

The Courage to Let Go of Certainties

*A comparative study exploring realities
relating to creativity in secondary schools in
Australia*

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Master of Philosophy in
Comparative and International Education

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Abstract

This study explores realities relating to creativity in the Australian educational system. Increasingly, creativity is seen to play a significant role in the development of technology, within the economy, our societies, and to individuals alike. National governments, such as that of Australia, have therefore begun to identify it as a vital element within educational policy documents (*Melbourne Declaration*). This study examines why, if at all, creativity in education is important to key stakeholders, where spaces that give rise to creative acts might be, and how creativity may lead to developmental transformation and change.

Through the use of observations and narrative interviews, this study utilises a constructionist conceptualisation of creativity. The framework that is applied is based upon the work of Lassig and the National Advisory Committee on Creative and Cultural Education to provide a unique comparative case study between two Australian secondary schools (one private and one public), and amongst key educational stakeholders (2009; 1999). Participants included policy makers, school administrators, teachers, and students to further contextualise each case.

The findings suggest that while the creativity agenda and its development is seen as critical to the economy, the development of society and technology, and to individuals in discovering and realising their own inherent potentials, evidence of exactly how to best develop it, both at an institutional and personal level, was difficult to uncover. The absence of a shared discourse meant creativity was understood differently, not just at the schools, but between different stakeholders. Furthermore, due to the current emphasis placed on standardisation and testing, prioritisation of the creativity agenda was left largely ignored.

In order to move forward, the creativity agenda must be a responsibility shared by all. Fundamental re-evaluations regarding what education seeks to achieve and how it goes about it is the first step. This involves developing a shared discourse, a recognition of the influence of politics, and a greater consideration for the impact that assessment has upon the ability of teachers to nurture creative learning environments. The next step is to implement a framework to support this.

Acknowledgements

The basis of this paper actually has its roots in Ecuador. Working as a photographer, it was only after spending time with a remote community that I really grasped the value and appreciation of difference and that education was far more than simply a building we walk into. There I learnt, in the most unexpected places, one can develop an understanding for another and their wisdom and recognise that while our similarities were apparent our differences were what made us unique. Having the opportunity to learn from that is what challenged me and inspired me to write about this topic.

Creativity is difference and difference is both confronting and comforting. It lets us see the possibilities and therefore allows us to be ourselves. This is what my beautiful partner allowed me to do and for this I thank her. She encouraged, pushed, and argued with me until I could accomplish what she felt I was capable of, despite my own reservations. Furthermore, my family, whom I left back in Australia, are always in my heart and have always inspired me to explore and develop my own creativity and for that I am eternally grateful.

My amazing supervisor deserves more than the words I can write. But in the least I will try by acknowledging her tireless support and encouragement that I felt went far beyond the scope of her role. Thank you Claire, it has been an honour working with you and I hope this is a piece of work you can be equally proud of.

Thank you finally to everyone whom participated in this study, as without you it would have been impossible. The efforts to accommodate my requests and my short time schedule were deeply appreciated. Everyone that participated displayed a passion towards education and if nothing else I hope this paper allows, or at least contributes, to you being able to display it and encourage it in others the way it was conveyed to me.

Thank you.

Abbreviations

ATAR	Australian Tertiary Admissions Rank
FMoE	Factory Model of Education
ICT	Information and Communication Technology
NACCCE	National Advisory Committee on Creative and Cultural Education
NAPLAN	National Assessment Program – Literacy and Numeracy
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PBL	Problem Based Learning
TTCT	Torrance Tests of Creative Thinking
VCE	Victorian Certificate of Education

Participants Pseudonyms

PM1: Policy Maker 1 (Senior Educational Official)

PM2: Policy Maker 2 (Senior Political Figure)

Pv: Represents private school participants

PvA: Private School Administrator

PvT1: Private School Teacher 1

PvT2: Private School Teacher 2

PvT3: Private School Teacher 3

PvS1: Private School Student 1

PvS2: Private School Student 2

Ps: Represents public school participants

PsA1: Public School Administrator 1

PsA2: Public School Administrator 2

PsT1: Public School Teacher 1

PsT2: Public School Teacher 2

PsT3: Public School Teacher 3

PsS1: Public School Student 1

PsS2: Public School Student 2

NB. The use of names identifies sex and compromises anonymity of participants. Hence, any implied sex is fictional. These pseudonyms also allow for easy identification of participants role and school throughout the paper without constant clarification.

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1 Introduction

Around the world, change is transforming work patterns, challenging societies, and influencing the personal lives of even the most remote communities. We need only to look around in order to see how our modern world has transformed from its industrialised beginning, to the knowledge-based society we have today that is increasingly seeking to find value in the meaning of what we are doing (Airley, 2013; Kozma, 2011). Consequently, it has become increasingly difficult to predict exactly how we must prepare and plan for the future in terms of our personal and public lives.

Change can solve problems, yet simultaneously it presents other concerns; and increasingly, the problems we are faced with often call for dynamic and creative solutions. Something governments, companies, and individuals alike will need to address is that the new information economy and knowledge society paradigm is challenging a naïve perception still held by many regarding labour and work (Airley, 2013; Pink, 2008). It involves the notion that people are somehow like ‘rats in a maze’ in that they are directed and motivated principally by way of monetary rewards (ibid). While the importance of money is undeniable, to achieve economic growth, social progress, and widespread prosperity, policy makers, organisations, and many within the field of education, are recognising that ‘our global community is changing to increasingly value creativity and innovation as a driving force in our lives’ (Airley, 2013; Kozma, 2011; Lassig, 1999, p.1; Robinson, 2010;). Yet, understanding the value of and nurturing ones creativity is something that reflects many issues within the educational system.

Many have tried, and continue, to demonstrate that the education should involve much more than simply the moulding of future workers or citizens that can be quantifiably measured in the economy (Dewey, 1938; Freire, 1993; Harlem Children’s Zone, 2011; Leadbeater, 2010; Robinson, 2010). However, sometimes oversimplified notions and beliefs that schools are places where all children are entitled to have their ways of thinking developed, and their best forms of intelligence nurtured, seem unrealistic. This is especially true when contrasted by the realities of dominant educational policies that are increasingly standardized, measured, and often fosters a competitive environment amongst students, schools, and systems alike (Robinson, 2009).

Australia, like many nations, has long been influenced by a model (the screening model) that sorts students out and places the most able in the most difficult and best remunerated jobs (Quiggin, 1999). Under this model, exams serve to rank students by determining their correlation to perform high status jobs. Yet due to the rapid changes in society, individuals that simply perform well on standardised tests are increasingly not correlating with the needs of these 'high status jobs' (Robinson, 2011). Therefore, as the rate of change intensifies, narrowly defined educational success determinants, such as Australian Tertiary Admissions Ranking (ATAR), have become progressively questioned. Brown suggests, 'to apply a one size fits all ATAR' that 'disenfranchises' students and results in a low score may actually reflect 'social background or where they went to school, rather than their [students] capabilities and potential' (Brown, 2013).

Education that rarely adheres to people's reality anymore due to changing environments and jobs in today's growing global society is no longer a viable argument to continue using it (Mitra, 2000; Robinson, 2009; Quiggin, 1999). As Lassig highlights, 'In a system [such as Australia and elsewhere] where the curriculum is already overcrowded and standardised testing is influential in policy and practice, introducing creativity as a priority requires significant changes in curricula, teaching and learning' (2009, p. 1).

Creativity is no longer a word simply synonymous with the arts. For an increasing number of people, creativity is slowly being understood in a much more relevant way that infuses meaning into one's life (Burnard, 2006; Robinson, 2011). Not as a 'thing' you either have or do not but as a vital element of a person's being in relation to any capacity. The question then is, not whether you are creative or not but how well your creativity is being developed.

Creativity clearly has increasing economic, personal, and societal value in a world where individuals that are succeeding are ones that are embracing change, innovation, and an ability to think and see things differently (Robinson, 2010). It is almost imperative due to a world that seeks specialised knowledge and quickly transforms it into routinized work (Pink, 2008). Previously, creativity may have been seen as 'a luxury for the few...but now it is a necessity for all' (Csikszentmihalyi, cited in Lassig, 2009, p. 1). Hence, it is vital to understand how to further nurture and develop it. Education is not a thing or a concept, just as creativity is not a subject within the curriculum. They are processes that exist within equally unjustified dogmas. Therefore, trying to understand the environment within which it flourishes is of central importance in order to explore the general functions of education in the 21st century.

1.1 Rationale

There are four rationales that underline this study – Creativity (section 1.1.1), Realities (section 1.1.2), Secondary Schools (section 1.1.3), and Australia (section 1.1.4), all of which are all presented below.

1.1.1 Creativity

There is a timely need to address the growing concern about the direction education is taking in Australia, as creativity is a word that is increasingly used by governments around the world not ‘as a transient fad, but as having an explicit role in the economy’ (Burnard, 2006, p. 313). The culture of work has shifted dramatically due to a complex new global climate and is recognised in the Melbourne Declaration, where a need to ‘approach problem-solving in new and creative ways’ is highlighted (MCEECD, 2008). It therefore constitutes a fundamentally political imperative (ibid). The creativity agenda is more than just economics and national prosperity though. There is considerable debate around falling standards and tension about pressures and principles regarding assessment (Blake, 2013; Donnelly, 2012). However, what is really valued and important is signalled in the assessments we are given (Beghetto, 2010). Unless creativity, regardless of what is often speciously stated, is accommodated, valued and rewarded in the assessment process, the message to students will remain quite clear: Creativity does not really matter.

There has been a tendency to believe that it has been due to a shift from core concerns regarding numeracy and literacy, which requires more standardisation and control (NACCCE, 1999). However, whilst this may have seemed like a logical approach in the past, educating students for the future is proving a lot more complicated. Authors, such as Becker discuss the growing return to investment in human capital, describing education as a mechanical system (2002). Yet, he fails to mention that education is a human system not a mechanised one; hence, not everyone is motivated to become educated simply because of the potential monetary ‘return on investment’.

People also seek simply to be happy. Happiness, while dependent on how we interpret it, does depend on the ability each person has to achieve it on the basis of his/her own individual efforts and creativity (Csikszentmihalyi, 1990). People who drop out of school do so for reasons that are embedded in their own biographies (Robinson, 2013). This alone is a strong

case for the need to cater to individuality and to value their creativity more seriously. Undoubtedly, there is little chance of being happy within an educational system where you feel you are unable to truly express and discover yourself.

For many, the capacities and traits that the education system would like to nurture are currently absent or accidental; the desire to be self-motivated, better-informed, have greater thinking and problem-solving abilities, have a larger capacity for cooperative interaction, to possess more varied and more specialised skills, and to be more resourceful and adaptable than ever before (Department of Education and the Arts, 2005). For many, due to the systemic constraints currently embedded at various levels, the educational aim is to simply finish and get a degree in order to get a job, rather than utilising its powerful potential for self-discovery, growth, and intrinsic happiness (Pink, 2008; Robinson, 2010).

Another growing concern is that a bachelor degree no longer guarantees you employment as it once did (Robinson, 2011). Therefore, for an increasing amount of people, education must seek to provide something more if it is to continue to have some validity in our lives. Becker argues that college graduates earn on average fifty percent more than high school graduates (2002). However, again, he doesn't discuss how many college graduates still end up unemployed, are happy with their lives, and are over qualified for the positions they hold, or never end up utilising their degrees in the area they were intended for. While nurturing ones creativity may not necessarily guarantee monetary reward, having the opportunity to develop your own unique personal skill sets and discovering what you love to do does generally lead to greater validation, self-worth, and engagement (Csikszentmihalyi, 2004; Dewey, 1938; Robinson, 2013).

As population swells and competition for jobs intensify, for many of us, education and the difficulty endured to reach it must have more than simply the possibility of a job we have yet to actually try. This is particularly true as patterns of work are changing so rapidly. Since 1956, 30% of people surveyed in the United States say that their life is happy (Csikszentmihalyi M. , *Flow, the secret to happiness*, 2004). According to Csikszentmihalyi,

This hasn't changed at all. Whereas the personal income, on a scale that has been held constant to accommodate for inflation, has more than doubled, almost tripled, in that period. But you find essentially the same results, namely, that after a certain basic point -- which corresponds more or less to just a few 1,000 dollars above the minimum poverty level -- increases in material well-being don't seem to affect how happy people are. (2004).

Therefore, as higher education becomes the norm of more and more developing countries, credential inflation may devalue the core principle that motivates a majority of the population to obtain a degree (Lauder, Brown, Dillabough, & Halsey, 2006, p. 6). While Lauder et al, stop short of advocating a particular kind of education, their message ‘that dominant policy agendas seem wholly inadequate to meet the challenges that we now confront’ are clear (2006). What are the implications for the future students who might view them as worthless? What will motivate them to continue their educations other than monetary/material reward and the promise of a prosperous career wane?

Creativity is more than merely a word or a ‘thing’; it has become an agenda (Burnard, 2006). As an agenda, it is now of concern to various stakeholders each with individual interests. It is clear companies wish to utilise creativity within the economy. Therefore, governments see creativity as a political imperative. However, at a more intrinsic level, the context and desired outcomes that recognise creativity as a ‘valued human capacity’ are still to be properly identified (ibid). A recent report of Australian and New Zealand educators highlighted that the top barrier to creativity was a system that was too reliant on testing and assessment (Adobe, 2013, p. 6). Furthermore, a 2002 study found that 80% of students based their self-worth on academic performance (Crocker, 2002). Hence, at a systemic level, education is argued to increasingly constrict and constrain due to political and policy fixation on mechanisation, standardisation, and measurement (Robinson, cited in Goodman, 2009). One may repudiate that this does not limit your future entirely or that these are merely intended as (or should be) diagnostic tools. Yet, it has become difficult to deny that formative assessment, and the grade given, has serious significance on one’s future acceptance into study programmes and in the workforce.

Whether creativity is best nurtured in a cultural climate that is supportive and nurturing, harsh and competitive or a mixture of all is yet to be agreed. Understanding the culture that exists within 21st century schools is of immeasurable value for everyone if we are to realise people’s potentials. The common impression that creativity is only associated with the arts, leaves many believing they are not creative or that creativity is something that only a few talented people possess (Claxton, 2006; Robinson, 2009). Mere knowledge acquisition and meeting the increased pressures and requirements of the national curriculum, inspections and monitoring (both national and international) has led to some feeling that a ‘creative society’ is unachievable under current policies and practices (Davies, 2002; Grainger, Barnes, & Scoffham, 2004) This is since it is difficult to know what is desirable in the future and a

simple metric alone speaks nothing of the journey travelled, the person we actually are, want to be, or can possibly be in the future.

Creativity, and an investigation surrounding it, provides a lens into many of these core issues. People seek education to express themselves more clearly in many diverse, even undiscovered capacities. In doing so, we are all hopefully rewarded personally, socially, and economically. Therefore, in order to do that, creativity can mean many things and indeed should if we are to explore new possibilities. If the process suggests there is only one answer, then you will only find one (Scottish Consultative Council on the Curriculum, Teaching for Effective Learning, cited in NACCCE, 1999, p. 30). It is, therefore, evident that a study about creativity is especially important in these modernising times to ensure an equally prosperous and meaningful future for people in both their public and personal lives.

1.1.2 Realities

Due to the dominance of structural and policy led studies in the area of creativity, providing an alternative pedagogic comparative research that looked at common discourse and practice has been something that has been lacking, particularly within a singular education system such as Australia (Jeffrey, 2006). By performing a study of this kind where key stakeholders, from the top (policy-makers) to bottom (students) are accounted will therefore be quite rare. The rationale is to simply provide a unified picture of the phenomena within a single study. People see and interpret the world in different ways. An important consideration according to Craft is that, ‘A challenge to any discussion of creativity... is the difficulty of terminology’ (Craft, 2003, p. 118). This is further corroborated by other studies where creativity is commonly presented and defined in various ways in order to explore it (Burnard, 2006; Craft 2006; Davies, 2002; Robinson, 2006; Shaheen, 2010). Even more than 30 years ago, Morgan culled 25 definitions of creativity from psychological literature alone (cited in Walberg, 1988). Hence, only by reviewing the realities of the participants at various levels of the educational system does it become possible to understanding the nature in which the creativity agenda currently exists. By exploring the various realities of participants at various levels, it becomes possible to see where realities regarding the same topics diverge and converge.

While one must accept that in social science research a researcher cannot provide the ‘mirror reflection’ the social world that might be hoped, it does provide access to the meanings

people attribute to their experiences and social worlds (Miller & Glassner, 2011, p. 133). In this way, what is desired is actually to simply grant the subject's point of view 'the culturally honoured status of reality' (Ibid). Hence, the realities sought here are to provide insights to the meanings the individuals attribute and offer a way to experience the participant's subjective view in regards to creativity. This affords not only a means in which to describe it with depth and detail, but also to compare various views of others around the same phenomena based on each person's reality of it.

1.1.3 Secondary Schools

There has always been a strong debate regarding private alternatives to mainstream public schools (Mahuteau & Mavromaras, 2014). Hence, it is critical to include them due to their representation in society and in Australia. It is also suggested that creativity needs to be nurtured as early as possible and that elementary and secondary education may in fact be more important than university for national prosperity and welfare (Walberg, 1988). However, more than this they are particularly significant because they provide access to a very interesting group of students that is receiving attention through curriculum reform and research (Barber, 1999). This group is commonly identified as the 'middle years' or 'middle school', generally, aged between 9-10 and 14 (Years 5-9).

The primary factor for focusing on 'middle years' students and their environments in secondary schools relates to, both international and local (Australian), research that suggests that student engagement often decreases during this period. This is particularly concerning considering the above statement regarding their importance to national prosperity and welfare. Students at this age often become more critical of the teaching and this becomes evident in how they 'switch off' through increases in truancy levels, stand-down, suspension, and expulsion rates (Chadbourne, 2001; Gibbs & Poskitt, 2010). This provides a unique set of challenges where the realities relating to creativity could shed possible light, particularly as this period is marked by a 'readiness' in preparing students for life outside of school. Studies that have focused on this issue poignantly identified these students as going through an 'important stage in their development', and the further iterates that '[s]tudents in the Middle Years are experiencing a profound transition from childhood to adolescence. They are undergoing significant intellectual, social, physical, emotional, ethical and moral development...moving from concrete to abstract thinking' (Department of Education and the

Arts, 2005; New South Wales Department of Education and Training, 2006, p. 1). Therefore, by including students towards the end of the middle years spectrum they are able to think in more abstract ways and contribute to more robust discussions surrounding the realities relating to creativity in education.

The need for change is well documented and emphasises how ‘curriculum, pedagogy and organisation of the Middle Years are inadequate’ (Barber, cited in Government of New South Wales, 2005). Therefore, this is a critical moment where informed planning at all stages can establish structures to ensure the creativity agenda is factored in and discussed at all levels of implementation. This group is essentially at the heart of the ‘modern life’ identified in the introduction. Therefore, their relationship and association to the educational system is of significant interest due to the fact that,

These students use of mobile phones, MP3 players, video games and the Internet are not just tools, but a way of life...The role and importance of technology in learning will be a major factor in the way Middle Years’ students learn and define themselves (ibid).

They are the next generation that will have to shape the world in which they live. Consequently, it only seems just to uncover what their realities are in order to better understand how they may best be met.

1.1.4 Australia

Australia is a unique society dramatically influenced by change, multiculturalism, and diversity. It is a country that provides many interesting nuances that are particularly fascinating. As late as 2011, still one in four Australians were born overseas (Australian Bureau of Statistics, 2012). Hence, a great deal of discrepancy remains in perspectives, ideologies, and expectations that must be catered for within the educational system. Utilising Australia as a lens, precisely because of this incredibly divergent group of people, provides enormous value to communities both locally and globally due to their own broadening populations. How we best deal with difference in all its forms is of paramount importance (Olson & Mittler, 1996). Furthermore, Australia is unmistakably positioning itself as knowledge based economy. With growth in the service sector due to decline in trades, manufacturing and rural sector employment Australia is transforming quickly and provides an interesting lens in which to investigate how creativity is understood in both theory and practice.

While many governments increasingly recognise the influence creativity is seen as having within the economy, not all have made it explicit within educational policy documents. However, under goal 2 of the *Melbourne Declaration on Educational Goals for Young Australians*, Australia has (2008). The declaration states that the ‘Australian governments commit to working in collaboration with all school sectors to support all young Australians to become...confident and creative individuals...are enterprising, show initiative and use their creative abilities’ (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008, p.8-9). However, besides this document there is little else to suggest how and why they have adopted such an approach or how it is translated into reality for young Australians. Therefore, this made Australia an interesting candidate for this investigation to further explore how it is implementing this mandated responsibility.

1.2 Aims and Research Questions

Broader Aims Relating to the Study is to provide an insight within the education system to further understand the conditions in which people thrive, and conditions in which they don’t. A further aim of this paper is to explore fundamental questions concerning the purpose of education in a knowledge economy using the lens of creativity.

Specific Conceptual Aims Relating to Creativity looks at why creativity in education is important, where those spaces might be that give rise to creative acts, and lastly, how creativity leads to developmental transformation and change?

Hence, there were **3 research questions** that guided this study and they are as follows:

- What are the outcomes or goals that drive key stakeholders at various levels in the Australian secondary school system, and in particular, how do those concepts relate to the current creativity agenda?
- How are the creative needs of students being met, if at all, and what are the main differences and similarities in the approach of a private school compared to a public school?
- What are the factors that promote or limit creativity in these settings?

