? If it is art is it art because it breaks the rules or for another reason? If the author hadn't written it down, would it have been art in his mind or is the artefact, that is, the page that it's written on, the art?

In the case of other forms of art such as painting, if an artist thinks of an idea for a painting, and then tells someone else exactly how to paint it, which of these two people is the artist? If the person who actually does the painting is *not* the artist then what are they and where does the art exist?

Is the musical manuscript the art or the performance that takes place when it is played? By attempting to answer, we can see that things are not necessarily how we thought they were before we applied thought.

Activities

Write a story or draw a picture that uses characters that bear no relationship to anything that is known. That is, do not create something new from putting together parts of other things that are not usually put together; make the characters *completely* original. Write an account of the process you undertook, the difficulties you experienced in doing this together with an explanation of the reasons for them.

Discuss the proposition that art is creativity that breaks the rules.

Examine the notion that *art* is in the mind of the artist and that the physical object that results from this e.g. painting, sculpture etc is *craft* rather than art.

To what extent does the value of art depend on cultural values, attitudes and beliefs and what evidence supports your view?

Discussion Points

If it is not possible to create something that is completely original, and it is the case that everything created is a development of something that came before, how many inventions could the world have missed out on?

Logically, must there have been an original first thought that resulted in an early invention? What makes you think so?

What is the function and place of art in your society?

Why do we insist that many products that are purely functional in society also have *aesthetic* appeal?

How does a culture decide what constitutes attractive and unattractive objects?

Part 10: The Brightest Light of All

And then there's God...or not, depending on what you believe. Before I get a million and a half letters reminding me that, in a multi cultural world where all religious views are to be respected I'm not allowed to write about God, I'll make a few things clear: firstly, you can write to me about whatever you want as long as you bought the book. Secondly, I'm not writing about God in any religious way, I'm treating the word G-O-D as a signifier that refers to an all powerful, beginning of the Universe, *idea*; an idea of the essential, absolute being and I'm making no comment whatsoever about God's gender, species or whateverness that may allow you to have a special relationship with him/her/it. You have little to complain about but, if you insist, please enclose a stamped addressed envelope and have your complaint countersigned by someone whose independent existence can be adequately verified.

Dimness

The idea of God has caused a lot of people throughout history a lot of cerebral stress since, humankind really does like to define, categorise, and label everything even if they cannot see it. That's not to say I don't respect the experiences of others who may have seen black holes, giftedness and God I'm just a little bit troubled by the evidence they point at to prove it.

Before I completely bury myself under a mound of political incorrectness, let me share what I know about these issues. People in the know, claim that black holes suck everything into them including light and it is the distortion in light around them that points to their existence. I don't know much about the theories of science that say that weird people can go off the straight and narrow but weird light rays can't; that's just what they say. It seems like a tenuous argument and I'm sure there's much more to it.

It's probably different people who say that intelligence shows itself through the things people do such as understanding advanced calculus when they're five but the argument is the same: a set of things that are observable or measurable point to the existence of something we can't see. Some of these people say that the universe is exceptionally complex and this proves that God exists as things that are exceptionally complex don't happen by chance. I'm not sure how they know things don't happen by chance but there you have it!

Like when I was digging in my garden the other day and came across some electronic parts buried under the soil. I saw them there separate and partly hidden in the muddy clay until they gradually

made their way to the surface and, without any help from me, fell together in the pattern of a computer and began...ermmm...computing. Lucky for me they did as I had this book to write and I'd broken the lead in my pencil...

OK, you don't believe my story? This suggests you believe in cause and effect then as you may have believed it if I'd told you what caused it to fall together. Of course, behind your belief in cause and effect is a belief in *causal connections* that may be true or not as, outside of this notion, it's hard to prove for example: A bus passes just as my head falls off leads many to say the bus must have taken my head off instead of saying that two random and unrelated events took place at the same time.

Close inspection of my head reveals no marks on it that might have been expected from a moving force such as a bus, colliding with an opinionated and unmoving object like my head, but does this lead to a theory that my head fell off by itself without any help from the bus or to theories about strong wind, streams of electrons caused by a hurtling metallic object? I'll leave you to guess.

For those looking at the world, the universe, the inner recesses of their own minds and other strange phenomena the existence of these things suggests a causal connection and, however they characterise the nature of the cause, they label it God. This might be fair enough if they were content to leave it at that but many want to go further and describe this idea and, having seen nothing that isn't worldly, attempt to force it into their own set of perceived experiences with an end result that is the myriad of God notions that sometimes cause people to fight; although many people claim that their God advocates peace and love, it is necessary to *hate* the concepts of peace and love that others believe in rather than those they believe. For an explanation of this, see the section on *semiotics*.