1.3 Methodology

This qualitative study looks vertically to present the realities relating to creativity of various stakeholders within the Australian educational system. The study also incorporates a horizontally comparative aspect in the form of two case studies across two metropolitan schools in Melbourne (1 public and 1 private) to compare how these realities are translated, if at all.

Involved in this study are two policy makers (a senior political figure in Victoria, and the other a senior administrator from within the Department of Education), three school administrators (two from the public and one from the private), five teachers (all from the relevant year level investigated), and 4 students (again, all from the same year).

1.4 Conceptualising Creativity

Although the theoretical framework for this study will be given more attention in the next chapter, since the term creativity has been used so vastly, it is essential to conceptualise the way creativity will be used in this thesis.

While no category is 'fixed', and the value of more scientific approaches to the study of creativity is not to be understated, these theories are often seen through psychometric philosophies. One such theory that has had a profound impact on the field of creativity is that of Guilford during the 70's (1968). Significantly, it was later incorporated into Torrance Test of Creative Thinking (1968). However, a key distinction is that these theories have had a more 'underlying goal of mapping the empirical reality of creative phenomena' and have aspired to 'develop formal or computational models, along the lines of the harder sciences' (Kozbelt, Beghetto, & Runco, 2010, p. 22). The risk here is that, just like IQ tests, it can and has in some cases led to a simplified, often polarised classification of people into 'those who are' and 'those who are not' creative due to the objective nature of this type of perception. This perception is deeply embedded and often unnoticed. For example, a simple Google search of 'define creative' produced this result that suggested it was 'relating to or involving the imagination or original ideas, *esp. in the production of an artistic work*: "creative writing"' (*emphasis added*) (Google, 2013). Therefore, it can be of little surprise that people rarely define themselves as creative unless they are associated to the arts.

To clarify my conceptualisation I have embraced two distinct premises regarding creativity. Firstly, it is embedded within a more metaphorically orientated theory. It focuses more on hypothetical modes of thinking that according to Smythe, ‘provide entry into imaginative possibilities both for theorising and for self-understanding in everyday life’ (in Kozbelt, Beghetto, & Runco, 2010 p. 24). Secondly, my conceptualisation of creativity is a more adaptive and open-ended. It incorporates a more organic, holistic, humanistic, and democratic understanding of creativity underlined by Robinson and highlighted within the NACCCE’s *All Our Futures* report, which will be discussed in greater detail in the next chapter (1999). Briefly, it devised the term ‘democratic creativity’. This type of conceptualisation provides an understanding of creativity as something we all possess. As Gabora and Kaufman importantly note in regards to the evolutionary approaches to creativity, ‘there is no a priori limit to how a creative idea might unfold over time’ (2010). Indeed to explore new possibilities we need to be able to admit there may be one first.

By adopting the term ‘democratic creativity’, it enables one to recognise creativity is not vague or inconceivable, nor is it reserved for a special few. Within this stimulative position, it is possible through ‘imaginative activity, fashioned so as to produce outcomes that are original and of value’ (NACCCE, 2009, p. 30). Everyone is capable of displaying creativity, just in various capacities. Hence, it is the role of those working in the educational field, as stated earlier, to provide the optimal conditions under which this can happen. Perhaps, in exceptional circumstances, exceptional things do happen. Yet if the conditions are right, and people have the relevant skills and knowledge, then we are all capable of reaching our creative capabilities within a system that encourages us to do so.

Accordingly, creativity ‘is obviously to do with producing something original. But there are different views of what is involved in this process’ (NACCCE, 1999, p. 28). The key task here is to understand it is a process that ‘help[s] people break free from overly restrictive and hegemonic beliefs about creativity, [that] in some cases – carry more ontological traction and deliver more practical significance than more scientifically orientated frameworks’ (Kozbelt, Beghetto, & Runco, 2010, p. 22). This means that just like humans, the process must be organic, because it can never assume all our similarities or our differences. It can however accommodate for them. Therefore, it cannot be systematised to the point where it cannot adapt to the people it was intended for.

1.5 Australia and its Educational System

Australia's unique multicultural blend provides both unparalleled challenges and opportunities. Immigrants from more than 200 countries call Australia home with more than a quarter of Australians born overseas (Australian Government, 2012). While the 'character' of Australian education on the whole can be seen as homogenous, the 'peculiarity' of Australian education, noted by Monroe, was the absolute centralized control by the State of each public education system (Monroe, 1915, p. 301). Each state government manages the school system within their state¹. School is compulsory for children between the ages of 6 to 15, and all states utilise the three-tier model consisting of primary (ages 6 to 12), secondary (ages 13 to 18) and tertiary (including universities and technical and further education; TAFE). However, the national government provides the funding for universities. Each is independent in its governance, setting their courses and course content.

The Education Act, 1872, formed the basis for a central public school system based on the principles of free, secular and compulsory education (Parliament of Victoria, 1872). However, this was not the case with public secondary schools. Students of ability paid less than private, which were essentially transplanted English inspired 'grammar schools'. Thus, as highlighted by Burke and Spaul, 'competition was created between the public and private sectors' (Burke & Spaul, 2001). Even though public secondary education is now free, many remain today and are still characterized by gender differentiation, high cost and/or engagement of select entry by way of centralized examination. Often, they receive a greater degree of public funding for that student than if they were to attend a non-selective public school (ibid). While schools in Victoria are generally considered to be relatively high-performing and receive adequate funding, a core educational debate continually revolves around what some refer to as the public-private divide (Donovan, 2013). According to Zyngier,

Ever since federal and state governments began to syphon funds from the public purse to top up poor Catholic parish schools, we have over four decades seen an exponential growth of government funding go to middle class and wealthy private schools at the expense of increasingly impoverished and disadvantaged public schools (2013).

As education once again became a priority under the Gillard government in 2010, the desire for a review of school funding and greater transparency within education grew. This was to

¹ As of 2014, Australia has since implemented a national curriculum. However, the term 'creativity' has still remained on policy documents and within the Melbourne declaration (The Australian Curriculum Assessment and Reporting Authority, 2014).

address the fact that over the past decade Australian students had ‘decline at all levels of achievement, notably at the top end’ (Australian Government, 2011). This resulted in the commissioning of the ‘Review of Funding for Schooling’, or Gonski as it is more commonly known (after the chairman of the committee David Gonski), and the release of the My School website. Essentially, it was the biggest review of funding to Australian schools in over 30 years. Its aim was ‘to develop a funding system for Australian schooling which is transparent, fair, financially sustainable and effective in promoting excellent outcomes for all Australian students.

The My School website provides statistical and contextual information about schools in a community so people can compare them with statistically similar schools across the country. When first released however, the website principally compared schools (both public and private) through a national assessment program (NAPLAN). Naturally, this sparked uproar. Not surprisingly, they were utilised by various groups far beyond their intended use as a point-in-time measurement (Barnard, 2010; National Assessment Program, 2011). What is did prove however, once financial figures were released in an updated version of the site in 2011, was that educating a child was far more complex than statistics alone could measure.

This thesis consists of six chapters. Chapter two will provide a literature review regarding the topic of creativity and then presents the theoretical framework to support and inform the findings. Chapter three will then detail the methodological aspects of the study; while chapter four will feature an account of the findings. Chapter five then discusses the major findings before the final chapter, six, concludes the study.

2 Literature Review and Theoretical Framework

This chapter begins by exploring the study of creativity itself (section 2.1). How creativity research has been perceived, organised, presented, and developed will be discussed through relevant literature. The framework utilises Lassig's *3 building blocks* of creativity model, however, it also incorporates elements from the *All Our Futures Report* published by the National Advisory Committee on Creative and Cultural Education. These issues, and the theoretical framework for understanding them, are presented in the second half of this chapter (section 2.2.1 & 2.2.2). Presented under the themes of economic, technological, social, and personal challenges for education (sub sections 2.3.1-2.3.4), these themes constitute an integral part of the framework. However, they are further supplemented through four concepts titled creative potential (2.4), freedom and control (2.5), cultural understanding (2.6), and systemic approach. When these elements are combined it becomes apparent that a culmination of concepts must be brought together to shed light on the infinite realities that study and the process of creativity might encounter instead of a singular fixed framework.

2.1 Background Literature

Runco and Albert suggest that to understand creativity and its research the 'when' determines 'what' will become important (2010, p. 4). Hence, examining literature and the discourse within it provides a way to explore the limitations so we may move beyond them. The 'when' and 'what' in creativity research therefore provides insights to the 'how' and 'why' being explored in this paper.

Much of the initial work surrounding creativity revolved around the separations of the idea of 'creativity' from 'genius' and understanding differences between talent and 'original genius' (Runco & Albert, 2010, p. 8). The significance is embedded in the notion regarding what can be taught and what comes biologically. Are some people exceptional? Regardless of what happens will they be great or is everyone capable of greatness? This can be chartered all the way back to Aristotle, Kant, and others including Guilford and Gardner, whose work later helped develop the Torrance Test of Creative Thinking (TTCT) and multiple intelligence model that are still widely used today (Runco & Albert, 2010).

Understanding the classic nature vs. nurture debate was a vital step in creativity research history. A particularly interesting study involved Galton, whose interest in individual differences led him to choose eminent individuals as examples of hereditary ability through selective breeding (Galton, 1868). While this study may be old the interest in genes and their connection to talent and IQ is not. Shenk argues that modern research shows that genes do not act alone, but are instead reactive to their environments (2010). According to Runco and Albert, what Galton gave us evidence for was that ‘genius was divorced of the supernatural’ and that ‘genius although exceptional, was a potential in every individual’ (2010, p. 12). This finding became invaluable because it validated the need for more than quantification alone.

Metrics however are powerful tools for organising. Therefore, understanding the importance of metrics is paramount towards understanding creativity research design and its influence on educational planning in general. According to Serafini, the Factory Model of Education (FMoE) and standardised testing programs were intended to bring ‘hard science’ to reduce uncertainty, standardise products, and create more efficient schools (2002, p. 67). They were aligned with modernist philosophical assumptions based on ‘the point of view that all nature (including human nature) is governed by invariable laws and that these laws can be discovered and unerringly applied by means of science’ (Hanson, cited in Serafini, 2002, p. 68). Once the ‘standards’ were in place and means of testing was developed, a form of ‘quality control’ could then be regulated to address inefficiencies in the system (Robinson, 2010; Serafini, 2002).

Research, even within the field of more ‘scientific’ fields has increasingly acknowledged the need for balance. Kozbelt, Beghetto, and Runco themselves note that ‘variation...which encompasses the subjective experience of the moment of a private, minor insight by an extraordinary individual as well as the greatest achievements of human genius’ demonstrates just how difficult creative categorisation is (2010, p. 21). Hence, a shift in the last 50 years has found an increasing respect for the ‘unambiguously creative, as well as everyday creativity’ that is seen to be increasingly stifled by mass education (Burnard, 2006; Lässig, 2009; Runco & Albert, 2010; Robinson, 2011). This has led to a more cooperative approach amongst fields such as in the *Philosophical Psychology* journal that develops links. Fields must realise their relative strengths and weaknesses and not defend them but embrace them openly to inform accurately and responsibly.

Rule based knowledge helps us to understand the fundamentals of a topic, as is being done here and will be discussed further in the methodology chapter. However, social science has long tried to be recognised amongst the traditional sciences in a search for validity, which raises a poignant point raised by Flyvberg (2004). He suggests that, ‘there does not and probably cannot exist predictive theory in social science’ (ibid, p. 422). Hence, the shift in focus from merely the creative *person*, to the *process*, *product*, and *environment*, to include more contexts to creativity research based upon Rhodes’ 4Ps. Here studies are categorised based on how many of the four foci they include. Some creativity studies involve a focus on the *product* produced, that is, the object of creative thought or acts, but also the *place* where it occurs. Other studies include and explore more of the 4Ps, such as the *processes* undergone, and last but not least the *persons’* own inclination is sometimes considered (Rhodes, 1961). This has now become the foundations to research that discusses the why regarding creativity and not just the what (is creativity) (Rhodes, 1961). These have also been extended now to incorporate 2 more categories, *persuasion* and *potential*. Further demonstrating how the field is moving towards a greater understanding of context. These categories provide a more applied way in which to categorise and understand creativity in parts alone, or how one influences another rather than focusing on more person-centred views. As Kozbelt, Beghetto and Runco appropriately go on to highlight, groups are ‘not monolithic, in some cases there is as much within category variation in the type of theories as there is difference between the categories’ (2010, p. 20). This is not the biggest and most pressing concern however.

It is true that all theories have, and will provide useful insights. An over reliance on any theory, tool, or methodology can always run the risk of being counterproductive. Studies with a distinctly clinical focus often ignore many of the sociological, economic, and philosophical reasons creativity is so important, not just to the individual but the wider community (ibid). This influential approach has its roots in Adam Smith’s (1723-1790) rational argument and is often manifested today within the field of psychology in regards to creativity research. It attempts to measure creativity and understand the human mind but has poorly understood the ‘unintended and unanticipated consequences’ of this data and how it is often used both socially and politically to measure and infer things it was never intended or designed for (Runco & Albert, 2010, p. 10). Their objectivity means that they lean towards more traditionally scientific approaches and are unable to explain the crucial element of context.

Conversely, one category of creativity studies raised by Kozbelt, Beghetto and Runco that is particularly interesting for this study relates to systems theories (2010). They include studies

that are broad and they focus less on understanding the particulars of a single act and more at how the particulars fit into the creator's overall goal. This is seen in Csikszentmihalyi's reframing of the basic question of 'what is creativity?' to 'where is creativity?' (1988). Another area worth noting relate to developmental theories. This area has its basis in psychology, yet has a more contemporary emphasis on persistence, intrinsic motivation, and autonomy. These studies have primarily asserted that 'creativity develops over time, mediated by an interaction of person and environment' and are invaluable because they explain 'the roots of creativity, as suggested by the background of unambiguously creative persons' (Kozbelt, Beghetto, & Runco, 2010, p. 26). The remaining studies that fall outside of these categories are often narrow and marred by the use of metrics to quantify individuals. This perhaps reflects their inability to successfully evaluate an individual's creativity in the present, let alone in the future. This is why the last two categories, *persuasion* and *potential*, have been suggested.

While intelligence and creativity are not the same, the study of these two areas has sometimes mirrored one another. However, an attempt to measure creativity as intelligence was and still is increasingly demonstrated to be neither 'accurate nor responsible' ways to judge an individual's abilities (NACCCE, 1999, p. 39). Therefore, if creativity is to be used merely as another metric, you may have situations where an individual could create something but because we have yet to understand its significance, we discard it and that person in the process. This means that the growing importance placed on creativity, and the increasing desire to measure it, may well end up producing the same kinds of competitive environments as seen in regards to the intelligence quotient (IQ).

One significant development in the field of psychology that follows this point is seen in the work of Dr Scott Barry Kaufman (2013). Kaufman's assertions in his book *Ungifted* challenge many pre-existing beliefs regarding IQ and intelligence, including those made famous by Gardener (2011; 2013). Gardener's multiple intelligence model is widely used in schools and has done a lot to broaden our conceptualisation of IQ beyond a mere IQ test. It has helped to recognise the variation in learning styles and changed the way teachers teach. But more importantly the questions raised by Kaufman relate to educational paradigms that simply come up with more ways to measure those abilities by comparing people to each other rather than concentrating on what motivates us to discover and succeed in all kinds of ways.

According to Kaufman,

There are an infinite amount of intelligences. We should be open to that possibility, and constantly open to every person's unique brand of intelligence... There's not going to be any use for the word intelligence anymore... So that whole framework in which we can capture potential at one slice of time, place an enduring label on that person, and then that will remain. That is, I think, an outdated notion (Kaufman, 2013).

Further evidence in recent study by Runco, Millar, Acar, and Cramond has even suggested that IQ wasn't correlated with any form of creative achievement (public or personal) (2010). This is quite significant because it follows Torrance's own later admissions that a consistently better predictor of creative achievement was not scholastic achievement, including school grades and IQ test scores. He suggested that, 'One of the most powerful wellsprings of creative energy, outstanding accomplishment and self-fulfilment seems to be falling in love with something—your dream, your image of the future' (Torrance, 1983). This thinking is supplemented by people such as Pink, Goleman and Sternberg that have revealed several weaknesses to our 'test-happy' systems that increasingly demonstrate how little IQ accounts for future career success (2006; 2008; 2012). In fact, it accounts for a meagre 4-10 percent (Goleman, 2012). IQ influences the profession you enter due to the current way it is used as a means to rank individuals, but once in the profession it seems to matter very little over the high concepts and high touch abilities such as imagination, joyfulness, social dexterity and creativity.

This is quite significant in the sense that it challenges much of the standardised foundations on which education in most countries, including Australia, is built and measured on. This idea forces us to recognise that perhaps the way in which we organize, structure classes, entry to them, and what learning characteristics are central to academic success and beyond. These are the 'unintended and unanticipated consequences' that are mirrored within studies regarding creativity, and is the reason it has become increasingly multifaceted and dynamic. Therefore, it is not sufficient to simply mention it. In order to see where we may wish the discourse to proceed, we must reflect upon where it has come from.

Today, the greatest distinction is one that is also reflected in many other fields by authors that have growingly contributed, perhaps even unintentionally in regards to any social science phenomena (Flyvberg, 2004). We are not simply studying 'subjects' or 'participants', they are people who have needs, either perceived or real, that are as multifaceted and dynamic as the concept of creativity itself (ibid). In other words, there is a hierarchy of needs, and what motivates a person at any given time will depend where they are located on that hierarchy

(McQuarrie, 2013). McClelland further proposes that these needs are not instinctive, but are instead acquired or learned through experience, which is particularly important because it is our education system and all those in it that provide this experience and must be aware of their changing needs at any one time (Penn State University, 2014). According to Victor Vroom's expectancy theory, we must remember however that all of this creative motivation is useless if what is needed to perform it is absent; such as a desire to value various forms of creativity within the education system in the first place (cited in House, 1971).

This absence is heavily discussed in literature and often is embedded within testing and evaluation debates (Barnard, 2010; Firestein, 2012; Robinson, 2009). Firestein notes that we 'currently have an educational system which is very efficient but is very efficient at a rather bad thing'. Others, such as Hoppman, have coined the term *the age of accountability* in order to explain the increasing influence standardised testing, such as PISA, is having on educational decisions (2008). While this trend seems to be increasing in Australia too, it has been met with its criticisms regarding tensions and contradictions between competition, choice and the democratic, public purposes of schooling as to what really is its purpose (National standardised testing) and how effectively has it fulfilled the Federal Government's own commitment to education as a public good? (The Australian Education Union, 2010). A common remark among geneticist is that you get what you screen for, and according to Firestein, that is meant as a warning for education. He points out,

What we screen for is in our testing methods...we have to think carefully when we're testing whether we're evaluating or whether we're weeding, whether we're weeding people out, whether we're making some cut. Evaluation is one thing. You hear a lot about evaluation in the literature these days...but evaluation really amounts to feedback and it amounts to an opportunity for trial and error. It amounts to a chance to work over a longer period of time with this kind of feedback. That's different than weeding, and usually, I have to tell you, when people talk about evaluation, evaluating students, evaluating teachers, evaluating schools, evaluating programs, that they're really talking about weeding. And that's a bad thing, because then you will get what you select for, which is what we've gotten so far. (2012)

In order to explore what 'we've gotten so far', Gabora and Kaufman suggest the words 'Lamarckian' and 'autopoietic' as ways of understanding what propels creative processes within these current conditions (2010, p. 290). This, simply put, is to propose that the evolution of creative ideas must be understood within a 'unique tapestry of culture', woven through interactions, where 'the whole emerges through interactions amongst the parts' (ibid). Recognising this, the study therefore looks at the process to develop creativity that incorporates persons, not just a person, to explore the environments as a whole, rather than trying to specifically define or measure it as is commonly done.

2.2 Theoretical Framework and Supporting Literature

In this section, the theoretical framework will be provided to interpret the data presented later. Firstly, Lassig’s 3 building blocks is presented and explained (section 2.2.1). A diagram is presented to provide a clearer visual representation of how elements of the second framework will be tied together (figure 1). Lastly, the final framework, drawn from the *All Our Futures Report*, is discussed (sections 2.2 to 2.7) with relevant literature. While links can seem superfluous initially, they are raised in order to explain how things came to be, the way they are, and what factors currently drive them. Therefore, it is necessary to be comprehensive about each in the beginning in order to be explicit later on during the analysis.

2.2.1 Three Building Blocks of Creativity in Education

The first framework, developed by Lassig, is called the three building blocks of creativity in education (2009). Each block provides a concrete way in which to connect various elements to be explored in this paper by forming a solid foundation for development of creativity in schools. Building block 1 is about establishing a shared language about creativity that is understood by, and relevant to, all stakeholders. Building block 2 is about recognising and discussing creativity to develop informed policy to reflect block 1. Block 3 is about the development of the practices that block 1 and 2 established. However, the components are all designed to inform and support each other and they do not always follow a sequential process.