A big question is: can we know things that are invisible to us, that is, not available to our senses? The term often used to mean "available to our senses" is *empirically* experienced so, can we know anything without *empirical* evidence, such as God?

It has been argued quite coherently that there are countries that exist such as Africa, that are not immediately available to our senses because they're on the other side of the world. We are more likely to believe in Africa than in God as we know that given a ticket and a toothbrush we could experience Africa empirically. I'm not sure why we can't believe that there may be ways of experiencing God empirically that we don't know about yet especially as some people claim to

have done just that. It may be that not many airlines fly to wherever God is although, not knowing where God is myself, I couldn't say for sure that this is true.

Light and Dark

A common argument for the non existence of God is the problem of Evil. If God is all good, all powerful (*omnipotent*) and all knowing (*omniscient*) the doubters **postulate**, and he/she/it created everything, how could evil be created? In fact, they then go on to say, that either God doesn't know that there's evil in the world which means she/he/it isn't omniscient or that God had no control over it coming into the world which shows it/she/he isn't omnipotent.

Others have said, what is evil anyway as long as I'm having fun? One claimed that evil was whatever isn't in accordance with God's wishes, before immediately seeing the BIG problem which is that it is hard, if not impossible, to know what God's wishes are. If something that's evil is against God's wishes we might ask what an action defined as good is and conclude that it's something that IS in accordance with God's wishes. If a good act can be defined that way, than an evil act is the opposite of that and, you can see that we're spinning around again and headed for that same dark place...

I include this part just to allow some intellectual aerobics on your part while you're waiting for the plane to take you to the place where you can ask all these questions yourself.

Activities

Instead of using the term *God*, think of the meaning of the *Essential Being*; the entity that was the first cause in an universe that relies on causal connections. Discuss evidence that is commonly accessible that there was a need for an Essential Being?

Referring to the ideas that have been presented about cultural values, attitudes and beliefs, write about the notion that the culture created God and examine the incompatibility of this idea with that which suggests God created the universe.

Many people hold moral and ethical views that are based on notions of God. Describe the underpinning assumptions of this fact and make comment on them.

Some people have argued that our whole history is about power relationships: those with power seek to position themselves over those who do not. Research the role the notion of *God* has played in this process.

Discussion Points

What currency does the idea of a divine being have in the 21st Century: how does it benefit or disadvantage people in a society?

From what you have just read, how does a philosophical idea of God differ from notions of God that are current in religious communities?

Some argue that ideas that have currency in religions rather than in society at large are now provable in science such as the ongoing existence of a soul for example. Discuss your view on this and whether acceptance of this view requires an individual to be religious.

How can the issues described here as *The Problem of Evil* be reconciled logically?

Can the central ideas of God and Science ever be brought together or are they views so widely apart that they are destined to remain so?

Part 11: Putting it all together

At the beginning of this book I tried to make you aware of the issues that surround education of the gifted that leave many bright kids out of the beam of the extra light they could get from some of the better specialist programs that run in schools. The implication of saying *some of the better specialist programs* is that there are many schools claiming to offer programs for the academically gifted that are simply based on the myths that surround this group and often they involve providing extra work or the same work at levels that particular year level students would normally not attempt. For example, in English classes, studying Shakespeare is a favourite.

Don't get me wrong on this, Shakespeare is a fine, entertaining author deserving of the reverence he is shown as the bard and the patronising tone in which I am discussing it, but I can't think why studying texts written in 16th Century language which deal with issues kids need to be explained before they understand will stimulate bright kids to do better than they normally would reading the standard curriculum texts. From the cultural perspective, the culture believes that the study of Shakespeare is something that is considered advanced in education so, schools can claim they are offering an advanced education but in reality, in terms of finding students who can be innovative, creative and leaders in their chosen occupations, how can this help?

Bright kids need to be given the opportunity to think more deeply and, as many bright kids have not been identified by testing methods used by Education departments, they will show themselves when they are stimulated by opportunities to think such as those presented here. Although it seems to be a convoluted thought, it seems to be true to say that we cannot think about things we don't know about; we can't explore issues if we don't know they *are* issues it has also been my experience that when people are shown issues they hadn't thought about before, they will suddenly find many others that other people haven't thought about. This is how we discover new information and move the culture ahead.

Now, I have no doubt that there are some readers thinking: what happens to the young people who are not bright while all this thinking stuff is going on?