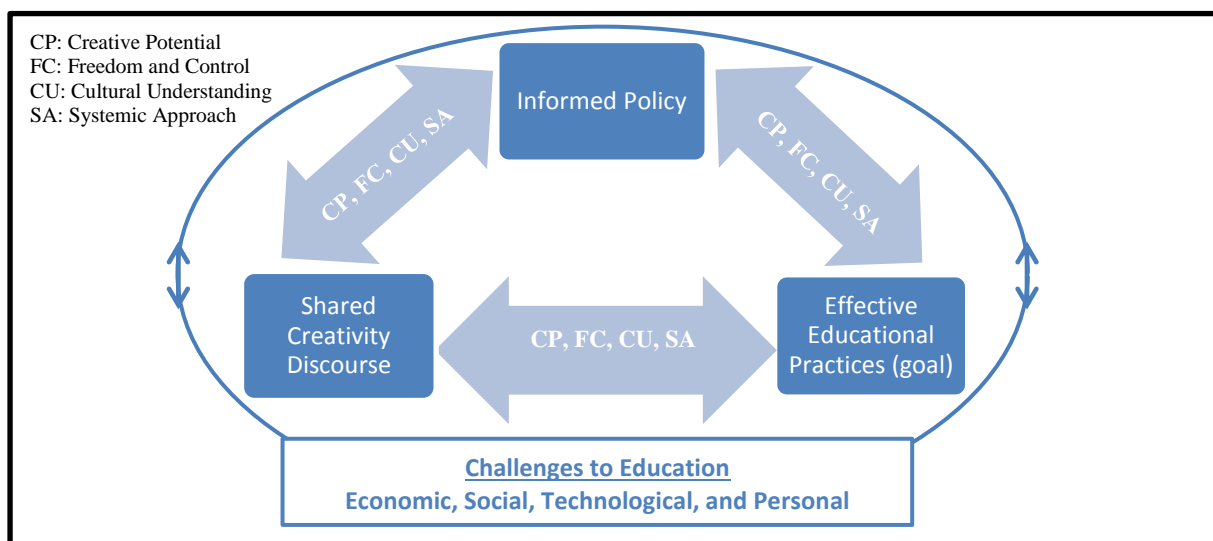


Figure 1 Three building blocks of creativity in education (with challenges incorporated from NACCCE Report)

According to Lassig, ‘it is not enough to know that creativity is important and have the desire to promote it’ (2006, p.8). There must be a common discourse amongst all stakeholders at various levels so that a language in which to talk about it is created (ibid). This is developed in Building block 1, which is necessary because various people have such varied conceptions about creativity. Often it is used as synonym for many other things, such as being artistic. Building block 2 is simply about developing more informed policy through discourse and dialogue and its importance for individuals and society (ibid). For policy to turn to action it must be filtered into political agendas by various groups of society to raise its profile. Building block 3 is about moving beyond discourse and policy and turning it into effective educational practice. This involves more than the often decontextualized ‘thinking outside the box’ activities and providing information, strategies, and mechanisms, which enables student’s creativity to be developed within all areas of the curriculum and in varied ways (ibid, p8). This framework provides the foundation (found in the middle).

The building blocks are best understood through analysis of policy documents, such as the *Melbourne Declaration*. These documents are published, but often lack any clarity and consistency for translating into reality. Much of the current focus on creativity, particularly in Australia, has been on the intrinsic value of creativity and has provided valuable insights. Yet, as articulated here ‘the focus on creativity is often at the policy level rather than in practice’, let alone the intersection of both (Lassig, 2009, p.1). This is an example of block 2 being laid before block 1.

An explanation why this happens is offered by Myer and Rowan, who also adopt theory put forth by Illich, to suggest that this is due to the ‘growth of corporate schooling’ and is increasingly standardised and controlled (Illich, 1971; Meyer & Rowan, 2008, p. 219). While, in theory, education is often desired to nurture the creative agenda stated in the declaration, progressively, ‘modern schools produce education for society, not for individuals’ (Meyer & Rowan, 2008, p. 219). Educational systems in this context can therefore be seen to be serving needs that are growingly political or corporate in orientation. Consequently, this makes it very difficult to move away from an educational system that creates and reinforces ‘standard types of graduates from standard categories of pupils using standard types of teachers and topics’ that we see often see in schools today. Educational theory suggests that ‘microcosms of capitalism’ have little place in our classrooms (Kindfield, 2004). Yet, the hierarchical structures that pervade classrooms are dominant and prevalent throughout the system compartmentalising, standardising and controlling the system in its image (Ibid).

2.2.2 The *All Our Futures* Report

The second framework will be outlined and broken down in the remainder of this chapter. It further contextualises links between each of the building blocks and provides a background to the circle surrounding the entire creativity agenda (figure 1). Hence, the framework can be seen as both the environment and the influence upon which to understand the creativity agenda and how it is sustained. It consists of four challenges to education that are integrated and at times competing elements that influence creativity. They are developed from the *All Our Futures* Report (NACCCE, 1999). Each challenge is significant on their own (and will be discussed in detail below) and cannot be separated from the other. They include *economic, social, technological and personal* elements that are deeply dependent upon one another. However firstly, the significance of the *All Our Futures* report will be outlined.

Due to the multidimensional nature of the topic, and the lack of similar in depth studies within Australia, the second framework chosen is largely based upon a report carried out in the United Kingdom. This was chosen because Australia's educational system is originally based on the English grammar system and much of it still remains. Secondly, the framework, which is drawn from the *All Our Futures* report, was largely seen as a report that brought the creativity agenda back into mainstream discussions surrounding education due to one of its authors, Sir Ken Robinson (Craft, 2003; NACCCE, 1999).

It is seen as a perfect addition to Lässig's three building blocks framework, as it extends it much further and deeper. The report looks at the current provision by assessing the 'opportunities and obstacles' (NACCCE, 1999, p. 5). This is important because it provides not only a framework for comparison but the reasoning for doing so. Hence, it provides an in depth way to unravel the tapestry to discover the interactions amongst the various parts.

Towards the end of the 1990s, interest in creativity has particularly grown within education and the wider community. In February 1998, The National Advisory Committee on Creative and Cultural Education (NACCCE) was established in the United Kingdom to address the 'unprecedented resurgence of activity in the field of creativity in education' and as an 'official agenda in relation to efforts to improve our schools' (Burnard, 2006, p. 313). The report, titled *All our Futures: Creativity, Culture and Education*, was not significant because it comprehensively addressed creativity, but because it was commissioned by the British authorities and was to influence the wider national strategy, which included recommendations on the National Curriculum (NACCCE, 1999). In many ways, the report can be seen as

recognition, not only in the U.K but globally, of the growing importance for the provision of creativity in the formal and informal education of young people (Burnard, 2006; Craft, *The Limits To Creativity In Education: Dilemmas For The Educator* , 2003). Furthermore, the report can be seen as a direct continuation of the literature that has been presented so far that has increased the importance of the topic.

The focus on creativity by the British government as a market driven approach is one that is also mirrored in Australia (Craft, 2006; Lassig, 2009). The concern here is that it could create ‘blind spots’ if the focus on performative education continued and some form of ‘universalisation’ of creativity is implemented with no reference to various macro or sub cultures. This is epitomised in the FMoE, where a teacher’s role becomes influenced by performance indicators (grades) to a point where they are often seen to be reduced to that of a technician (Craft, 2006). Another important concern is that the emphasis on creativity in schools is simply related to the selling of ideas and products (ibid). While these concerns are completely valid, they do not detract from the significance, or the value of the findings. It simply validates the need for more context-dependent research of this kind.

Investigation of Australian studies regarding research returns very little to confirm that creativity is much more than policy rhetoric. As seen in the *Melbourne Declaration*, creativity objectives are stated but never clearly defined, or operationalized for practice (2008). Australian studies have highlighted the value of creativity economically, technologically, socially, and personally (Graham, 2012; Lassig, 2009; O'Rourke, 2005). Yet, creativity discussions are still commonly framed in relation to the arts or at a theoretical level. Lassig’s work however is an example of where a bridge between policy and practice is attempted that looks beyond this traditional mould (2009). She provides a useful framework, the three building blocks. Unfortunately, she does not provide empirical data to support it, nor was any found to date. This is what this study aims to provide.

2.3 The Challenge for Education

The challenges for education are unparalleled by any time in our history. To appreciate this, Robinson says, ‘imagine the past 3000 years as the face of a clock with each of the 60 minutes representing a period of 50 years. Until three minutes ago, the history of transport was dominated by the horse’ (2011, p. 40). If you take in writing systems to this equation, the World Wide Web was only made 25 seconds ago. This rapid change has influenced the way

education is organised and able to respond to the needs of the 21st century. Furthermore, the challenges that will be outlined (economic, technological, social, and personal) have resulted in a dramatic shift that has placed new priorities on education that emphasis a new balance to teaching and in the curriculum that both governments and corporations recognise (Hallissy, Butler, Hurley, & Marshall, 2013). Some point to the fact that while disciplines remain essential for the organisation of academic pursuit, real world problems are not contained to a single discipline (Graham, 2012). Others add that wisdom, and outcomes that characterise creativity as a valued human capacity are also needed. (Burnard, 2006; Craft, 2006). What is clear is that 21st century challenges will require 21st century solutions.

2.3.1 Economic Challenge

The economic challenge is understood in terms of the individual and as a system. For the individual, concerns centre on expectations that people become educated to get a job when they finish school. There has been a clear shift in the workplace. Changing job markets evolve and develop. Demanding people are flexible and able to adapt. As education attains an unprecedented importance as a source of technological innovation, so it is predicted that the number of unskilled jobs will decline while jobs that require expert knowledge will increase (Craft, 2006). The view that creative abilities are seen of value in all forms of business is one that is well supported (Burnard, 2006; Craft, 2006; Csikszentmihalyi, 2004; NACCCE, 1999). Apple and Cheung, remind us that education is not static (as cited in Kubow & Fossum, 2007, p.83). So what constitutes valid knowledge is perpetual. Literacy and numeracy are essential. But in the global markets of today, the skills and knowledge needed mean more than just getting back the ‘basics’.

In terms of economic challenges as a system, all the issues above must be addressed along with national ones. As raised earlier, the FMoE was a market driven response that made sense in an industrial economy where 80% were manual workers (NACCCE, 1999). However, more than 60 years on, the context has changed completely. In some cases the ratio is being reversed (ibid). The shift from theoretical to applied knowledge production means that the FMoE currently utilised in many countries will find it increasingly difficult to produce the creative, trans-disciplinary thinking more frequently required by employers (Hallissy, Butler, Hurley, & Marshall, 2013). Employers often find that graduates simply don’t have the skillsets that their companies need because their degrees are simply too narrow.

Degrees are a way to acknowledge skills. But more broadly, a degree is often used by various institutions to sort, rank, and label individuals at a very basic level. Degrees are also a status symbol for the individual, their families, and for the state where they also serve as goal in itself. A concern raised in literature surrounds issues regarding academic inflation and the decline of traditional forms of work (NACCCE, 1999). Due to rapid developments in various markets academic qualifications alone are no longer enough. According to Boretz, ‘indeed many students and instructors of all ranks appear to subscribe to the myth that grades and success are tightly bonded, particularly in the area of their future career potential’. It is a hard point to argue against, especially when so many educational programs and workplaces require minimum standards just to apply to them (2004, p. 42).

The argument being made here is not to deny the inherent benefits of a qualification or investment in training. However, whether the misunderstanding of grades is a result of building students’ self-esteem, poor grading standards, or a rise in overall student performance, they are interesting questions that require deeper reflection (Boretz, 2004). The greatest issue is that grades are often analysed without considering how they relate to student learning (Ng, 2008). Does a single number or letter accurately reflect an entire person’s achievements or do we need to look more broadly? Even amongst doctors, over a 20 year period, some studies state that ‘intelligence does not predict careers’ and even A levels, used to assess achievement ‘should not be the sole basis for selection’ according to McManus, Smithers, Partridge, Keeling, and Fleming (2003, p. 142). Regardless, the reality for now is that grades matter. Where a first degree once guaranteed you a job, the requirement is now a masters or even a PhD (NACCCE, 1999). Therefore, like any currency they inflate when there are too many people in relation to the job opportunities available (ibid). It was argued earlier that qualifications increase earning potential and this is true. However, even Becker acknowledges that ‘basic methods’ have hardly altered in two and a half thousand years. (2002) What is increasingly clear is that a degree is only a part of the picture for economic success.

2.3.2 Technological Challenge

The technological challenge for education highlights three parts. According to the *All Our Futures* report we ‘need to enable young people to make their way with confidence in a world shaped by technology’, understand its effects, while realizing its consequences (NACCCE, 1999, p.22).

The ways in which creativity impacts technological advancement is clear. Developments in technology mean markets that previously never existed are booming. To highlight this, simply think about how smartphones and apps in mobile devices have changed the world. The iPhone came to market in 2007, just 5 years ago, and introduced apps to the world. Now, in Q1 of 2013 alone, the four app stores (Apple, Google, Microsoft, Blackberry) combined still grew by 11% and produced a revenue of US\$2.2 billion (Canalys, 2013). This is a market that not even Apple themselves knew would develop into what it has because it was mutated by people that created new uses for it. Just like the internet, as is quite often the case with creative solutions, their potentials are never quite known until they are built. This is why the creative agenda is pivotal to both governments around the world and to the individuals allowed to explore within it. A report by KEA argues that currently an inability to ‘harness this huge potential to the full in order to better serve the economy and society as a whole’ is influenced by a culture that is not effectively promoting, encouraging and supporting a ‘creative ecology’ within schools (2009, p. 6). Therefore we must recognise that it is not a case of simply talking about technology in the public domain (such as consumer electronics) but in medicine, agriculture, logistics, and even areas such as sport that furthers ‘human-centred innovation’ to involve every domain from math, science, English, to the arts (ibid).

Technology offers unlimited potential both in teaching and learning that must be harnessed. The reality is that young people are often more alert to the possibility of new technologies than their teachers (NACCCE, 1999). New technologies in all their varieties are a playground like any other where people can broaden their horizons to create things only limited by their imaginations. However the risks must be equally managed to ensure that like the physical world, harm does not befall students before they understand the consequences.

2.3.3 Social Challenge

Like the technological challenge to education, the social challenge is dominated by a backdrop of global change and development. Authors around the world are predicating the need for education to enable people to ‘engage positively and confidently with far reaching processes of social and cultural change’ (Freire, 1993; NACCCE, 1999, p.23; Robinson, 2010). The breakdowns in patterns of work, detailed above, highlight how social and community life have shifted dramatically. Every country around the world, and particularly in

Australia, governments are dealing with a widening cultural profile that presents challenges and opportunities where creativity in all aspects of life is required.

The changing perceptions of gender roles and identity reflect the increasing links across various continents. Embracing and utilising the various perspectives, experiences and skills of various cultural backgrounds builds markets where they never existed. From the food we eat, to how we speak and dress. The way we continue to coexist in an increasingly ‘complex web of interacting cultures and sub-cultures: of families, gender, peer groups, ideological convictions, political communities, and of ethnic and local traditions’ is in constant flux (NACCCE, 1999, p.23). A focus on creativity provides a consciousness to the increasing diversity in our societies. Macpherson documents the consequences of the breakdown in intercultural relations, pointing to a need for schools and others to go beyond a general policy of multicultural education (cited in NACCCE, 1999). Studies highlight that in order to combat intolerance and diversity, the education sector as a whole must aim to humanise and value both culture and an individual’s difference wherever and however it occurs (Kozulin, Gindis, Ageyev, & Miller, 2003). It is often far more productive to recognise difference in order to discuss things thoughtfully and with weighted reflection, rather than pushing people and their issues further into the periphery.

2.3.4 Personal Challenge

The personal challenge to education again embraces elements of all the above mentioned. This is clear because each of them is of concern to everyone. The challenge to education to be more personal and appeal to our intrinsic motivations is made clear by Csikszentmihalyi, Golman, Kaufman, Pink, Robinson, Sternberg, and earlier (2004; 2012; 2013; 2008; 2009; 2006). It is further supported by Abbott here, ‘life is more than work...[and] the issue is not technology, but what it means to be human.’ (cited in NACCCE, 1999, p.24). Hence, the need to be more specific is paramount in order to inform discourse regarding the need to develop the unique capacities, aptitudes, and biographies of all people (NACCCE, 1999). Education is more than just the academic elements. According to the *All Our Futures* report, education must enable people to express emotions and feelings in positive and constructive ways (Ibid). This notion is supported by Freire in his ‘banking education’ model (Freire, 1993). For Freire, much of education fails to acknowledge men and women as historical

beings. As a result, people often find that education does not help them find meaning and make sense of their lives.

Education has to remain relevant. Disaffection and disengagement is a problem that must be addressed to ensure that people are not excluded from the educational system. The greatest disincentives to achievement are low self-esteem and lack of motivation (NACCCE, 1999). Although, in Australia, exclusion is relatively uncommon, there is growing evidence that suggests ‘that students do want to learn, but that the way in which they are currently learning is not meeting their needs’ (Department of Education and Early Childhood Development, 2009, p. 9). Nurturing an individual’s creativity that encourages personal fulfilment and a sense of accomplishment is not only required but seemingly demanded by people who are unfulfilled within the current paradigm. Education of this kind often views creativity as important, but separate from the mainstream academic curriculum (Beghetto, 2010). Consequently, few attribute creativity to areas such as maths or science due to the prescribed nature of the lessons. Creativity, while perhaps not suppressed by current educational systems, is not nurtured in a way where students learn to value their unique individual abilities and are encouraged to do so.

2.4 Creative Potential

While it may seem romantic to conceive creativity in this way, as some may doubt it can be taught at all, the proposition here is that it can (NACCCE, 1999). Therefore, the primary obstacle to understanding creativity is its perception due to surrounding discourse. This can be at a societal, institutional, and even personal level. If one chooses to perceive creativity through an elitist discourse for example, only very rare people are creative and creativity involves rare talents (ibid). Then educators of any area are finished before they have begun. Indeed creation is not elitist, it is actually quite common (Kaufman, 2013; Lassig, 2009; NACCCE, 1999). Creativity is utilised to make better solutions to complicated problems every day, in all areas of life. However, what is often really being assessed is the value of that creation.

The pinnacle of any area reveals similarities. We marvel at football player that performs an exceptionally creative passage of play on a field. Yet, while hoped it is not demonstrated every time. Hence, the talent is there but the feat is unique due in part to the factors that lead to it (Gladwell, 2008). A scientist can create something astonishing and is labelled a genius.

However, even as Nobel Prize winning chemist Sir Harold Kroto attests, ‘nine out of ten of my experiments fail, and that is considered a pretty good record’ (cited in NACCCE, 1999, p.34). The point is that exceptional is exactly that, exceptional, and a combination time, space, skill, knowledge, and even luck must combine for it to happen (Gladwell, 2008). A foundation of skill or talent must generally be built in any area for something extraordinary to happen. The aim is hence to develop the particular techniques, skills, knowledge that are specific to different disciplines and forms of work that can provide the potential for more people to do exceptional things.

While words and numbers help us formulate some ideas, others are often less valued within conventional education. Gardener’s work has done a lot to shed light on the multiple ways of thinking (2011). However, the list is not fixed. In fact, thinking has been proven to be as diverse as people themselves (Kaufman, 2013). All people have abilities to varying degrees and the ways in which they are classified is less important than the need to nurture it within the system as a whole. Some children who perform poorly in conventional academic tests may have strong abilities in areas that were not designed to be measured. Standardised tests can measure cognitive ability well enough, and divergent thinking tests can even be used to measure aspects of creative cognition, but both fail to account for other crucial learning characteristics that are integral to academic success (e.g., active learning strategies, interests, self-control, persistence) (Finn, et al., 2014; Murayama, Pekrun, Lichtenfeld, & Vom Hofe, 2012). Yet, for individuals, it can be a severely inhibiting factor.

According to the *All Our Futures* report ‘creativity is best construed not as a single power, which you either have or do not have, but as multidimensional’ (1999). What this implies is that discovering, and having your creative potential developed can enormously develop confidence and achievement as a whole. Discovering ones skills of creative thought and production is highly rewarding and personally fulfilling. In a way, it is a validation of who you are and what you can do. Perhaps, for this exact reason, some, even many have felt ‘disaffected by education’ and suffered a sense of failure precisely because they have not discovered where their own abilities lie (NACCCE, 1999, p.42).

2.5 Freedom and Control

The concept of freedom and control is developed to highlight that like most things, they require balance. Beghetto notes that popular slogans like ‘thinking outside the box’ and

‘eliminate all constraints’ sound liberating, but are ‘unrealistic and inaccurate’ because in reality we need to think creatively inside many boxes (2013, p. 7). Therefore, in the case of creative education, this does not mean simply letting go, but an equal dependency on knowledge, control of materials, and command of ideas (NACCCE, 1999, p. 6). Perhaps an idea even more supported involves the notion that people understand the processes and to gain control of them in order to transfer these forms of knowledge and skills to all areas of their lives (Alonoaimi, Hinostonza, Issacs, Kozma, & Wong, 2011). In this way these processes of freedom and control are transferred into the power ‘to pursue one’s own research agenda’ in all capacities and areas of life (Marginson, 2009, p. 100). While it is possible to have an impact in an area with a limited knowledge, increasing your understanding of the field in question by not disregarding the teaching of skills and understanding, one can recognise the ‘mutual dependence’ freedom and control has on the heart of the creative process (NACCCE, 1999, p. 43).

2.6 Cultural Understanding

Cultural understanding here is separate to definitions relating to the word culture itself. The principle concern here is to merely recognise that various cultures exist due to our differing language, values and beliefs. Furthermore, it is also to recognise that the engine for cultural change is the human capacity for creative thought and action (NACCCE, 1999). While many, most notably Bourdieu, have discussed and debated the important significance and influence of terms such as ‘cultural capital’, ‘habitus’ and ‘cultural arbitrary’, the ‘messiness’ and ‘vagueness’ of these terms means they have been acknowledged yet largely avoided because they have become so ‘ambiguous and overloaded’ (Sullivan, 2002, p. 150; Nash, 1990, p. 446). While the terms provide great validity to possible discussions and ideas, none are circumvented nor ignored by the framework of this paper. Culture can and does constrain, however simultaneously it provides freedom. It is within this framework that creativity is best explored. Hence, cultural understanding in the context of this paper is dynamic and diverse. This allows one to engage with and respect cultural perspectives other than our own and to provide an awareness of that balance between teaching knowledge and skills, and encouraging innovation in a particular context and individual (NACCCE, 1999).

2.7 A Systemic Approach

Public education, was, and still can be seen as response to a whole set of social, cultural, and economic, and personal challenges. Some argue, as Durkheim did (Filloux, 1993, p. 303), by suggesting that education provides for the ‘greater good’, or a more critical approach might be to argue that society uses education as a way to reproduce, thus maintaining dominant groups, as Bourdieu (Nash R. , 1990) has proposed. If we choose to accept these arguments, then one could even suggest that not much has actually changed. In truth it has always done both. It is the degree that one has been prioritized over the other that is of central importance, because the same is true regarding the prioritization of the creativity agenda.

In order for education to prioritise creativity the system must work together. Yet, often as a system develops it compartmentalises to increase efficiency. While many governments, including Australia, seek to have graduates who can predict and have the skills to work in the future, educational compartmentalisation has meant that realistically very little is actually known about real directions to enable this outcome to come into fruition (Fleer, 2002). Hence, issues of creativity are clearly a concern for the whole of education as they influence much more than simply the shape and content of the formal curriculum (NACCCE, 1999).

While some suggest that educational compartmentalisation is due to a lack of ‘synergies’ among actors (Fleer, 2002, p. 139). Others, such as Hobsbawm, go further to suggest that ‘we could be entering a period which is defined by our inability to control the forces we have unleashed’ (in Lauder, Brown, Dillabough, & Halsey, 2006, p. 7). Here Hobsbawm, is alluding to the role of decentralization and how lack of continuity and coordination, particularly due to the abstractions of our increasingly complicating world, must be underpinned by a type of ‘social cooperation’. According to Abbott, ‘Good schools will never be enough’ (1997, p. 8). Hence, a systematic approach should not only be dependent upon the ‘geographical location nor the personal enthusiasms of individual teachers’ (NACCCE, 1999, p. 138). Education requires synergy, cooperation, and communication to be developed to support creativity through an extensive network of partners, in a wide range of capacities. The notion that schools must go it alone is a fallacy. Partnerships are not additional luxuries. They should include individuals, professionals, community groups, businesses, industry, and cultural organisations to provide greater opportunity for development (ibid). These notions are not subjects in the curriculum but general functions of education (1999).

3 Methodology

In this chapter, decisions regarding methodology and choices concerning procedures will be presented and justified. It will begin by discussing general philosophical assumptions (3.1) and move on to the more practical decisions adopted during the study (3.2 – 3.8).

3.1 Philosophical Assumptions and Research Paradigm

Social science is a field that has the ability to influence society. Many social science researchers have endeavoured to adopt a strategy as close as possible to that of the natural sciences in an attempt to produce what they feel will constitute as quantifiable, objective, and legitimate knowledge. However, this is not a study over the semantics of a definition with the purpose of providing a single objective truth. A philosophical assumption employed in this study is based upon pragmatic knowledge claims made by Tashakkori, Teddlie, and Patton that convey the importance of focusing attention on the research problem in social science research, then using pluralistic approaches derive knowledge about the problem (cited in Cresswell, 2003). Therefore, because we are looking at the social world, learning to see through another's eye and listening to their stories is not a sufficient condition for effective and successful development, but it is a necessary one in really understanding the texture of their lives (Olivier de Sarian, 2005, p. 26). This epistemological view therefore adopts assumptions that knowledge and 'truth' is relative and only true from the view of the individual (Burrell & Morgan, 1979). This reflects ontological discussions that place this research within a constructivist strand. Due to the fact this study is interested in social change by realising the creativity of individuals within education, it further clarifies it within the radical humanist paradigm. Here, radical change, combined with constructivism is used to challenge the status quo, and defines the use of an inductive approach to discover how realities regarding creativity binds people in order to break through and reach emancipation.

3.2 Research Design

Following the philosophical assumptions outlined above, a comparative case study which aims to compare educational environments (horizontal comparison) for the purpose of gaining better understandings of educational realities (i.e. creativity) is well suited (Bray, Adamson, & Mason, 2007). However, in this study, the crucial comparison will also be made

across key stakeholders (vertical comparison) to further contextualise variation and commonalities amongst them in approaches, attitudes, ideologies, and values towards creativity and the education system. By utilizing a combination of cross-sectional research, structured observations, and interviews of participants, a study that enables the use of description and exploration rather than the manipulation of variables to produce richer context-dependent understandings and insights will attain an even more holistic, rich and descriptive understanding to explain the realities of creativity in each environment (Bryman, 2008).

3.3 Sampling

This section will describe the sampling related to this study. Broken into four subheadings, the country (3.3.1), city (3.3.2), schools (3.3.3), and participants (3.3.4) will be elaborated and justified.

3.3.1 Country

The research was purposefully carried out in Australia for a number of reasons. Firstly, Australia has notably identified the creativity agenda within the education system (The Australian Curriculum Assessment and Reporting Authority, 2014). This provides a means in which to address exactly what is meant by the inclusion of such terminology and how it has been implemented. Australia furthermore is a well-established, industrialised economy that is looking to firmly establish its future in new industries and jobs to lessen its reliance upon primary industries such as mining, and agriculture (Australian Labor, 2013). This requires the development of new knowledge-based economies that investment in creativity is seen to provide. While all countries have had to deal with immigration, as mentioned earlier in the introductory chapter, Australia is already home to immigrants from more than 200 countries, with more than a quarter of Australians born overseas (Australian Government, 2012). Being such a multicultural society, it provides a unique lens in which to explore the way education deals with difference (along with all the cultural and personal peculiarities this entails) and caters to the creativity of such a varied group of people. Difference, after all, is something all people growingly have to contend with in our globalising world which makes the choice of Australia particularly appropriate in this case.

3.3.2 City

All of the above-mentioned are represented in this study through the city of Greater Melbourne. A city on the South East coast of Australia, it is home to an estimated 4.35 million people (Australian Bureau of Statistics, 2014). It is the largest growing city in Australia and perhaps the world's most social (The Economist Intelligence Unit, 2013). Melbourne's diverse population and perspectives drive continual revision of educational policies to cater to its rapidly changing industries. Melbourne has a thriving food, music, and sports culture, with an abundance of galleries and a good corporate reputation. According to recruitment specialist Tim James, 'the creative industry here is really well-paying', however employers 'are focused on recruiting people with very specific skills and are not as flexible as they once were', particularly within 'IT, finance, engineering specialists, and...in the health and energy sectors (Carrington, 2013).

While it is highly debated and pragmatically immeasurable, Melbourne unofficially lays claim to the reputation as Australia's creative capital (Carrington, 2013). Therefore making it a perfect candidate to explore how creativity is nurtured (if at all) in this highly diversified and competitive environment.

3.3.3 Schools

Ten schools were approached (both from the private and public sector). Then a selection of two (one private and one public) was established on the basis of convenience, by virtue of accessibility, and purposefully to ensure that both fulfilled criteria in relation to the studies aim. As the study aimed to reflect the broader population, criteria were quite fundamental in that they (i) only needed to value creativity² in order to reflect the *Melbourne Declaration* mandate: (ii) they also needed to respect anonymity in order to allow free speech; and lastly, (iii) they needed to be a coeducational institutions to ensure all students could be represented. Some schools, only private interestingly, insisted on pre-selecting participants. Despite being told that it would compromise people's ability to speak freely and most likely produce unreliable data about their institution, they insisted. They were therefore deemed illegible to participate.

² At this stage the term 'creativity' was used arbitrarily as a criterion to later assess exactly what was meant by the schools in each context. This valuing of creativity was expressed explicitly on websites, documents or verbally by administrators.

The private school, with an enrolment of over 1200 students (approx.70% male), was spread across several hectares and has a contemporary learning environment with state of the art facilities and learning technologies. Students have access to fully equipped Sports and Function Centre, IT Centre, Aquatics Complex and hi-tech Science and Environmental Studies Centre. Here, parents contribute as much as \$18,000 a year for their child to attend, with 77 percent of their students going to university in 2012. Most Year 12 students are in the top 20 percent of the state. The campus is broken into three sections based on age (junior, middle, and senior).

The public school, with an enrolment of just over 600 (approx. 55% male), was much smaller logistically due to its location. It provided an alternative to its traditional educational stream in the form of a Steiner programme, and also provided facilities for most areas including Arts, Physical Education, Science, Environment, and Technology. While contributions within the public sector are not obligatory, parents may be required to pay for programs deemed outside the 'standard curriculum' (arts, English, health and physical education, languages other than English, mathematics, science, studies of society and environment and technology) (Department of Education and Early Childhood Development, 2013). They also may include essential items including books, stationary, and finished articles such as ceramics. Here, only 37 percent of students went on to university, but triple the number of students from the private went on to vocational studies and double into the workplace compared with the private school.

3.3.4 Participants

Great consideration was given as to how the realities of creativity could be explored. Since an overall aim was to better understand the environment in which creativity currently exists in Australian schools, simply investigating the realities of a single group (such as students, teachers, or even schools) in isolation seemed insufficient. Therefore, in order to provide a broader context to each reality a vertical comparison amongst key stakeholders was also needed. This was achieved by a four layer investigation at the policy level, administrative level (of a school), teacher level, and of course the student level. With policy implemented from the top to the two streams (public and private) the figure below illustrates the relationship between each participant level and how realities relating to creativity will be compared. Each is subsequently discussed below.

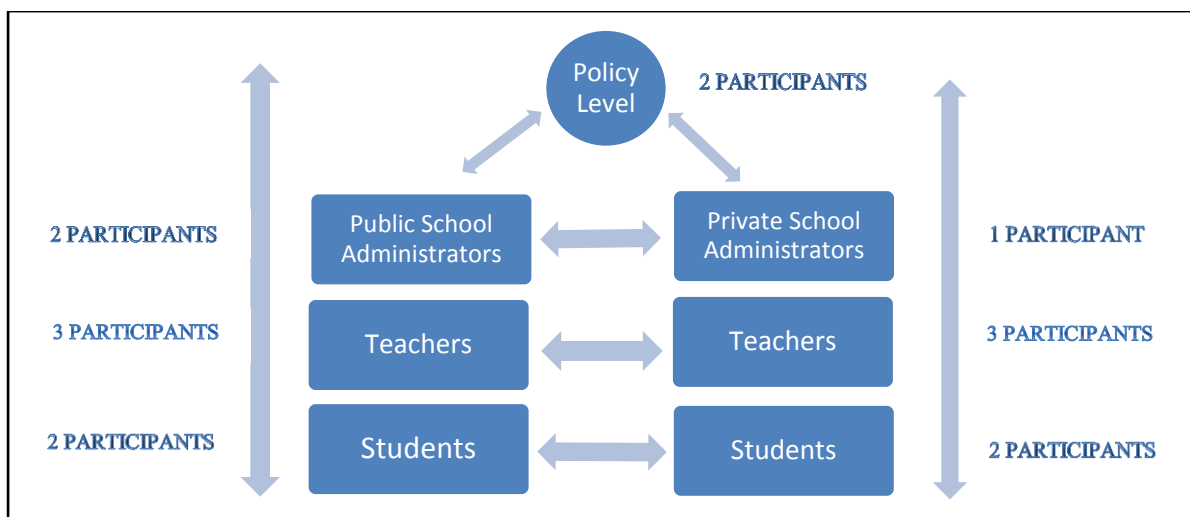


Figure 2 Vertical and horizontal participant relationships for comparison

Policy level:

At this level, purposeful sampling was employed to request interviews of high profile and relevant politicians, and educational employees. Eventually, two highly influential educational figures, one in politics and one within the Department of Education in Victoria were secured. Both figures have a critical role in educational policy development and implementation. Therefore, their realities have a central role in dictating how the creativity agenda is developed, and in which way. It also allows for greater understanding of current directions by uncovering how their realities in regards to creativity reflect their own personal philosophies, ideologies, and actions.

Administrative level:

The next logical step was to include how administrators at the selected schools therefore interpreted the current creativity agenda at the policy level, have (or have not) implemented this into their relative schools, and why. This is why it was of particular interest to include two schools with such different approaches, philosophies, ideologies, and demographics. Sampling was again purposeful, with most relevant individuals sought. In total, three administrators participated (2 from the public and 1 from the private) to provide realities regarding creativity from a school administrators perspective.

Teacher level:

Teachers are at the forefront of education and its delivery. Without their insight a vital link in understanding the creativity agenda would be missing. Three teachers from each school

participated in this study (six in total). This enabled data to be obtained from various fields to explore realities in general and not narrowly as is sometimes done within a particular domain (Robinson, cited in Goodman, 2009). It also adds a vital voice for teachers to elaborate on their realities in realising students creative potentials.

Student level:

Students provide the final voice in realising the creativity agenda in education. While middle school was purposely chosen to align with the aim of the study, Year 9 students were initially preferred due to reasons associated with age, maturity and the ability to communicate more complex ideas. However, Year 8 students were ultimately chosen because of accessibility issues between, administrators, teachers, and the two different schools that participated. Year 7 students were also considered but it seemed more appropriate to include a cohort of students that had already been at the school for a year. This would also allow them to provide a more reflected impression of their school and its environment. Two students from each school were represented (four in total; 3 girls and 1 boy). They were obtained through a blend of random and convenience sampling where all students were given the opportunity to participate but only four returned the appropriate consent forms in time.

3.4 Materials and Development of Interview Guides

A voice recorder was used for recording interviews. A electronic pad for note taking, and images; a personal computer and printer; interview guides (appendix 1-4); letters of request, (appendix 5); note book.

Following a narrative semi-structured approach to interviews, questions were carefully developed against the chosen frameworks. However, the interview guides had to also acknowledge and interpret their own understandings of creativity to understand motivations and realities. It was integral to the study to understand how various forces regarding creativity impacted participant's lives. A mindfulness to maintain a reflexive analytical approach meant recognising that there are two active participants in each interview, the interviewer and the informant (Aunger, 1995). This negotiation led to interview guides that adopted very similar characteristics to a conversation where the informant was directed onto the topic of interest, then allowed to provide the information that he or she felt important (Bernard, 2006; Bryman, 2008). Questions were tailored to each participant in language use

and relevancy. However, they preserved a thread regarding the topics under investigation. This was maintained by performing a constant comparative analysis. Data was analysed as soon as possible in order to incorporate interesting findings into the next interviews as follow up questions following the main structure of the interview.

Questions were created with a specific order so they flowed well but also cross referenced participant's histories, opinions, meanings, and realities. This was done by using comprehensible and relevant language to address broader questions first and slowly narrowing the focus through probing questions, if participants had not done so already (Clifford, 2012). In this way, once comfort and rapport had been built, participants could feel encouraged to open up about their realities regarding creativity and provide rich narratives about their understandings. Finally, participants were asked more reflective questions to summarise their ideas to initiate a sense of closure. Overall, interviews were designed to last for approximately 45 minutes. Pilot studies were carried out with each interview guide before-hand in order to make adjustments, particularly in sequencing and language.

3.5 Procedure

This study was carried out utilising a three stage process illustrated below:



Figure 3 Research procedure

Once ethics approval was granted interview guides were adjusted, schools were contacted and possible participants sourced from Norway for arrival in September, 2012. With only two months for the study, and a two week school holiday in between, it was easy for prospective schools to say no from abroad. It proved much more fruitful to speak to schools face to face in Australia. This took two weeks of negotiation to balance schedules then pilot studies were then carried out in preparation of interviews. Australian public schools required government approval and it was granted in early September, so I began with the private school to maximise time while waiting. Policy makers were also contacted during this period (appendix 5), and interview guides sent in advance (appendix 1) and carried out prior to school visits.

3.5.1 Data Collection

All participation was voluntary and permission was sought to enter classrooms and speak to any individual. The formal interviews were often longer in duration than planned due to the engagement of participants. This meant transcription took twice as long as first anticipated. The research had to be carried out during September-October 2012, due to university scheduling. As term 3-4 holidays in Australia fall during this period careful time management and planning needed to be negotiated, allowing little room for flexibility. This meant participants and schools had to be organised during September and the field work commenced in October (term 4). Policy makers were interviewed before entering schools to better inform questions, observations, and interviews to be conducted.

Data was recorded primarily through interviews. However, equally fruitful data was gathered through impromptu discussions with individuals during a week of initial observations at each of the schools. During the observations various aspects of the settings were examined. Mainly used to triangulate comments made during the interview process, they were also used to either support or deny various elements within the settings themselves. Timetables for example can indicate what subjects are offered and how much time is allocated to various types, perhaps reflecting some significance in the curriculum. How the school, classroom and environment is set up and positioned was also taken into account. Resources available can also be used to draw possible conclusions. Other elements included teaching and learning practices, for example, student participation, student-teacher interaction, interactions among students, pacing, sequencing, chalkboard use, handling of student questions, summarizing discussion, group work, questioning techniques, command of content, explanation of concepts, and appropriateness of teaching methods. Great efforts were made to simply sit in and observe a wide range of classes and situations where at times participation was required. Anything that helped paint a more complete picture was observed. Sites included drama performances, libraries, sports events; recess in the yard, even an art exhibition was attended. Written descriptions, images (or sketches, if images were not allowed) of environments were gathered, as was curriculum documents, samples of worksheets, assignments, and tests (see appendices 7-9).

Two weeks in total was spent at each location. Interviews were only conducted during the second week. This approach, observing first and interviewing later, increases the validity and trustworthiness of the study by allowing me to triangulate both what is said to what is done

amongst the different schools and the people within them (Bryman, 2008). This will be raised further in the section related to the studies trustworthiness (3.8). Nevertheless, by allowing for a greater explanation of the concept of creativity through various examples, and by numerous people and circumstances, the data collected is much richer and the explanations more clear.

3.5.2 Analysis

An inductive approach was first favoured where the research questions would selectively guide data perceived to be relevant and transcribed. However, due to the large volume of data collected the analysis of this study was based on an adapted version of grounded theory (due to time restraints) and content analysis to utilise all the rich information gathered. A full transcript over partial tape analysis of participants was performed resulting in 231 pages of rich data³. Tone and inflection were noted to accommodate feelings and meanings and detect positive/negative continuum, certainty/uncertainty, enthusiasm and reluctance (Hancock, 1998). The aim was to develop patterns to reach an adjusted principle of saturation within the data and attempt to identify core consistencies and meanings (Patton, 2002). Utilising a process of coding, conceptualising, and categorising, a schedule was developed guided by the analytical framework, but driven by the participants and their responses (Bryman, 2008).

3.6 Ethical Issues

During a qualitative research, such as this, a researcher has a significant responsibility to ensure that participant's feels comfortable and safe to tell stories, share meaningful experiences, and be at liberty to divulge their personal values or realities in this case (Kvale & Brinkmann, 2009). Therefore, throughout this paper, ethical issues remained at the forefront of my concerns. In order for the study to yield any valuable insights people had to be certain they could feel free to be as open an honest as they possibly could. Trust was a major factor.

Firstly, gaining their trust and abating any scepticism involved discourse of the studies intentions. I was deliberately vague to begin, as clearly stating I was looking at creativity

³ This includes formal interviews only. One of the interviews (a teacher) was cut short as a participant had to leave and another (a teacher) was partially lost due to a recording error. Notes were taken directly after to reconstruct as much as possible. This number however does not include impromptu discussions with various participants during observations.

would have potentially influenced participant's responses. This is also why observations were carried out prior to interviews in schools. This ensured what was being observed was not influenced by me or the studies objectives. In order to maintain an honest dialogue with participants, I stated I was looking at the broader topic of 'curriculum restraints in modern times', which catering for creativity in current classrooms is a part of. This was disclosed to policy makers and administrators of schools. School administrators agreed that simply discussing curriculum restraints would be sufficient as to maintain the studies integrity and its findings. However, it was an ethical consideration that needed to be carefully deliberated to ensure people did not feel deceived at any stage.

Secondly, participants were all given documents outlining the study's approval by the *Norwegian Social Science Data Services* and their role in it, including national legal obligations regarding data protection, anonymity, and consent (appendices 5 & 6). All participants were given pseudonyms with printed, recorded, and transcribed materials stored securely in accordance to guidelines. They were also free to withdraw at any time. It was critical that participants felt that they could feel free to say things they otherwise would not in a formal setting for fear of persecution. This was why some schools were deemed illegible. During interviews participants responses were considered to be honest in relation to their own realities. Being aware and attentive of context in which things were said or done during interviews and observations, and later during the analysis, also assisted to minimise fragmentation, loss of context, and loss of original meaning. Any questions or situations that seemed to raise any apprehension were either reworded or abandoned.