I will tell you a story that comes from my own teaching career which is where most of the stories in this book originated which may...errr...shed some light.

A parent complained to me once I had given her fourteen year old daughter nightmares. As I listened to her, she reminded me I had asked a question in the classroom, and this had troubled her child: "How do you know the world is still outside when you close the door?"

Naturally, I was concerned that the young lady had been troubled by what I had said although, in being upset she had obviously thought about the notion and realised that such questions bring everything into question and, as I said previously, this is when the potential for new *knowledge* presents itself. For her, nightmares were the unwanted side effect.

Before I could apologise however the Principal, who was also present at this meeting asked, "Why did you say something like that in your classroom anyway?"

"I was trying to teach my students to think," I replied to which he quickly responded, "Well, DON'T!"

Most people would disagree with the Principal. In fact, I would argue that, like many administrators in education, he was responding to the immediate, political circumstances; addressing the short term public relations issue of how the school looked rather than paying attention to the long term learning needs of the students. ALL students gain benefits from learning to think, a fact that I have shown during the course of both my Masters and PhD studies as well as my thirty odd years in the classroom.

In addition to this, the United Nations have indicated that Philosophy, which is the academic discipline from which most of the material in this book has been distilled, is essential to be taught to modern students. Further, it has been shown that people who think deeply on a regular basis are likely to ward off certain kinds of dementia in their latter years and have the possibility of improving their IQ's in the now.

Although the culture may rail strongly against this idea in favour of maintaining the status quo, the education of our children will not improve in ways that have been shown desirable by many University studies until we embrace the idea that change is necessary, possible and, most importantly, need not be expensive. Among any population of high school students, there are likely to be those who are extremely bright who spend more time attempting not to show this fact than doing well at school. The reason for this is obvious: culture is a powerful force and often school cultures pressure young people to *fit in* rather than excel.

My experience has shown that a ***community approach*** in classrooms to investigating the ideas presented here can help to overcome this but, I don't ask you to take my word for it-try it!

If this is not possible, parents can have fun and build relationships with their kids by reading the text and exploring the issues with them. When their teachers begin ringing you to ask what you've been doing, you know you've hit pay dirt and probably rescued your own bright kid! Good luck and may the Essential Being bless you with patience!

Steven Martin & Peter Merrotsy

University of New England/ University of Western Australia

2013

Glossary of Terms

Politically Correct Meaning

Absolute

Beyond which nothing else is possible.

Actively thinking

Fully engaging thought processes with a topic or issue

Ambiguous/Ambiguously

A word, topic or statement that has a number of meanings such that the intended meaning is unclear

Analogy

A comparison made between two things that clarifies the intended meaning of one of them

Aroused

A mental/physical state which occurs as a result of stimulating the central nervous system

Associate

A belief that something not necessarily mentioned is commonly related to a word, notion or idea etc

Attitude

The physical orientation of a person or object in space although commonly used as a metaphor to suggest a person's mental orientation in regards to a topic or issue.

Autobiography

A narrative account of the writer's life usually considered to be factual

Belief

Something a person holds to be true without the need for supporting evidence

Bright

Emitting light beyond the average although often used as a metaphor to describe a person demonstrating intelligence or thinking capacity beyond the average

Brightness

The degree to which a light source emits light beyond the average or a person demonstrates intelligence or thinking capacity beyond the average

Causal Connections

An observation that one observed event or phenomenon was dependent on another for its existence

Community Approach

A method in which a group of people work together in order to consider a topic of conversation

Conceptualisation

Thinking of a new idea, usually in detail

Connotation

An idea invoked by another idea without direct reference to it

Contexts

The circumstances in which an idea is produced

Correlate

One thing that has a direct connection with another

Cultural Assumptions

Ideas that are considered obvious, natural or unchallengeable because of their place in a culture

Culture

The set of values, attitudes and beliefs that underpin a community

Dabrowski

A Polish Psychiatrist

Dabrowski Test

A test for "giftedness" based on the theories of a Polish psychiatrist

Denotation.