Finally, it is imperative to acknowledge personal factors that can influence any qualitative study. These factors relate to sex, age, ethnicity, social status, etc., and all have an inevitable effect on various stages of the research process. It was possible that some found it quite intimidating to discuss things openly with me due to my position as a researcher and were worried about my sincerity in regard to the information they would divulge. I had numerous requests from participants to know what others had said and who had participated. It was also apparent that some were intimidated by my sex as a male, particularly students. However, this did allow me to create bonds with others and enter circles that perhaps may have been more difficult otherwise. My ethnicity also came into play when individuals of the same background began to associate cultural traits when explaining actions and realities.

3.7 Delimitations

The delimitations to a study of this kind are clearly bound by the questions it asks, the participants it includes, and the time available to carry it out. Therefore investigations are in a sense pre-determined to some extent by these choices and realities. Naturally, the literature reviewed, data collected, and the way it is analysed are largely centred on these priorities. Having an opportunity to return to the field to further build upon the adjusted model of grounded theory to reach proper saturation is one example. Another example is regarding the fact that parents were also to be included initially but were excluded due to these time restrictions. There is little doubt this influences the studies ability to be generalised to a larger context (Bryman, 2008). Other delimitations include the fact that only one country is looked at, two schools, and a handful of participants. These delimitations are again dictated by time and manpower. Additionally important was my ability to gain access to the participants I did versus the ones I might have had consent forms been completed in time. This delimitation should in no way discount the quality of the participants included but simply reflects a reality relating to how willing some were to participate for whatever reason.

3.8 Issues related to trustworthiness

Due to some of the delimitations just outlined, many discussions have been raised in regards to how the ‘trustworthiness’ of qualitative studies should be determined (Patton, 2002; Bryman, 2008). While concepts commonly associated with more objective studies, such as the terms ‘reliability and validity’ have been used, here the most relevant criteria utilised for the subjective nature of this study are presented instead (Patton, 2002).

The first involves *triangulation* and entails an approach that uses multiple sources of data to verify what is being gathered (Bryman, 2008, p. 379). In the case of this study this criterion is being fulfilled by not simply words, but through observations within the schools. Further triangulation is achieved by referencing questions amongst participants to verify information from one source or another.

The second criterion commonly related to qualitative research involves *replication* and refers to ‘the degree to which a study can be replicated (ibid, p.376). This criterion is one that is difficult to meet due to the impossibility in replicating social settings. A way to minimise these doubts however is by accounting for as much of the decisions as possible in order for

other researchers to adopt a similar role as possible. This is why it has been so imperative to be explicit in all areas of decision making during this study.

The final term, *credibility*, refers to how a researcher has managed to convey a trustworthy account of the findings (Bryman, 2008). Here, it directly refers to how accurately participants' perceptions have been depicted. One approach which sought to achieve this (along with triangulation) was to employ 'respondent validation' as a way to corroborate interpretations and impressions (ibid, p.379). By seeking conformation from the respondent this method helps ensure that participants were fairly represented and their realities remained genuine.

4 Presentation of Findings

This chapter consists of three sections framed by the three research questions. Thus, the first section (4.1) *The Creativity Agenda*, covers interests of the various stakeholders in order to understand why differing realities exist in schools (RQ1). The second section (4.2) *Educational Experiences*, explores how and in what environments (RQ2) creativity is being currently fostered (if at all). In the final section (4.3) *Transformation and Change*, the effort to further develop strategies for improvement is presented in order to understand how this might happen (RQ3). Whilst following the research questions encourages a top down approach, the emergent themes that appeared during the course of the analysis are identified integrated into each of these sections.

4.1 The Creativity Agenda

The sequencing of the findings will be presented based upon the interview guide. This helps identify firstly, what was most prominent in their responses when asked, and secondly, how that information emerged and may have changed depending upon the questions asked later during the interview and upon further reflection. Pseudonyms have been used to protect participant's identities (see page VIII).

4.1.1 Exploring the Purpose of Education

Early during the interviews an absent component was regarding any real difference between the public and private school, and between levels. Responses were quite universal. There was also no mention of the term creativity by any participants during early discussions regarding education's purpose, despite being a prominent component of the Melbourne Declaration at policy level, and even being utilised on advertising for an open day at the public school⁴. However, after being encouraged to reflect further upon the personal purposes of education, participants began to characterise many of the holistic educational notions that are indeed reflected within the current creativity agenda. PvT3, for example, believed that 'it's about allowing them [student] to reach their potential and finding their interests and giving them a

⁴ The public school had flyers with a sub line stating 'Experience one of Victoria's most creative learning environments'. See Appendix 7; Image 1&2

purpose or reason'. This statement however also highlighted another important finding, the future.

The future, or preparing for it, was a key notion that was repeated on more than one occasion by students, teachers, administrators, and policy makers alike. Participants were very concerned with what students would become and who they wanted be. Yet, only one participant actually verbalised a concern for the present. The PvA underlined how important it was to understand 'how they [educators] can develop the skills they've [students] got'. She also emphasised the importance of finding out 'what are they interested in, what are their strengths' currently (PvA). This process of 'becoming', looking towards the future, was reflected by all participants. In terms of what students were to become, what they were desired to become (for themselves and for society), and what students at both schools themselves felt they should become.

Many responses, particularly at the policy level, reflected the many social, economic, technological, and personal challenges outlined within the *All Our Futures Report* (NACCCE, 1999). PsA1 highlighted this very distinctly by stating, 'There is not a comprehensive answer that sums it all up. I think there is a multiplicity of purposes and I think that some of those are public and a matter of functions, society, and the economy you belong to'. Although most began by relating the purpose of education to the personal challenges education must seek to meet, PM1 began by highlighting that 'ultimately, education is about providing for young people to reach their full potential'. At the same time education was linked in terms of the social challenge, often seen to be preparing people so 'they can engage in a meaningful society, culture, environment...that leads them to a fulfilling and productive life' (PM1). Teachers discussed encouraging their (students) ability 'to think and make good decisions', 'feel capable of having some control over their lives' (PsT3; PsT2). This wasn't just explained in an academic sense. According to PvT3, it was 'emotional' elements too, 'it is a bigger picture than learning Maths, English, and Science'. PvT2 went further to emphasis skills that they would need when they left (school) and to understand what their role is in society. The PvA said there is a need to address, 'what a 21st century individual needs to have to be a functioning person in society'.

Another key point was further clarified in terms of the societal functions education should have for the nation. PM1 explained how he saw education as a means to 'developing well-rounded citizens for our nation'. A point well supported by the all the other participants,

except for students. Students strongly associated its purpose quite simplistically through broad notions such as ‘pathways’, ‘choices’, ‘sense of right and wrong’, ‘ideals’, ‘money’, and ‘work’. Only PM1 narrowly linked criteria such as income generation and tertiary completion to the ideals of ‘opportunity’, ‘influence on a person’s life directions’, and ‘fulfilling your dreams’.

Ben Levin and the graph that shows it starkly you know... you finish tertiary you’re going to have this income. So, it is both in terms of your economic circumstances but also pursuing your dreams and happiness.

While PM1 linked income generation to tertiary completion and to the pursuit of dreams and happiness, PsA1 reflected on a very different challenge in education. PsA1 focused upon systemic issues, arguing that in order to understand the purpose of education, ‘you have to distinguish an educational philosophy from what is actually happening’. Hence, he focused upon how people formulated their ideas into words and how those words influenced educational realities. So nuances reflected in participant’s responses had a lot to say about how they saw themselves within the educational system. At this early stage only two responses addressed the kind of nexus that currently exists within education and it is a key feature highlighted within Lassig’s *Building Blocks*. While other participants did acknowledge this notion later, this concern was only conveyed by one participant (PsA2) at this stage to recognise this as a shared responsibility. PsA2 expressed that,

Through the various developmental journeys they [children] have through education, it’s about making sure that every child has the opportunity to develop as an individual. I think providing we know that we have responsibility across the whole learning spectrum, then that’s what’s important’.

Conversely, PM2 chose to distinguish himself from educators. At the very beginning of the interview he clarified that ‘I am not an educator’. While he did clearly convey his ‘deep, deep passionate interest in education’, this clarification was to ensure that I understood he was ‘going to give [me] a slant’ from a politician, rather than an educator within the department of education or an academic. The clarification simply made him appear less adept.

4.1.2 Educational Tensions

It became apparent that all participants to some degree acknowledged the influence politics has upon the education system. It was both significant and most notable between the policy and institutional level (between the policy makers and schools), but predominantly this

tension was felt by teachers. Policy makers were the first to admit that these tensions are real. PM2, as a senior politician believed that ‘we are not particularly improving but we are in a good space internationally speaking’. PM2 elaborated by saying, ‘my biggest concern about education in this nation is that it is treated as a political football...an area of public policy that is used from election to election’. The policy maker within the department also reflected internationally and noted how Singapore had reduced its curriculum by 30 percent allowing ‘more time for deeper learning’. Currently, he felt schools ‘do too much too thinly’, describing the curriculum as ‘a mile wide and inch thick’. However, he still believed that we have ‘reasonable settlements about what schooling is and isn’t [in Victoria]’. PM1 did voice concern regarding the intractable ‘one size fits all’ solution attributed by the ‘duty of care’ that is placed upon educators. He identified this as a feature that is reoccurring worldwide. According to PM1, ‘this inevitably means that there’s a physical arrangement and you order them into classes (*laughs*)’. He felt ‘it’s a pretty intractable issue’.

At a policy level a specific philosophy was not discussed by either participant, after being asked to be more explicit about the topic, PM1 identified ‘getting a year 12 completion’ as a goal. However, PM1 stressed it was ‘a proxy for a whole range of issues around education standards, preparation for work, and further education and training’. PM1 noted, ‘I do not think it is a simple to say this is ‘the’ goal’ (PM1). PM2 also supported this view, but related the discussion to the political and public sphere by discussing the need to address general ‘disadvantage and inequality’ within the educational system. PM2 noted the current funding framework, identified by the recent *Review of Funding for Schooling*, as major concern and obstacle to equality, regardless of the system (independent, catholic, public) (Australian Government, 2011). PM2 also noted the lack of recognition that the teaching profession received in Australia compared to areas such as Northern Europe.

Creativity, while being broadly addressed through other proxies was again not a feature of participant’s early responses to these topics regarding tensions. PM2 began by discussing creativity through a child in terms of schools that focus on ‘creative pursuits’, such as art, versus a school that has ‘a strong focus on maths and science’⁵. PM1, however, encompassed a broader view, demonstrating more progressive concerns regarding the creativity agenda, ‘All our schools think that creativity is something you do across over in art...I would never think that is what creativity is’. PM1 was able to be far more specific than PM2 about his

⁵ While he did come to recognise creativity more broadly later on in the interview, it is important to note how his initial responses were to associate creativity quite narrowly to the arts in the beginning.

responses and about the challenges that he saw for the educational system as a whole. A key concern was that,

Would our school be creative? We have got too much of...‘we have to get this work done’...where a teacher still goes and talks for 85 percent of the time. Then we want to know if the kids have learnt anything they have said. These are fundamental issues around education that exists. I’d like to think we have got more islands of good practices than most systems (PM1).

While these tensions were all noted by other participants they were best underlined by a comment made by the PvA, ‘I don’t know that we are having the right discussions yet’. One teacher admitted, ‘I have found it heartbreaking at times, really, really heartbreaking. In a way we are teaching them more than what is just on the paper’ (PsT3). Despite the recognition that the purpose of education was ‘a bigger picture than learning maths, English, science’, students were observed at both schools to often be given the same comprehension styled activities (PvT3). This was described as ‘narrowing of aims and goals that became dictated by government requirements to meet certain standards in respect to particular subjects’ (PsA1). While both schools vigorously pursued new measures to address this, there were concerns the problems would be simply moved rather than solved⁶.

These discussions raised a lot of significant, personal and professional factors for many of the participants. Many expressed a desire to do things differently but felt bound by the current status quo that was now reflected by the broader public. This was particularly due to political and policy influences that related to narrow performance measures of both the students they were teaching and as educators seemingly solely responsible for that performance. This was stressed by the PvA,

They [government] always talk about league table and they talk about teacher performance pay...how do you measure someone’s capacity to connect with a student? How do you measure that student being passionate about an area because the teacher has given them the incentive to go after it? It’s grey; it is not a black and white thing! The relationship is vital...and could be between them failing to get a mid-grade mark and they [student] could be ecstatic about it. If I was talking to a politician they would say that mid-grade is useless...oh no it’s not! To that student it is a huge achievement.

And also at the public school by PsT3,

⁶ The private school was in the process of building a new facility specifically for year 9 students whom already participated in a special ‘engagement’ term. They also carried out extensive questioning of students in preparation of this. However, one teacher expressed concerns that ‘there is a real risk that year 8 will become the new year 9’. The public school, is one campus and has two separate streams (main/traditional and Steiner). One administrator said it was ‘crippling’ initially due to divisions in personalities. Another noted the ‘obligation to them to make sure that they were not left behind in the system [they had put in place]’ (PSA2).

Some goals are achievable, some goals are really hard. You don't succeed with absolutely every student you know and you have to be able to walk away sometimes and say, I've done my best.

These passages underscored a key finding that is reflected in studies that also highlighted the desire for increasing standards through a focusing on accountability measures such as standardised testing (Hopmann, 2008). Commonly referred to as 'the basics' (reading, writing, and arithmetic), and as underlined by the PvT3 in her comment above, 'the basics' were essential as building blocks but were increasingly questioned by participants to simplistically address more significant issues that education confronted. The issue is further complicated according to one teacher,

In this class, I have one [student] that is operating at a grade three level. I have got three that are just very advanced. Then I have some stragglers on top of that...I do a lot of modifying, you just have to. You can try and teach to the midrange but you want to cater to everyone's ability and stretch those who need stretching (PsT3).

The difficulty of diversity, measurement, and teaching was confirmed at the private school as well,

I think you have to take into account the personal circumstances of each of the kids you are dealing with on a daily basis. If someone has had a bad day or something has happened at home, it can potentially impact on what they going to be doing at school...You have to be able to deliver the same message in numerous ways (PvST1).

While students expressed their approval of the faculty at a personal level, the gravitation towards these principles surrounding examinations and particular subject matter was felt by all student participants during interviews and observations⁷. However, the complex and difficult task of catering to difference while pushing for increased performance is best understood by how participants at all levels have attempted to marry accountability measures within the growing creativity agenda.

4.1.3 Measurement and Creativity

Voicing concerns as to what was preventing ideals from being realised, creativity began to feature more in discussions. Yet, it was often contrasted against rather than integrated with forms of measurement (as will be shown in this section). Passionate discussions ensued regarding challenges, priorities, interests, goals, even lessons of which they were proud. A

⁷ Students at both schools identified English, maths, and science as priorities of the school. At the private school, one entire class was observed to be purely dedicated to delivering of grades after an assignment. Students came to the front, were given their paper and feedback in front of the class and it quickly became competitive. One student after being pushed to reveal his mark clearly felt belittled by others when he was taunted for his poor grade.

finding that became increasingly clear was the various ways in which students, teachers, schools and the system itself are being measured and the pressure that it was placing on participants at all levels.

Measuring up

While different terms, such as assessment, test, or instrument, were used and preferred by participants, they were all synonyms for the measurement of the system, a school, or a student. Policy makers suggested that, ‘transparency’, and ‘understanding why a particular community or school might be delivering these results’ was an aim of measurement. At a political level, PM2 wished to address ‘the level of inequality in outcomes both between schools and within schools’. He felt that in order to do so, both in terms of developing public policy and as a parent, ‘there has to be a level of standardised testing and evaluation’ that provides a ‘snapshot’ to know where to improve. However, he also acknowledged that he felt it was a ‘blunt instrument’ and didn’t think its aim is to be in the realm either way of creativity. It was simply to ‘measure how well they read’ and ‘how well they can do arithmetic’ (PM2).

While PM2 touched upon educational ideals more broadly, again PM1 presented a more specific, inclusive understanding of measurement in the educational system. PM1 described how the measures are used to inform at all levels. He explained that ‘we tend to think of vertical accountability. Accountability is horizontal’. PM1 also contrasted PM2’s view by suggesting that ‘if we get the right assessment items’, NAPLAN (The National Assessment Program – Literacy and Numeracy) is capable of testing for creativity. PM1 stressed the importance of ‘good items in NAPLAN’ as a way of providing support to teachers. This was a ‘side benefit’ he felt ‘nobody talks about’. This, he believed, would allow NAPLAN to be utilised against a continuum that would also assist with curriculum planning. PM1 also encouraged the use of PISA for assessing creativity because he felt its ‘fundamental nature is about application’.

PM1 stressed the importance was in the sort of assessment. He recognised that currently ‘a lot of teachers do it [measure] in a very formative way...and that happens in university. But it’s a bit, flimsy’ (PM1). The differentiation PM1 made in regards to ‘good assessment’ and other forms of measurement was that he felt it was fundamental to student improvement because it ‘provides feedback’, was more ‘dynamic’, and ‘demands kids work in different ways’. For PM1 it came down to simply assessing the ‘right things’. However, in his view, ‘we tend to

lose our way on it' and believed this was mainly due to the fact that 'we haven't given the right support to those teachers'. He did acknowledge that NAPLAN still needed to grow and still had a way to go in order to assess 21st century skills in schools. A major concern for him was that currently, NAPLAN only 'tells us a lot about the middle' and also simply about 'one point in time' (PM1). This he suggested was principally due of time restraints of the test (40min). However, he suggested that 'if we get to on online environment, I think we'll learn a lot more' (PM1).

Understanding measurement and creativity in the two schools

At the administrative level, both observations and interviews yielded fascinating findings about how various measures impacted the schools and presented distinctive sets of challenges at each. Consequently, these challenges had a strong impact on each schools ability to focus on creativity. PsA2 explained how 'overnight our foetus base was removed, and it put our school on its knees' when 'government policy declared that families would no longer be placed in high-rise residential housing'⁸. Observations of the school clearly demonstrated its unique solutions to this problem. Principally, it offered two streams (traditional and Steiner) of education in the one institution. This was observed to complicate things both amongst the students and faculty but it was also found to enrich the school by offering an alternative. The challenges had forced a significant shift in approach and methodology and despite the meagre resources, the school was observed to provide quite an extraordinary array of programs for its students through partnerships with other institutions that have received wider attention⁹. Administrators described these programs as instrumental in providing a new approach, one describing it as 'refreshing', but conceded that it still required parents whom wished for a more traditional approach to be convinced (PsA1). PsA2 further elaborated,

We are a school that at times has been quite leader, that has stepped outside the norm. It has argued the case sometimes for opportunities for schools within the system even though we haven't participated in the outcomes.

The public school had numerous programs that were unique and geared towards catering to the creative mantra the school propagates. Yet, as apparent by the last sentence by the PsA, providing the sufficient measures to justify these programs has been the schools major

⁸ Families living in old high rise governmental housing estates were responsible for a large part of the schools population. An end to the policy meant an end to children being sent to their school.

⁹ The school offers the International Baccalaureate, works with principles from Raymond Lewis of Latrobe University, has partnerships with other local and international schools (China) to expand courses and language (Melbourne University, RMIT), courses with Distance Education, or the council of Adult Education (CAE), Kitchen Garden that was founded at the school.

concern. This was confirmed by another of the schools administrators: ‘the school has been grabbed by the scruff of the neck because it has not been very successful in various standardised test so we are emphasising numeracy and literacy’ (PsA1). He further explained that ‘it wasn’t growing naturally so we are teaching it explicitly’.

The school had distinct features compared to the private. No uniforms, students referred to teachers by their first name, and it also offered two approaches (main and Steiner) that were at each end of the corridor (appearing as if it were two schools in one). Hence, while administrators acknowledged the need to ‘open up’ to the use of standardised tests as a means of defending its distinct approach, what remained unclear from participants was exactly how NAPLAN would assist them when most felt it measured and assisted them so little in practice. The school had resisted participating in NAPLAN for a long time according to PsA2¹⁰. A greater concern that was expressed by many at the school was that exposing themselves to NAPLANs narrow measures would undermine many of the schools distinct features, both in terms of academic performance and in catering to the creativity of their students as a whole¹¹. However, despite these concerns it appeared that adhering to these measures clearly had become a priority because slowly the public school had raised its NAPLAN participation from 30 percent to 90+ percent in three years according to PsA2. Another administrator pointed out that ‘government will always want to put a figure on something’ (PsA1). Hence, during interviews it became clear that the school had felt increasingly obliged to participate because of both what was required of them by above and what it would be perceived as if it continued to resist. Therefore, NAPLAN performance as a priority was elevated within the school.

Creativity, while so important to everyone during interviews, was largely elusive during observations in classes and the schools as a whole. However, a statement by PsA1 resonated and greatly assisted to reconcile many of the observations and interviews at both schools. When asked about *the prioritisation of goals*, PsA1 revealed that,

I am not so sure as there is ever something as orderly as that, prioritisation. I think it is more that things are just dropped off or not even attempted. It’s a bit like unemployment figures you know, they disguise the fact that some people have given up looking for a job and that’s what happens in schools. Things are simply not addressed...but it has disappeared from sight.

¹⁰ It was clear from the interviews and impromptu discussions, even with a parent, that most found NAPLAN to be counterproductive.

¹¹ Administrators raised concerns about NAPLAN as a ‘measure of success’, suggesting that ‘on a crude basis it differentiates between people...it demonstrates difference in the areas being tested’. The fact that they utilise Steiner that did not teach literacy until later is one example where the school was forced to change.

Hence for PsA1, the creativity agenda, like unemployment in the quote above, ultimately seemed to be ‘dropped’ or ‘not even attempted’ in practice (see section 4.2).

Creativity requires a balance between control and freedom (Robinson, 2006). Yet, the degree of control verses the freedoms that the current measures were providing at both schools were undeniable and continually highlighted by every participant. The curriculum, according to policy makers themselves, was too broad and did not go deep enough (PM1). National testing, which was in the politicians own words ‘a snapshot’, measured very little about a majority of students true aptitudes and their improvement potentials (PM2). Interviews revealed that teachers and administrators had results that were returned so slowly that they had very little real impact on the students that participated¹². Furthermore, as one participant noted, simply releasing numeracy and literacy figures in the form of a website (MySchool) had not made the system more transparent or accountable; it has merely complicated and distorted it (PvA).

If you hop on and look at the results, what does MySchool website tell you about a school?...Because it doesn't tell you about the kids that love coming here. It doesn't tell you about our programs; it doesn't tell you about the level of pastoral care we have. There is a lot of information missing and how one chooses to pick a school (PvA).

While current measurements were clearly well intentioned and deemed necessary in some form as a means of improvement by all participants, they were ultimately found to place a heavy burden that filtered through the entire educational system. Hence, like the unemployment figures in the PsA1s statement, measurement was a significant factor in disguising the pursuit of creativity. Creativity was simply disappearing from sight or not attempted when such ‘blunt’ instruments continue to be used. This was found to be the case at both schools where the creativity agenda noticeably suffered¹³. This was even truer when the school placed even more forms of measurement on top of ones already in place as a means to micro manage the progress of its own students.

¹² The PvA was very dubious about NAPLAN. She felt that feedback was paramount to improvement and said that from a school point of view it was a waste of time if results were given back six months later and there was no way to use that information to inform teaching of those students.

¹³ While the public school used the mantra ‘Experience one of Victoria’s most creative learning environments’, one administrator when asked to use some key terms to describe the school never mentioned the term ‘creative’. In fact, he used ‘academic’ and noted that he was not sure if he would claim that the school was more creative than any other. The private school had wonderful display cabinets that could have been used to display student work, but were left empty and sterile. A student claimed the cabinets did have things last year and another labelled their rooms as ‘not interesting’ and ‘depressing’ (PvS2). See appendix images 3,4,5

Measurement was always underlying most conversations during interviews and observations. The amount of time spent discussing tests, particularly at the private school was substantial. The private school conducted end of term exams at the year 8 level, the public did not. This difference had a significant impact on student responses as a result. One student at the private school responded, ‘you don’t need the extra stress or anything in year 8. We are probably one of the only schools that do it. All my friends don’t. We don’t need them’ (PvS1). In fact, testing (or examinations) was mentioned at some point by a teacher in every class that was observed at the private school. While concerns of students at the private school were twofold, in terms of testing at both school and national level, public school student’s largely avoided this anxiety. Their concerns shifted more towards NAPLAN rather than tests they had to sit after each topic they covered.

I barely feel any stress in that (topic tests) because I know I am in a good environment and my teachers aren’t going to be judging me...but with NAPLAN, I feel it just puts a lot of anxiety on me (PsS1).

When everyone mentions that NAPLAN is coming, I will just go, ‘shhh ahhh shut up’ (PsS2).

Interestingly, students confirmed a need for NAPLAN, even though one suggested that it was the same questions every year¹⁴. Another student had a similar explanation to the politician, ‘I guess the government wants to know how things are going and where improvements need to be made’ (PsS2). None however explained where those improvements derived from testing like NAPLAN might be. Students at both schools agreed that they felt more relaxed and tended to ‘joke around’ with teachers more in between tests but leading up they felt teachers expected them to be more ‘serious’ or ‘get into the test’¹⁵.

The findings also revealed that students generally expressed feelings that often mirrored their teachers in regards to measurement. This was particularly the case in classes such as maths that they found to be less ‘exciting’ and prescribed¹⁶. All the students conveyed the feeling that creativity was not something they could easily express on most current forms of measurement. One student emphasised that it depended on the sort of measure but reaffirmed that ‘a lot of them are not particularly creative because it is about getting the right answer not about thinking, exploring and being creative really’ (PsS2). The same student went on to elaborate that through work she felt she was able to demonstrate her creativity, but not as

¹⁴ If you went to any textbook you would see the same questions (PsS1)

¹⁵ Confirmed by both PvS1 and PsS1.

¹⁶ ‘Maths tests are more just for the teachers’ (PsS2)

much through testing. She identified balance a key to her creativity further developing but suggested she was currently satisfied with the situation in her (public) school¹⁷. This therefore highlighted the differing sentiments felt by the students at both of the schools.

Within the private school, the impacts measurement had over creativity were found to be equally significant. Its greatest advantage, being a private institution, was also found to be the source of its biggest burden. This meant that while the facilities and school were much more modern allowing for more dynamic classes and a far greater variety of activities to be offered to its students, it simultaneously placed a whole new set of pressures upon the institution, the faculty, and the students themselves to justify the high fees it commanded. One teacher felt that perhaps it was justified due to the financial investments that were being made¹⁸. As a result, the delivery of the curriculum was observed to be clearly more prescriptive¹⁹. While there appeared to be genuine concerns for individual students' creativity within the school, what was also apparent was that creativity was again a priority that often simply became lost due to the overwhelming need to prove performance through various forms of measurements. During many of the interviews I often received such contrasting opinions and contradicting approaches from each participant that it became clear that the faculty found it difficult to balance the need to allow students freedom to be creative while being measured so stringently and so often. One example was when a teacher described science as 'fun and abstract' but maths as 'you know [participant groans]', but then highlighted how 'everyone is different and thinks differently because sometimes they see it that way and other times in a different way' then later commented 'you need to have standardised testing where things are a level playing field' comparing it to a 100m race where everyone needs to be measured from the same place (PvST3).

While most believed the school (private) was doing 'fine' to nurture creativity while meeting the various pressures of measurements, none of the private school participants truly felt that the relationship between creativity and the attainment of more traditionally academic subject

¹⁷ 'It is all about right and wrong and doing well and not so well, which I don't really like...so I think it is about balance really...At the moment we don't have a lot and I think that is good' (PsS2)

¹⁸ During an impromptu discussion about if there would be added pressure because of a new facility that was being built a teacher responded, 'perhaps, but there should be due to the investment'.

¹⁹ Forty minutes of one science class taken up by a teacher lecturing and another maths class entirely composed of completing a worksheet. Two students were even required to sit exams they had missed during their lunchtimes.

matter was something that was currently being done cohesively²⁰. Additionally, being a non-select entry private school only made things more difficult for the institution according to the PsA, primarily due to the broader diversity of students they had compared to select entry schools that means-tested a lot of their students. Therefore, allowing for creativity was something that was very much a case of ‘only at times’, such as during creative writing in English or during subjects such as art or music²¹.

The PvA noted that ‘we’ve had quite a focus on numeracy and literacy’ and English and maths subjects ‘would have the largest amount of time given...in the cycle of teaching that we have’. The PvA added that it wasn’t because they particularly value those subjects more but proposed that ‘certainly when you are looking at NAPLAN testing and things like that, they are a focus of those sorts of areas. So yeah, you are looking at are we able to deliver the kind of results we need from the students’. This was a sentiment that was clearly felt by students too. PvS1 felt that,

At this school it is a lot about their image and, I guess their academic side. The reports and the marks that all the students get is very looked upon strongly because of the reputation outside of the school and for other schools to think ‘oh we have to compete with this school because they are getting these marks’. Does that make sense?

Despite their attention, Maths and English were found to be least favoured not just at the private school but also the public. However, one student suggested that it was not particularly because of the content but because during testing for those subjects, such as art, they found them ‘more personal...they [the teachers] like talking to us and seeing what we really knew other than like studying for it’ (PvS1). Validation through a broader demonstration and discussion of skills and abilities versus measurement through a summative based written test was valued most by students. Furthermore, the reliance and influence that summative, paper based forms of measurement had on student’s evaluation into higher education and during the later stages of secondary school was of equally great concern to students and the school’s faculty alike. This was not simply because of how narrow most current forms of summative

²⁰ The administrator suggested that this was because ‘they [government] was forcing their requirements on us, and ATAR is it...you work towards getting an ATAR score where as if you didn’t have to do that you might deliver it [curriculum] completely differently’.

²¹ One example is made by PvST3, ‘then [if you do teach for creativity] the parents and everyone still wants to see results just to make sure that if you do the creative ways that you’re still embedding the explicit learning so they actually do still get the results’.

measures were perceived to be but also the implications it was felt to have on funding even in the case of the private school²².

The impacts of ATAR (Australian Tertiary Admission Rank)

An important discovery of the study also relates to how narrow measures for university entrance influenced educational practices and teaching. As was apparent at every level of the interviews, a narrowing of priorities was becoming self-evident. The introduction of creativity as an agenda within the education system clearly had complications that participants said were difficult to align with current academic subject matter. When the politician was asked about how he perceived the current relationship between students developing their creative potentials and the attainment of the academic subject matter, he was unable to offer a response²³. PM1 however proposed that he found it a bit dichotomous claiming ‘why is academic subject matter not creative?’ He suggested that it is not happening at the moment because there is pedagogy around it (creativity). The first part is giving students time to think and currently that is not happening (PM1). For him the curriculum was far too crowded and not explicit enough, which he said meant that ‘they [students] often do too much too thinly’. Furthermore he also suggested that ‘we talk about it more in a pedagogical sense but not using the word creativity. We would talk about innovation’.

ATAR was never directly addressed by participants. However, the challenges created by it were at times inadvertently acknowledged and highlighted. One important example was during the later stages of the interview with PM1 when he became more candid and discussed the prominence of ATAR scores for mature age applicants versus direct school leavers to university. This offered an interesting insight into how even policy makers viewed university entrance. PM1 momentarily suggested that it (entering as a mature age student) was ‘often a better way to do it too’²⁴. Asked to clarify further, PM1 diverted the conversation rather than expanding further on his suggestion. PM1 discussed how ATARs importance to university entrance is significantly dropping anyway because they are looking at a broader range of measures than ATAR alone now. This was a significant admission because while PM1 seemed to quickly dismiss it, it was an inference that validated a lot of participant’s responses

²² The administrator at the private school had said that they were bound by standardized tests as a method of how they can impose what they want on the school due to a process of qualification to ensure they have all the ‘right’ sorts of things required. While the government had not been as blatant as to say that, it was a concern they could by saying if you don’t do what we want you to do then we will cut funding.

²³ After a long pause he said ‘that is a good question’ and I would perhaps get a better answer from an academic.

²⁴ Apply for university as a mature age student.

regarding how difficult it was to develop and nurture the creativity agenda within the current conditions at their schools while ATAR remained such a central focus of the educational agenda.

Administrators at both schools were quick to reinforce the influence that ATAR had on convergent teaching practices. At the public school one administrator was quick to reflect PM1's view that creativity was not something that was systematic. When asked if they teach for creativity, he felt that within subjects like art and music they had a tendency to 'invite' creativity. He did suggest that of the two streams the Steiner is bolder as to attempt more creative tasks, such as performing a Shakespeare play, but because they weren't really inherently planning for creativity their success would be difficult to define (PsA1). He further highlighted that an impediment towards creativity was when teachers 'simply looked for closed answers to questions and only exercised factual knowledge' of their students. Currently, he felt that because the curriculum was 'pretty tight', the emphasis was probably towards 'fundamental facts' rather than problem solving that he felt requires a creative frame of mind. The biggest issue with current measures were that while it did differentiate between people on a very 'crude' basis it only looked at areas being tested and 'are narrowly focused on skills'. These were agendas that policy makers set and schools are obliged to follow. The feeling that the final two years that make up a student's Victorian Certificate of Education (VCE) was prescriptive was also cohobated by another administrator at the public school²⁵. In fact PsA2 went as far as to question how 'sterile' VCE has become.

Some people argue we have to abolish the VCE system. Why have a two year system that is grooming kids for university? Why not have a six year secondary school that actually prepares kids for life? Why not throw another year onto university and let them do some of the VCE work...there is a good argument for that. Yes we are tailored to every kid almost going to university and they don't always go to Uni (PsA2).

ATARs influence was found to be quite broad but narrowed quite significantly as a student progressed through their stages of schooling. This reflected much of what was said by PM1 earlier in that most felt that as individuals progressed through their stages of schooling they had less time to focus on people as whole, as younger years did, and instead were often simply ensuring the attainment of specific knowledge within subjects²⁶. It therefore was more accurately suggested not that 'secondary teachers loved their subjects', but that the

²⁵ VCE is made up of year 11 and year 12. It is those two years that count towards the attainment of a student's ATAR. The PsA2 commented that 'VCE is a very prescriptive course' during the interview.

²⁶ This was commonly referred to by participants as an inability to perform 'higher order' thinking tasks. Two of the students also agreed that classes were definitely driven by teachers rather than by their interests.

correlation between creativity and the attainment of more formal academic subject matter ‘don’t marry up’ (PvT3). This was a strong sentiment felt by teachers at both schools²⁷. One commented that she tried ‘to give a lot of creative work in year 7 and 8 because I know that by the time they are in 11 and 12 that gets knocked out of them a little bit’ (PsT3). An administrator went further and added that the current VCE process was contributing to students that were ‘poor problem solvers, [had] poor communication skills and poor levels of understand of cultural issues. They were very one dimensional, very sterile’ (PsA2). This, according to him, was why universities such as Melbourne University had changed their educational models upside-down. However, despite the acknowledgement that many of these abilities rarely ‘showed up in formal testing’ utilised to calculate ATAR (or NAPLAN for that matter), preparation for such testing was seen as a life skill that was essential to student’s progression and preparation at both schools²⁸.

It was quite evident from responses and observations that the attainment of high ATAR scores was more of a priority at the private school. The fact that preparation for exams and formal testing had begun earlier (at a year 8 level) and were much more prevalent during class discussions was a clear indication of their importance and significance. This did not however mean that students at the public school did not express opinions about it. One student at the public school, while unable to verbalise a solution, also felt concerned that his own ‘learning process’ would not be recognised in year 12 (PsS1)²⁹. This was a significant theme throughout the study, participants expressed dissatisfaction with the status quo yet due to the significant shifts required at a systematic level most found change almost impossible. PM1 suggested that if was a case of ‘the tail wags the dog’. He felt that if creativity, through enquiry learning, was embedded more into VCE it would ‘push down into 7-10³⁰. A teacher, whom when asked to describe the current relationship between creativity and the academic subject matter, had a more profound conclusion, ‘I suppose you need a whole paradigm shift in terms of how it is all done...married up a little more would be good. Giving the kids more reins of choices to find their niche or their little interest’ (PvT3).

²⁷ PvT1 also viewed certain subjects as more able to be creative and said he was ‘lucky’ he had that flexibility over other subjects. PsT1 also reaffirmed that having the ability to ‘play’ in class was essential otherwise ‘someone else is solving the problems for you’.

²⁸ Importance of leaning test preparation skills was highlighted by both PsA2 and PvA1

²⁹ This was seemed particularly true due to the Steiner educational background that he came from.

³⁰ He said that it was something the department was trialing (an enquiry semester).

4.2 Educational Experiences

In this section views and opinions to the approaches that nurture creativity in practice will be compared and analysed. Section 4.2.1, will address how various interpretations of creativity were translated into classrooms and what effects they had on practice at the two schools. In section 4.2.2, issues regarding challenges in catering to difference will be addressed. Lastly, section 4.2.3 will elaborate on the various experiences relating to creativity both explained and observed during the course of the study.

4.2.1 Challenging Convention in the Classroom

The educational experiences discovered during the study provided fascinating insights that illuminated and informed a lot of the feelings and opinions uncovered in the previous section. The schools' approach towards creativity was twofold. Firstly, it was dictated by how they interpreted creativity, and secondly, how it was implemented. Because creativity was only used as a broad term within the Melbourne Declaration, the study found that policy makers had no conformity in their understanding and largely discussed creativity through personal interpretations³¹. This lack of coherence reflected the discovery of no cohesive understanding regarding creativity in schools, by teachers and amongst students. Therefore, how creativity was supposed to be produced within the education system was also a feature that was comparatively absent from discussions until it was raised specifically during interviews. Consistency in the use of the term creativity both amongst and within participant's responses was another key discovery of the study. Often, answers directly conflicted with other in regards to creativity when participants explained narrower topics, such as educational aims and goals. Highlighted by PsA1 during the interview, creativity was 'broad' and educational aims and goals had a 'much narrower focus'.

Administrators, teachers, and students all had very different interpretations of creativity. References were made about whether it meant 'problem solving', displaying and developing 'things' outside of formal structures, to what 'allows us to get to an iPad'. Policy makers, administrators and teachers all displayed great affection for what is best described as an 'openness' towards various creative principles³². However, a more prominent finding relates

³¹ As was described in section 4.1.1.

³² Taken from PsT2's response about not just being open to different ways of doing things but also initiating some of the different ways of thinking or approaching something.

not merely to the interpretation or ‘openness’ towards creativity, but to the general capacity of those working within education to be open *enough* to accept that creativity may mean and appear very different to someone else.³³ One private school student revealed that during a creative writing session a story had resulted in a counselling session over the content: ‘she (the teacher) thought it was too dark...I just wrote it because we got the choice of writing whatever we wanted and so I just wrote it’. Hence, a further finding indicated that while all participants’ view of creativity embodied notions of difference, diversity, and discovery, it was in fact a lot harder to be open to various forms of creativity in practice. This was true at both schools. When one of the private school students was asked, *what value do you feel is placed on creativity at this school*, he replied, ‘[it is] not one of the top values’ (PvS1).

The Steiner philosophy at the public school also had difficulty in accommodating certain creative capacities and interests of students, particularly if they were translated through multimedia or electronic technologies. An administrator suggested that creativity was about encouraging his students to ‘invent things’ and ‘find things out’ because not being creative was ‘dull’ (PsT1). However, when we discussed if this extended to areas that involved newer forms of technology and I asked *if a student displayed a creative capability with technology and wanted to express themselves creatively through those forms; would you support that?* He simply replied that they did not, even suggesting that ‘multimedia was the worst culprit’ for dulling creativity. Another teacher added that they do introduce it (electronic technology) later on (year 9) and if they wished to explore technology they were free to but at home (PsT2). A third added that compared to other Steiner schools they were ‘grounded more in reality’ and tended to integrate technology earlier³⁴. This was a contrast to the traditional stream of year 8s that not only had a one on one laptop program, they advertised its success as a tool to ‘enhance skills’ and ‘maximise opportunities for learning’ (see appendix 8). While one student in the Steiner stream said that she preferred ‘the old fashioned way’, she did confirm that Steiner would ‘probably not’ encourage her capacity if she did happen to have a creative inclination towards technology (PsS2).

³³ These ideas here were derived at from interviews with the two policy makers but representative of the many holistic answers that were reflected by all participants. Here the distinction is more about how participants identified these points quite unanimously, such as being ‘open in mind and heart...to explore different pathways...that aren’t accepted as being the norm’ (PsA2); Yet, were found to be contradicted in many cases when triangulated with observations and during interviews with students.

³⁴ This comment was made during a general conversation with a teacher in the staffroom was asked, *how would you say Steiner is different here compared to other schools?*

The main stream at the public school also revealed some significant findings in regards to convention. A teacher explained how she had abandoned a PBL (Project Based Learning) approach and chosen to return to a more traditional classroom environment that incorporated common assessment tasks (PsT3)³⁵. PsT3 explained that,

I didn't know anything about PBL so I asked...She [colleague] said 'they can do projects research and it's like enquiry methods'. So I asked the kids, what did you do for PBL last year? One of them said, 'I spent the whole year on Egypt'. Another one said, 'I spent the whole year on Justin Bieber'. I said, 'well I am cancelling PBL. I am calling this humanities...First semester we'll be looking at history. We will be looking at ancient societies. Second half we will be looking at geography. We will be looking at mapping deserts and rainforests'. Ok, and they loved it.

The classes that were observed reflected this approach. The main stream was reminiscent of the private school and largely prescriptive with the greatest amount of time allocated towards comprehension activities. In the most extreme instance it took only six minutes for a class to be seated and told to continue with a comprehension activity that they did for the entire length of the class. Consequently, students did not reflect PsT3's proposal of love for the current curriculum. In fact, one student whom was spoken to during one of these lessons suggested that he found classes to be 'pretty tedious'. The student believed that maths and science were the worse culprits. He felt English also involved a fair share of comprehension activities. Yet, he felt they got to 'do work where we have a little more choice'. He pointed to a poster and said 'we get to express a bit more creativity because we get to design them and it's a bit more fun', further noting that he liked to draw. Again, the term creativity was reduced merely to reflect superficial design elements rather than the actual substance of the curriculum that encouraged students to seek answers to their own questions that surrounded their own interests, which curiously the abandoned PBL did.