The literal meaning of a word or idea

Determined

The notion that people's actions are governed by physical laws rather than choices made using their own free will

Dialectic

The way in which two distinct ideas join together to make a third, original idea

Disruptive Behaviour

Actions of individuals that detract from the achievement of the goals of a group

Doing Well

Performing a task or set of tasks at an above average level as judged against a particular set of criteria

Emotive Language

Words that influence the feelings of an audience

Empirical

Based on information gathered solely through one's senses

Ethics

A set of governing ideas that are based on notions of right and wrong

Euthanasia

The act of deliberately killing a person or animal prior to their natural death from illness or old age, in order to alleviate further suffering

Extension Program

A course designed by schools to provide extra opportunities to perform well to students requiring more stimulation

Fact

An indisputable claim of knowledge

Fiction

An account of something not believed to be true

Framework

A set of ideas, principles, or rules used as the basis to achieve an objective

Fred and Jill Everyperson

A convenient way of referring to people who have average intelligence and have societal beliefs etc that conform to the average

Freedom

A state of being that allows individuals an unlimited right to make their own decisions

Freewill

The unlimited right to choose one's own actions

Generalisation

A conclusion derived from limited information of a group said to apply to all occurrences of the group

Gift

Something received that was given for free

Gifted

A state in which the receiver of a gift stands from then on

Gifted Education

A particular set of curriculum strategies and experiences offered to students identified as being of above average intelligence

Hippocampus

A particular brain structure believed to play a role in emotion

Intelligence

The ability to reason and plan how to recognise, acquire and apply knowledge

Intrinsic

Belonging to a person or thing as an essential part of its nature

Jemmy

Prise something open using some kind of lever. The lever is also referred to as a "jemmy."

Kid

A word describing young goat which is also often used as a metaphor describing a young person

Literal

The direct meaning of a word, idea etc requiring no interpretation

Know

A claim to certain and definite understanding usually supported by evidence

Morals

A set of beliefs about how individuals should conduct themselves

Near Death Experiences(NDE)

Incidents that individuals have reported as real after returning from a situation in which they had been recognised as demonstrating the indicators of death

Necessary

Something that is essential

Non-Fiction

An account of something believed to be true

Objective

A judgement made about the truthfulness of something without considering influences such as personal opinion or emotion

Omnipotent

Being possessed of unlimited power to act

Omniscient

Being possessed of an unlimited ability to know

Opinion

A belief based on a set of premises the believer considers to be sufficient to support it

Overexcitabilities

A set of states of being that Polish psychiatrist Dabrowski claimed were exhibited by the "gifted"

Performance

A set of behaviours exhibited in response to a task or set of tasks

Perhaps

An expression indicating uncertainty

Positioning Audiences

A term used to describe the result of strategies used by a writer or performer to elicit a particular response or set of responses from those experiencing their works

Postulate

To make a claim of truth or knowledge

Premise

A statement which, when joined with others leads to a conclusion

Pronoun

A word which takes the place of a noun

Reality

A state of being generally accepted as how things really are

Reasoning

The process of forming judgements through the use of logic

Relatively

The way one thing, such as a thought, object, statement etc stands in relation to another

Rhetoric

Language used in a way that is effective in positioning its audience with regard to the propositions it makes regardless of whether it is truthful, sincere etc

Scientifically Tested

Something which has been proven effective through a trial or series of trials that have been designed by a person with qualifications in one or more of a set of academic disciplines

Semiotician

A person skilled in the study of the meanings of words

Semiotics

A study of how words acquire their meanings within the context of a culture

Shared Cultural Understandings

A set of generally unchallenged ideas that the participants in a community accept as being true

Sound Evidence

Proof of a fact that is difficult to challenge

Subjective

A judgement based on an individual's thoughts and feelings

Sufficient

An item that, on its own, is enough to support claims of knowledge

Syllogism

A form of reasoning in which a conclusion is formed logically from two premises which are treated as being true

Symbolic Significance

*The importance applied to the meaning **implied** by a word, object, idea etc rather than its literal meaning*

Teenagers

A person between the ages of 13 and 19

Texts

A medium from which meaning can be gained

Truth

An idea, statement etc that cannot be challenged in respect to its claims to knowledge

Values

A set of belief that a community holds as precious

Further Reading

It is entirely accurate to state that the education of *bright* kids; usually referred to as *gifted education* (G & T) is a growth area in educational research. This text has attempted to cover a number of the issues that are common in this field although, quite obviously, it isn't long enough to be exhaustive in its coverage. In fact, both of the authors are intimately involved in this area of endeavour and both produce publications aimed at readers in, both the academic and the wider communities. Rather than include an extensive list of possible reading here, it was felt that the most useful approach was to indicate the willingness of each author to engage with you, the reader, in order to answer questions and point you in the direction of reading that is appropriate to the area of G & T education that interests you. In view of this, if you would like to contact the authors, please do so by writing to Steven Martin: boldandsmartt@iinet.net.au and they will reply as soon as they possibly can!