4.2.2 Catering to Difference

The holistic claims made by participants in regards to creativity, and the various conditional circumstances where this was found not to be the case was a significant revelation from the data. At both schools, administrators and the teachers were observed to go to great lengths to inform practices and cater to difference. However during classes this was rarely apparent. During interviews teachers often gave examples of where students were 'encouraged to

³⁵ Project Based Learning is a teaching method that encourages components that investigates and responds to a complex question, problem, or challenge through critical, in-depth enquiry that is largely driven by students (Lee, Blackwell, Drake, & Moran, 2014). Common Assessment Tasks are essentially a set of predetermined achievement standards that is believed to indicate the quality of learning students should typically demonstrate by a particular point (Poliah, 2003).

explore deeper thinking' through the 'tweaking' of assignments to personalise them to the students individuality (PvT2). Such examples of classes included utilising film to act out and explore medieval torture, students making leaflets, cartoon strips, and talks to investigate reproduction in science.³⁶ One teacher used the word 'student directed' when describing an exemplar lesson he was proud of (PvT1). While it appeared teachers wished to encourage students to create their own assignments in consultation with teachers, particularly in the area of humanities, one teacher contextualised the situation with this statement,

We are still a very academic school so I can't be open ended, fuzzy, and warm. I still have to get through the curriculum. So, I am trying to marry both things and they have exams. It is a traditional school. It is academic. Their parents want them to be exposed to a traditional academic environment so we do have to deliver that...So there is a responsibility to be consistent with what everyone else in year 8 is delivering.

Hence, of the examples towards creativity that were conveyed during interviews, observations and discussion with other participants (students) actually found them to be infrequent and inconsistent. Students affirmed that in the cases where creativity actually was a focus, it was only teachers that 'really knew them' who were able to incorporate and explore their difference effectively (PvS1). PvS1 said that 'our mentor lets us try new things', PvS2 agreed, 'yeah she [mentor] is really good with that'. Another student during a candid discussion also affirmed that he felt while subjects such as English presented different topics, he said 'English is essays, essays, essays'. A further point he mentioned was that he had an interest in IT and when asked if he was able to utilise this interest he believed there was not much 'flexibility to express creativity' through IT because 'teachers were afraid you will use the PC to cheat yourself'.

The private school had invested heavily in elaborate facilities and sophisticated measurements to assist in identifying and to teaching students various learning styles³⁷. However, when a group of three students were asked if teachers generally utilised the technology at their disposal, the three expressed that generally the equipment was only used for the most basic of tasks, such as playback of video content³⁸. This was found to be the case during observations also where technology was only used to play a film during English

³⁶ These were examples teachers gave of classes were students presented a topic in a manner of their choosing.

³⁷ The school had electronic whiteboards, new science buildings, PCs and Macs, and students had pads with educational software installed. They also underwent an evaluation to diagnose their learning styles according to a multiple intelligence chart, which students are given and place in a folio along with work they are proud of to show their parents.

³⁸ This was in all classes other than those classes specifically orientated around technology, such as a music technology class that was observed.

classes. A student that was using an iPad was asked if he felt using an iPad was creative, he laughed and said ‘they are used just like textbooks’. This feeling that bookwork dominated their education was a strong one amongst students. While all students felt that they were able to express their creativity at certain times, it was seen as an exception rather than the norm in most classes³⁹.

Intelligence testing, which was intended to help identify and inform difference, was also felt by students to have little value upon their individual creativity. Teachers and administrators perceived it as a significant tool but students interviewed felt that while their differences were being identified through intelligence mapping teachers were ‘really laid back’ about looking at the results with the students. Hence, the value of such testing was diminished in the eyes of students as they felt it had little to no impact upon how they were being taught as a result. Three students said ‘no one ever looks at them’. One of the three boys when asked *do you feel they teach you according to these types [intelligences]* plainly stated ‘no, they just teach the same thing’. A fourth student during an interview, said that ‘they like flick through them [results]. They don’t really sit down with you’ (PvS1). PvS2 concluded that the testing was ‘a pretty dumb idea’ because she felt it was simply something to show parents during student lead conferences⁴⁰.

The trend of instances that demonstrated certain paradoxes when catering to creativity also persisted at the public school. A key example arose when both teachers and students in the Steiner stream attempted to illustrate creativity in reference to what was called ‘main lesson books’. A teacher explained that these were ‘a little bit like they [students] were creating their own textbooks’ (PsT2). These books were used to ‘get students to be more creative’ (PsT2). A student also affirmed that he felt that these ‘main lesson books’ were a way for everyone to ‘express their own creativity in their own work’ (PsS1). During an impromptu conversation with four students, one of the girls described how Steiner was more ‘creative and personalised’. When asked to describe how, she said ‘we can decorate our English book’. Hence, the level of creativity these books encouraged was in fact very narrowly defined. The girls then revealed how they were interested in music and writing short stories. After they were asked *do you get time to do that much?* ‘Not so much’, one replied. The ‘main lesson

³⁹ This question was asked to numerous students candidly and all responded affirming that creativity in a class was an exception with art, science and English being subjects where creativity was most likely to occur. However, they felt bookwork dominated a majority of their time.

⁴⁰ In reference to the portfolios PvS1 said, ‘everything that is put in this book my parents already know. PvS2 also said ‘we did it last year and my mum was like ‘I know all this’.

books' simply allowed students to display the information they were taught differently. The content itself was found to be the same⁴¹. PsS1 elaborated on the concept when he explained, 'instead of sitting down using a computer...normally what I would do with like Shakespeare is I would do like these pillars with vines wrapping around it with petals. And I would do like Shakespeare kind of leaning against a pillar reading a book'⁴². Therefore, despite the fact that it was suggested that school 'generally isn't textbook focused' and the Steiner philosophy was less so, the books they created became textbooks but with pictures and borders drawn by students themselves. According to a teacher, this was done as a way of getting the students to be 'more active in what they are doing' (PsT2).

The main stream of the public school was much the same and had similar difficulties catering to creativity within its standardised curriculum. While a degree of choice was available, as explained by a student earlier in regards to the presentation of content, no examples were directly witnessed during the observation period of the study at either school. Topics and content were always predetermined and students only really had choice in terms of presentation⁴³. This was a significant point, it contrasted many of the rich examples given by administrators and teachers at both schools about creative classes they had given and were proud of versus the overall lack of regularity where this actually occurred. This was a factor recognised by everyone involved in the study⁴⁴. Policy makers, administrators and teachers in particular were very open about their disappointment that creativity was often an absent element in the classroom. A common theme was that most felt that there was nothing they could do about it as traditional elements, such as reading, writing and arithmetic, was something that simply needed to be done. This is not to say that participants felt that these elements lacked creativity if taught accordingly, however according to one administrator, due to 'a pretty tight curriculum where there is fundamental facts and processes to be learnt, I don't think there is a lot of room' (PsA1).

⁴¹ Numerous main lesson books were looked at and students would write things such as a poem or passage but simply decorate it differently.

⁴² Again through the students comment it was again apparent that the use of computers as a medium of expression was not encouraged.

⁴³ Teachers often said they attempted to cater for students various creative capacities by allowing presentation through the use of various mediums and through consultation to determine appropriateness.

⁴⁴ At some point every participant made a note or comment about what they would like to be done or had done in the past in classes but were unable due regularly due to various factors relating principally to time and money (money was a more significant factor in the public school).

4.2.3 Classroom Experiences

The feeling within each class that either promoted an environment that encouraged and invited creativity or overlooked it was a significant theme that arose at both sites. This was in terms of the physical environments and personal feelings towards them. The creation of these environments was a conscious decision. However, the instances where creativity was absent appeared more unconsciously. In fact, it often appeared to be simply forgotten as suggested earlier. The conscious decisions were evident in areas such as the planning of the physical (the buildings, the classrooms) by administrators and teachers whom built and set up classes in a particular way they felt best services the outcomes they were trying to obtain, and the personal, such as in the delivery of the curriculum and its impacts upon the students it was delivered to. The unconscious were more apparent in the periphery, such as within dialogue and nuances between students and teachers and in the overall ability of each school to actively cater to the individual creativity of each student. This was often referred to during interviews and discussions as a situation about ‘what I wished I could do versus what I have to do’⁴⁵.

In many ways, the environments observed within each class were where the culmination of ideas regarding policies and practice from all levels about creativity were either demonstrated or absent. Careful observations of the schools revealed that early impressions regarding both school environments were quite misleading. Firstly, upon entering the private school the level of attention attributed to the schools impressive buildings and facilities was clear. However, what was more significant was generally in regards to details that weren’t seen. This was a point raised briefly earlier in regards to classroom appearances that led to two participants describing the classes as ‘depressing’ and ‘not interesting’. A student remarked that they wanted to ‘decorate the classroom last year’, but were not allowed to put up anything on the walls (PvS2). Hence, the appearance of the classes, the furniture and fittings within them felt cold. This feeling was also put forth by others that were asked during impromptu discussions⁴⁶. This was contrasted against the primary classes at the private school that were full of colour, warmth and examples of student’s work that lined the walls. Conversely, while the initial impression of the worn and weathered exterior of the public school was

⁴⁵ Participants regularly spoke dichotomously about what they would do if they had the time, were able to change the curriculum, could reduce the amount of reporting they had to do, or in the case of students, they all felt like their direction was driven more by ‘them’ than themselves (PvS1 & 2).

⁴⁶ Four students were asked about the appearance of classes and supported the view of the two students that were interviewed.

deteriorated and dull, the climate within the classes, particularly in the Steiner classes, was inviting. The only exceptions were the science class rooms. Dated in appearance, they felt as though they had not been upgraded for quite some time. However, it was the ability of each of the schools to encapsulate a certain feeling within the walls of the buildings that was most significant.

Overall, the public school was covered with colourful work of various kinds and abundant with progressive posters regarding tolerance and acceptance (see images 6 & 7, appendix 7). The private school was modern but quite bare by comparison⁴⁷. Furthermore, the classes that were least personalised in appearance was also generally found to be least personalised towards individuals. This was particularly the case with classes such as maths and humanities at the private school and maths and science in the public⁴⁸. Furthermore, these classes were observed to be more relaxed and were less disruptive as a whole. The Steiner classrooms were by far the most cohesive of all classes. There was an apparent sense of comradery and students rarely heckled each other in the same way as was observed in both the main stream of the public and private school.

There was also little notable difference in both schools' approach towards creativity in the classroom. While a policy maker himself noted and defined creativity as something that was 'developed and displayed outside of formal structures', it was observed and explained by participants within the schools that the formal structures themselves were often the very thing that was prohibiting creativity within the classrooms (PM2). Another policymaker affirmed that currently the educational system was 'not good' at embedding creativity within classrooms (PM1). Furthermore, PM1 felt that 'we have got too much pedagogy where a teacher goes on and talks for 85% of the time. Then we want to know if the kids have learnt everything they have said' (PM1). This assessment by PM1 strongly corresponded to the findings observed at both sites. Neither school was able to demonstrate any significant difference in approach that contradicted this point. Additionally, students also believed this to be the case, despite one student even using the word creative to describe the school (PsS1).

The students' contradiction towards their interpretation of creativity was a key to understanding both their affection for certain teachers and their understanding of realities

⁴⁷ This is specifically referring to where a majority of the year 8 classes were held.

⁴⁸ While these subjects were highlighted, there was a variation due to teachers. This was particularly true in the public due to the two streams. English, for example, was also far more prescriptive in the main stream. In these classes teacher lead discussions and comprehension activities were observed to dominate classes.

relating to creativity within their classes. The private and main stream students were both generally quite critical of their teachers and schools. Some felt that some teachers were against them expressing their creativity or trying new things (PvS1 & 2). They said it was often a case of ‘you have to do it. You have to sit down and go through it quietly’ (PvS1). However, the two Steiner students interviewed were both strong in their defence of their teachers and the Steiner philosophy. The private students interviewed felt that the separation of genders was based upon ‘a very stereotypical view of boys’ and girls’ and was ‘changing the way you would learn’ (PvS1). The administrator suggested it ‘was a choice to enable the students to learn at their [own] pace’ (PvA). Yet according to PvS2, that stereotypical perception extended to individuals also. There was a strong prioritisation on sport, English and maths, suggested students, and while PvS1 defined creativity as the ‘freedom to individuality’, PvS1 characterised the school as having a ‘more mainstream perception of things’⁴⁹. Hence, the private school students felt that creativity was ‘not one of the top values’ (PvS1 & 2).

The Steiner students however were far more positive and felt creativity was a ‘very high’ priority of their school (PsS1 & 2). This was despite an administrator earlier suggesting it would not be a word he would use to describe the school. In fact, another Steiner student suggested the word the administrator used, ‘academic’, was ‘not so much’ a word he would use (PsS1). However, the teachers in reality provided little differences in what they were teaching and how much choice they had over it (over the main or private) but made significant efforts in how they communicated and related that information to their students in classes that made it appear so. Students spoke enthusiastically about their relationships with teachers but often made distinctions between teachers and the kind of education they were receiving. One student commented, ‘the education is good, the teachers are awesome’ (PsS1). This was further emphasised when asked to speak more specifically about the challenges to achieving what he wanted through education. PsS1 highlighted that ‘at the moment it is like [name] she is giving me knowledge but it is not as...it’s a lot but it is not in the way that I would like’. For PsS1, ‘using your own expression in your work’ was creative and he referred to his tutor as someone who did that rather than his teachers. While he felt some teachers did do this, he did say that he was excited because ‘the maths teacher we are getting next year, he sounds amazing. He incorporates history, creativity, um maths phycology and I think he sounds awesome’.

⁴⁹ PvSA confirmed English and maths as having most amount of time in a teaching cycle.

A central finding within the classrooms that ties the aforementioned discoveries, and particularly highlights various explanations made by participants, was emphasised by the difference between creatively designed or run classes and actually catering to individual creativity. Catering to creativity, as pointed out within the framework, is a situation where you give individuals challenges, you set them tasks, and you give them freedom to speculate and hypothesis scenarios based on their own skill sets and capabilities (NACCCE, 1999). This underlined the inconsistencies of those, such as policy makers, administrators, and teachers whose broad purposes of education and holistic definitions of creativity were not substantiated by evidence at either study site. While the ‘one size fits all’ educational model was not how participants believed or envisioned their schools to be, as suggested by PM1 during his interview, they ‘inevitably’ and ‘intractably’ were.

Throughout interviews, creativity was defined by administrators through such terms as ‘doing something different than normal’, ‘finding various ways to allow a student to learn’ or by teachers as ‘finding something that hasn’t been found’, ‘finding a solution that isn’t obvious’, and ‘thinking outside of the square’ (PvA, PsA2, PsT1, PvT3). When teachers were asked about classes they were most proud of, the major themes orientated around flexibility and personalisation. Yet, many of the examples when detailed were in fact classes that simply used personal anecdotes to engage students rather than a textbook (PsT3). Students also had the opportunity to be more hands on. There were some examples of these types of classes at both sites but were confined to English (at the public school where they prepared for a play), science, art, and music tech at the private school. However, students often labelled them creative simply because they were encouraged to do more than merely reading and writing⁵⁰. Interestingly, the classes students often highlighted did not even fulfil their own definitions of creativity; such as ‘using your own expression...in the topics that I choose’ or ‘freedom to individuality and choice’ (PsS1 & PvS1). When asked to describe *how those notions of creativity are being incorporated into the education here?*; students described classes where they got to ‘play’ in science by pushing a wheel to demonstrate friction or ‘draw’ in English to produce a boarder around the same piece of writing (PsS1 & PsS2).

Two teachers (private) and one student (private) offered examples that emphasised the distinction between a creatively taught class and teaching that catered to creativity. The teachers described challenges they had set about a topic where they had encouraged students

⁵⁰ Students often referred to creative classes as ones that they had the opportunity to ‘do things’ in (PsS2).

to ‘tweak’ tasks and ‘come up with something that still fits the criteria’ (PvT2). One highlighted the point ‘not just PowerPoints or just posters but giving them the freedom to choose’ (PvS3). Another said this required her to be ‘receptive’ and ‘encouraging’, and often meant students did ‘even more work’ but were ‘happy to do that’ because it caters to students various ‘creative elements’. PvS1 validated this view by expressing the desire to ‘learn by himself and in his own ways’ (PvS1). He also wanted help and encouragement to nurture his ‘ways’ even if ‘teachers don’t really get into it but I think, help me’⁵¹. Despite these conversations, no examples were observed at schools where students were made to encourage or explore this definition of creativity, one that other administrators and teachers had also proposed⁵². When discussing classes they were most proud of, other teachers commonly referred to learning types, but through the presentation of information by them not the student. They encouraged conversation by being innovative through the use of anecdotes, technology, and various mediums. Furthermore, all participants agreed that these circumstances were exceptions to the norm. Therefore, neither school was found to regularly cater to creativity of its students. Nor were any classes observed to apply their own definitions of creativity, let alone the ones defined within the theoretical framework.

4.3 Transformation and Change

A feeling that transformation and change was required was a significant theme that arose early on in the study. This finding was also quite dichotomous at times and participants often contradicted on another, particularly at the policy level. Raised earlier and elaborated here, at the policy level, there was a desire to both ‘provide for young people to reach their potential’ and a ‘need to have a snapshot of where our system and schools are at’. These ‘challenges’ were often expressed as ‘getting the balance right’ (PM2). In regards to *the relationship between creativity and the attainment of academic subject matter* PM2 felt, ‘I think we do pretty well’. He also suggested that ‘my observations... visiting schools is that we get the balance pretty right’. While PM1 also felt there was ‘quite a good balance’ in regards to accountability measures compared to other systems, PM1 was less optimistic than PM2.

PM1 believed the current system was ‘not good’ at embedding creativity. He felt there was only ‘islands of it’ (creativity) and certain schools were outstanding. PM1 identified the lack

⁵¹ This was the student that felt despondent after writing a creative writing piece in an English class and was sent to a councillor because it was deemed ‘dark’.

⁵² PsA2 and PvSA also gave examples but related them to other year levels.

of depth in the current curriculum as a significant factor. He believed it was not encouraging 'deeper learning', which he felt existed but simply was not systematic. He further suggested that the word 'innovation' was often being used rather than 'creativity'. PM1 believed there was a pedagogy around creativity. However, he did not feel 'the links to the sort of pedagogical issues are clearly made. It's almost like we say let's teach creativity art (laughs), and that's fallacious' (PM1).

When asked to *identify factors that promote or impede creativity in schools*, PM2 was able to offer very little in the way of strategies for improvements in regards to the current creativity agenda⁵³. Yet, PM2 believed that the role others have (including himself) in developing creativity in the educational system was quite similar. Principally, he felt it came down to participation and how individuals applied themselves in each of their roles. Policy makers were to develop the public policy (whether it was curriculum or design of the physical environment), which administrators and teachers were to deliver in an environment that fostered creativity. Parents were to be aware and encourage students. Lastly, according to PM2, students had the responsibility to 'not be passengers', they had to be heard for creativity to be fostered.

PM1 emphasised both philosophical and more practical solutions to what he felt was largely impeding creativity in education. However, his responses were at times unclear. Ironically, he initially suggested that if he 'were able to play god' he would 'unclutter' and 'redo the curriculum' to 'really concentrate on the essentials' (PM1). Yet more important than the strategy they adopted was the need to address the deeply embedded culture that develops over time. PM1 felt that 'culture eats strategy for breakfast', therefore change that embraced the creativity agenda was difficult to achieve (PM1). He highlighted what he said was 'even the simple things', 'why do we have double periods? It's obvious, because one bloody period is too short (laughs). So we have made those sorts of decisions over time' (PM1). He acknowledged how to date, while the Melbourne declaration had emphasised 'all young Australians become...creative individuals', he pointed out that currently 'there has been a much heavier focus on literacy, numeracy and standards' (PM1). For PM1, a shift involved 'getting teachers to have a practice that makes this a natural development activity'. For PM1 teachers were the key, suggesting 'fundamentally, its teachers that have to provide the

⁵³ When asked if he had any *examples to improve testing* he replied 'not off the top of my head' (PM2).

environment'. They were 80 percent of the quality and 80 percent of the reason students improved⁵⁴.

However, later in the interview, when asked *do you feel the framework is there at the moment to allow teachers to promote the creativity agenda?* His response was that 'a majority of teachers are doing that...absolutely'. This seemingly contradicted his initial response about the need to 'play god' if he indeed did feel that a majority of teachers already had the necessary framework in place. When asked why he felt certain teachers were not promoting the creativity agenda, he suggested that it was because 'we had not given the right support to those teachers' (PM1). PM1 also suggested at one point that he 'wouldn't want to say teachers don't have enough time (for creativity)' but later suggested 'un-cluttering it dramatically (the curriculum)' to 'allow sufficient time' for what he himself called 'deeper thinking' in order to 'give students time to think'⁵⁵. When PM1 was asked to further elaborate on what he perhaps felt they should be doing to support those teachers, he replied, 'how long is a piece of string', emphasising that PM1 did in fact feel a substantial need for transformation or change⁵⁶.

Administrators at both schools felt that their respective schools were making significant strides towards nurturing creativity⁵⁷. Within the private school, the PvA strongly felt that the key to them continuing to do so was because they had made creativity 'part of their core' by embracing a 'flexible' approach to an area of study, to a method used to study the area, to the curriculum, and even to the 'way they (students) are assessed'⁵⁸. Yet, the PvA also expressed that 'schools are going to change dramatically in the next few years because we have been conscious of talking about creativity'. PvA felt that 'building a curriculum around the arts' was one way. However, at a systemic level PvA was more pessimistic. This negativistic view of the educational system's ability to nurture creativity was interesting seeing she felt that her school was already doing so. PvAs nihilism was squarely placed at the fact that 'all of the assessment at the end of the year is test based' and 'schools would be significantly different if they didn't have that'. Yet, 'at the moment they (governments) are forcing their requirements on us and the ATAR is it'. PvA, felt that at the moment 'VCE is about being able to

⁵⁴ The other 20 percent for him 'the role of families, the role of society in general. The school community'.

⁵⁵ In response to the question, *how do you feel you could improve the situation in order to nurture creativity?*

⁵⁶ PM1 did go on to say that millions had been spent through the Bastow Institute to provide 'hundreds of units of work'. It was all currently available to teachers through a website and he felt that these lessons exemplify good practice and would support creativity in our young people.

⁵⁷ PvA said 'we have been doing quite well' and PsA2 said he felt his school 'is a very creative school'.

⁵⁸ Creativity was further highlighted as 'an aim' in order to allow them to be as 'creative as they want to be'.

regurgitate’ and this was pushing down into ‘the middle school and even younger...so we are stuck with this at the moment’. Improving the situation was ‘the 99 dollar question’ because there was a concern that the government could cut funding ‘if you do not do what they want’⁵⁹.

The PvA felt that a significant change in discourse by policy makers would drive a change within schools. The PvA explained that ‘a discourse around developing skills rather than results on a test would change the focus completely’. This in turn would change the conversation and ‘schools would change what they do’. Academic inflation was also another justification PvA used for change as ‘students won’t allow what was allowed fifty years ago. They want participation’⁶⁰. PvA felt that teachers had to enable students to ‘facilitate those ideas’ about creativity to say ‘why can’t you do that’, and then assist by thinking of way to make it happen. The PvA made it clear that it was an effort that involved communication and involvement from parents to policy makers and even emphasised instances where private and public ‘work together to produce the best results for students’⁶¹. Yet, when asked if the school actually did work with other local educational institutions she said ‘we could do that...but I think parents from here wouldn’t want to see us collaborating’ (PvA).

The administrators at the public school spent a lot of time explaining how the school had changed and transformed. The PsA2 gave many examples to highlight that the school was ‘quite complex’ and ‘very different’ from other schools, which after observation it indeed was⁶². Yet during a discussion regarding standardised tests, PsA2 expressed that despite the complexity and difference of his school, he still felt it was sometimes useful to know ‘just how your school is travelling and how it compares to other schools’. PsA1 in discussing creativity even suggested that while some of the courses may have ‘invited’ creativity and some would say ‘it is very important’, he clarified, ‘I am not saying we do teach for creativity’. PsA1 felt reluctant to speak on behalf of others but suggested if it were to be nurtured at the school ‘it would [need to] be more explicit. You would probably be setting it aside as something you would really want to talk through’. This, like the PvA, he felt was

⁵⁹ While the PvA said the government had not been as ‘blatant as that...they could be’.

⁶⁰ The PvA also suggested students will no longer justify paying \$30000 for a ‘piece of paper that no longer gets them what they want’.

⁶¹ Gave an example about private and public sector teachers getting together to learn how to assess exams better.

⁶² PsA2 repeatedly suggested and explained how ‘we consider our own thinking to be a little bit creative’, ‘we are a school that at times has been quite a leader’, and ‘stepped outside the norm’.

best served through ‘an intelligent’, ‘more sophisticated’ discourse, particularly at the policy level.

Public school administrators felt that policy makers were the ones ‘setting the agenda that you are really obliged to follow’ (PsA1). Therefore, in order for change and transformation to occur, the role of policy makers was to help ‘set an agenda’ surrounding creativity (PsA1). PsA1 also affirmed that he felt the ‘study design’ for VCE was very powerful, ‘It really determines a lot of what happens’. PsA1 found this positive to a degree because it ‘helps guide to the sorts of things we should be teaching’. While PsA2 felt strongly about greater responsibility within the entire educational system, he was concerned more autonomy was often a way for blame to be shifted when ‘things went pear shaped’. PsA1 suggested that he was not so sure there currently even was an agenda ‘it’s a kind of organised mess if you like’. PsA1 concluded,

You want it (education) very well structured, very well organised, but you want it to come down and be stretched and pulled so it is reorganised so then something can happen at the real level where it is exciting. That is the way I think it needs to be, but if at the top they were rigidly enforcing it all the way down to the bottom; that would be terrible. It wouldn’t even matter how brilliant what was created was...if it was ridged, set in stone and that is what comes down...it would be anything but creative. It would actually be quite destructive I think.

Teachers were quite unanimous about their feelings towards the need for transformation and change regarding creativity. Frequently, teachers felt they bore many of the misgivings embedded within the current educational system. To emphasise the point, a teacher suggested ‘it’s our fault if they can’t ride a bike, brush their teeth...I don’t know, everything’ (PvT3). A common theme that arose at both schools was that a greater responsibility needed to be taken by all participants within education to support creativity⁶³. Teachers highlighted ‘cutbacks’, specifically within the public schools, ‘time restraints’, inadequate training or passion in a particular area or subject, pressure to get through ‘exam driven’ curricula, as other significant issues that also needed to be addressed (PvT3, PsT1, PvT2, PsT3). However, the most significant theme that was central to all the factors just listed was related to ‘how you allow students to explore’ (PvT2).

At a more practical level, PsT2 felt creativity and the academic subject matter needed to go ‘hand in hand’, so ‘if they are showing creativity they are actually showing academic

⁶³ Ideas relating to increased responsibility by all participants were raised by all teachers at some stage when asked to *discuss what role you feel policy makers, school administrators, students, parents have in developing creativity within the education system?*

understanding...it depends on how you define creativity' (PsT2). This was manifested within assessment that often polarised a success or failure mentality that was more evident at the private school⁶⁴. The use of rubrics was found at both schools but the private school had a much stronger emphasis on the use of letter gradings because they felt it was what parents wanted to see⁶⁵. The Steiner emphasised a double rubric, one to highlight 'this is where you are at and this is the things you have done', and another to tell them what Victorian Educational Learning Standard (VELS) they are at. PsT2 said she focused on the first, to say 'look at what you have done', and so do the students. She said she did not give them a grade at the end of it⁶⁶. The VELS rubrics was simply,

To explain (to the student) that there is always another level. If you are at the top there is always something else on top. You are always trying to progress...that is the one thing I want them to understand...there is always something to learn, more to do'.

Teachers often felt that 'every kid is different and you have to hone in on what their needs are', but found it simply impossible to do 'because you need to get through different things' (PsT3). Largely, it came to policy makers, because 'it is the national curriculum that dictates how it happens' (PvT2). Additionally, others were concerned that 'everyone still wants to see results', which lead to some teachers feeling as though at times 'students may not have enjoyed the subject as much as possible and they may put them off looking at that subject in the future' (PvT2). Addressing this, according to PvT3, meant 'a whole paradigm shift in terms of how it is all done'. Supporting the system in its entirety was therefore seen as key to transformation and change. Teachers were aware that 'the pressure to get through all of this (curriculum) can stiffer creativity (PvT2). Another finally added, 'I know we play a massive role in it (nurturing creativity) and I am happy to do that but I don't think it should just be where the onus is on us'.

Students' approach to the kinds of transformation and change that they believed would foster creativity more successfully was plainspoken and direct. The private school students wanted a more 'open way of being' (PvS1). This involved 'just letting people look at things the way they want', which they felt was 'not really' being done within the current educational system (PvS1). Students at the private school found 'being so strict' on issues, such as uniforms,

⁶⁴ Improvement was measured by yes / no (success or failure) checklists at the private school (see appendix 9)

⁶⁵ 'Parents want to see reports as an A, B, or C' (PvT3).

⁶⁶ PsT2 said the grade is 'just another layer on top' that could be added. She didn't because she felt it often instilled a sense of either success or failure, rather than highlighting effort.

rudimentary and excessive⁶⁷. Two of the students felt that uniforms camouflaged their personalities, preventing others from seeing whom they felt they really were. They wanted a greater emphasis on issues such as ‘stereotyping’ of boys and girls. They also felt that ‘grouping subjects’ together in one semester became ‘a little bit too much’⁶⁸. Students felt they understood that they had to learn certain things but resented being taught in one standardised way rather than ‘going about it (learning) in a way you want’. This was something they wished policy makers and administrators specifically would address. Students at the public school made it clear that they felt it was better when decisions about them were made as close to them as possible⁶⁹. PsS2 commented that policymakers ‘control everything’ but I think it (the curriculum) is left up to the school to an extent, to teach that as they will, which I think is good’.

While some felt the school was creative in some aspects already, most felt that primary was more creative than secondary⁷⁰. Appearance at both schools was raised but in different contexts. Public students felt that some of their school needed ‘fixing’ and ‘painting’. Comparatively, private students wanted classrooms less ‘cold’ and ‘depressing’. Most notably however, students wanted control over their own education. They wanted to be included in decisions and they wanted to be acknowledged as different. Both PvS1 and PvS2 noted that their school did ‘not really’ prioritise the subjects they were interested in, such as systems tech or science. One of the public students also affirmed that ‘if everything was dictated to us I definitely would not like that’ (PsS2). All the students believed that both in policy and practice, policy makers should ‘broaden the education instead of focusing on one small thing’. This also involved the delivery of content and in the presentation of it by students. For example, PsS1 believed that in order to develop creativity ‘having a better understanding of maths, of how it adapted, how it evolved, and how it was used’ would be

⁶⁷ PvS1 said girls were told to kneel in front of a teacher to ensure the dresses touched the ground. ‘Why can’t they (the school) let you have your hair out? It is not going to affect your learning...it is more annoying having to keep putting it up cos it keeps falling out and things like that’.

⁶⁸ PvS1 and PvS2 felt they should break up subjects. PvS1 said, ‘last semester we did dance and textiles, which are two arty subjects...now food tech and system tech’. Additionally they both felt the school ‘majorly’ prioritised sport. This was despite PvS2 highlighting a love for it. For two hours PvS1 sat there and said ‘I don’t do anything at all’.

⁶⁹ This was raised in regards to roles stakeholders have in developing creativity. PsS2 felt the school, and specifically her teacher, knew how best to nurture her creativity.

⁷⁰ This was conveyed by 3 out of 4 students during interviews.

more beneficial towards nurturing his creativity than simply learning equations⁷¹. However, as PvS1 poignantly highlighted,

I think it is entirely up to them as to what they want and how creative they want us to be, if they want us to be creative at all...or anything like that. It is up to them...you know...and they can say 'choose what you want to do' rather than 'you have to do this'. So it is really their choice. Even if the school says 'teach however you want', they could still teach from the textbook because they are just a boring person or they could be creative and let you be creative as well.

Thus, while students saw themselves as active participants in the development of their own creativity, a significant and final finding was to recognise that throughout the study students never forgot how much they felt their creativity, or the transformation and change required to develop it, resided in the hands of others.

Comparatively, it was quite unanticipated to discover how much effort had gone towards the promotion of the term creativity by the public school, only to learn that there was a great disparity between participants within the school about the schools philosophy and direction⁷². While the same issues were prevalent at the private school, they were more transparent due to the focus on exams and the numerous measures they implemented compared to the public. Accordingly, there was a certain level of expectation surrounding academic performance that enhanced their prioritisation of it over the public school and filtered down to the students⁷³. It was therefore less surprising to discover that creativity agenda was discussed less and not as commonly understood by colleagues at the private school as it was at the public. Yet, at both schools there was an overall recognition that creativity and its agenda was a feature that required greater cooperation, collaboration, and assistance at a systemic level, along with a radical rethinking of education in order to be properly supported at either.

⁷¹ He also said it was the same in English with Shakespeare, 'I would just make sure you get the background to what you are doing'. He did say this was happening but only in certain contexts.

⁷² Particularly as they highlighted creativity on flyers, yet administrators and teachers identified the schools through words like 'academic'.

⁷³ Students at the private school were prepared earlier and more often for exams. It impacted on their feelings about the school reflected by PsS2 view how public schools were 'not on you as much' and how private was better for students that needed that.

5 Discussion and Conclusions

This chapter begins with a brief summary of the research questions. A discussion of the findings and main themes will then be presented (5.1). Finally, some important limitations (section 5.2) that influenced the study will be reviewed before some recommendations for future research and policy development are presented in the conclusion (section 5.3).

Research Question 1: Outcomes or goals

The initial research question sought to understand *what are the outcomes or goals that drive key stakeholders at various levels in the Australian secondary school system, and in particular, how do those concepts relate to the current creativity agenda?*

The outcomes or goals that were found to drive participants were twofold. Firstly, participants universally valued the creativity agenda enshrined within the Melbourne Declaration that encouraged the emergence of individual creativity to occur. Essentially, the idea that creativity was a desirable attribute in educational, professional and personal settings was recognised and well supported by participants. However, the realities they were actually a part of, and were often unintentionally contributing to, were essentially preventing this from happening. The outcomes or goals that participants believed fostered creativity were often accidental or an exception within the current educational system, rather than a planned goal. This is important in relation to the second factor driving participants. Measurement, in some form was seen as beneficial to individual development by most participants. Yet, the desired outcomes or goals of the measures that would further support the creativity agenda were largely seen as impossible within the current climate of standardisation and control that were exacerbated further by existing measures such as NAPLAN, PISA and ATAR. Despite the overall perception of such measures as an inaccurate and a narrowly focused measure of progress and performance (both now and in the future), the measures currently used have transformed from mere indicators to become significant educational goals in themselves. The measures have increasingly come to define success throughout the Australian educational system and largely dictate how creativity is developed (if at all). While these measures remain the principal ways in which the success of education is defined, the creativity agenda will continue to remain in the periphery as a perceived and central outcome of education yet an unrealised one.

Research Question 2: Creativity in the schools

The second question was directed towards uncovering *how the creative needs of students are being met, if at all?* It also sought to understand *what are the main differences and similarities in the approach of a private school compared to a public school?*

While there was a perception amongst some participants that the creative needs of students were being met, it was also clear that no uniform understanding of creativity existed. In the few instances where creativity was said to be fostered, what was often referenced were situations where content was delivered creatively rather than the actual development of individual creative capacities. Essentially, students were shown different ways to learn but rarely able to demonstrate what they had learnt in ways that best utilised and explored their own creative skill sets and individual talents within each domain.

In this way, the experiences at both schools were largely prescribed and rigid. Opportunity to explore individuality was often predefined at either school due to externally imposed mandates and specifically measurable educational goals that had become institutionalised because of their significant and changing perceptions in the public forum. This was found to make them difficult to ignore at all levels. The mandates were therefore seen as both necessary but prohibitive towards future development of individual creativity at each school. The public school, which had initially resisted mandates in order to nurture creativity, now needed to justify its position amid growing pressure to produce quantifiable results. This resulted in a Steiner program that in practice resembled its more traditional stream, which had also repealed its own creatively focused elements due to the emphasis now placed on measures relating to traditional academic performance. The private school, however, was in a very different circumstance, yet it was bound by identical burdens. While it became clear that private school wished it could move away from the hold that externally imposed mandates had placed upon the school, its nature as a private institution with high fees ensured that it placed measurable performance achievement as a principal priority. Therefore, a commonality across both schools was the acknowledgement and the significance placed upon supporting the creativity of their students. However, neither school felt they were able to prioritise it long enough because the measures currently used to highlight their performance, such as NAPLAN, PISA, and ATAR saw little value in it.

Research Question 3: Promoting and limiting creativity

The final question wished to reveal *what are the factors that promote or limit creativity in these settings?*

The absence both within but particularly between levels regarding any real provisions to actually support the creativity agenda beyond the current mandate outlined within policy documents meant its development was largely ignored or forgotten. This was principally due to a lack of any specific discourse surrounding the creativity agenda amongst the individuals concerned to raise its profile and significance both in the private and public arena. Hence participants had wide, varying, and often contradicting opinions of what creativity could and should mean both at a personal and practical level.

While the creative agenda was universally admired and spoken about as a means for individuals in realising their potentials, the ways in which it was encouraged to grow in practice was far from apparent. While this could, in some cases, be attributed to individual inclination, the culture currently surrounding measurement and standardisation was consistently highlighted. It was often found to disguise many of the realities educators and students currently face because of the culture that has been built around them. It was discovered that when you measure so little and place so much value on it, so much else of what is done at the schools often becomes overlooked, underappreciated, and not even attempted in some cases. While many of the current measures used were intended merely as indicators that could not provide explanations nor were used as reliable determinants of future success in any field, they were able to dictate significant amounts of what is done within the two schools because of the perceived value prescribed to them. This was particularly true at the policy level, as often it set the agenda that other levels felt they were obliged to follow.

Many personal, practical and systemic factors were clearly found to influence the creativity agenda. But, developing and providing support and assistance at all levels that addresses the imbalance regarding the use of standardised measurement and promotes an environment throughout the entire education system that values and encourages individuals to be the best they can be, not the best someone else can, was found to be the most crucial factor to further promote creativity in each of the educational settings.

5.1 Discussion

In this section the main themes will be drawn out of each of the summaries and discussed in relation to both previously presented literature and relevant new literature.

5.1.1 Confronting the ‘Certainties’ in Education

Within large human systems such as education, as was the case during this study, wide sweeping directives and intentions driven from above to challenge the status quo rarely maintain their original structure (Quinn & Sonenshein, 2008). Authors, such as Friere, suggest that this is often owed to ‘instilled certainties’ that embed and persist throughout the educational system (cited in Shor, 2002, p.29). Furthermore, the personalisation required to implement certain policies and the effect they would have in each of the very different schools, let alone on the diversity of students in them demands significant cooperation and collaboration. In this study, challenging many of the ‘instilled certainties’ indeed reflected this view, as many felt that there was no agenda at all. Policy was often said to be developed based on what was quantifiable, rather than qualified through an agreed framework or based upon a shared discourse. Therefore a central theme that materialised from the study was participants’ desire to support the creativity agenda, despite the lack of an agreed framework, and their inability to do so. This was emphasised by the variance in responses regarding creativity and the use of the term ‘islands’, which highlighted how many of the certainties still deeply embedded within the FMoE made participants pessimistic about developing the creativity agenda within the existing culture.

Creativity is a term that was highlighted through the literature review as perplexing not just educationists, but psychologists, philosophers and society itself due to the myriad of connotations that are currently embedded in its use. Hence the emphasis by Lassig and her framework to establish ‘building blocks’ on which to build a platform in order to nurture the creativity mandates outlined in the *Melbourne Declaration* and participants themselves (2008; 2009). Evidence throughout the study further supported Lassig’s concept surrounding poorly established ‘building blocks’ and indeed affirmed the emergence of ‘blind spots’ in relation to creativity, as Craft suggested in the literature review, which were evident due to existing beliefs and practices of participants (2006). However what the findings did highlight, which has yet to be adequately addressed in any literature, is the extent to which participant’s perceived creativity was being catered for when in fact, based upon both my

conceptualisation and the elements outlined within the framework, it was not. This was particularly evident at the public school, as they had explicitly identified it in advertising material compared to the private.

Participants provided glimpses of challenging the status quo to further ascertain an effective and successful creative agenda. However, within the prevailing educational environment, the dramatically varied responses, where participants often contradicted ideas they had earlier confirmed, only underlined how difficult even introducing the term was at this point. Participants argued creativity was relevant across the curriculum and not subject specific. Yet, certain participants would later suggest that certain subjects ‘offered more opportunities to ‘explore’ creativity, or ‘be’ creative in than others (PM2; PvT3; PvT1)⁷⁴. This difficulty, pointed out by Craft, is often manifested by a difference of how ‘creativity is conceived’ and the ‘limitations in curriculum organisation’ (2010). This last point was reflected by PM1, whom confirms a further remark by Craft to illustrate that ‘the way in which the curriculum is presented and organised within the time available in a school day may offer greater or fewer opportunities for fostering learner and teacher creativity’ (2003, p. 119)⁷⁵.

As a result, many of these issues surrounding control of the curriculum and pedagogy, as well as other aspects of management and financing of schools, for some, formed a paradox (Craft, 2003). Within the study it was clear that some priorities were simply ‘forgotten’ and it is for this reason the *All Our Futures* report, and other authors such as Robinson in his book *Out of our Minds: Learning to be Creative*, argue that now more than ever it has become essential to educate the ‘whole being’ and move beyond polarising definitions that personify individuals and domains, as ‘are’ and ‘are not’ regarding creativity to ensure that the social, economic, technological, and personal challenges of the future are met (2011; 1999). Yet, the greatest challenge that arose in the study to many of the certainties that participants had regarding education were observed when the topic of measurement was raised, and how the creativity agenda related to it.

A significant certainty that emerged from the data and repeated during the study regarding measurement was within the use of summative assessments, such as NAPLAN, as a ‘snapshot’ that was seen as necessity in order to ‘gauge where you are at’ (PM2; PM1;

⁷⁴ Another teacher suggested that their subject ‘lends itself’ more towards being creative with students.

⁷⁵ PM1 highlighted this point about further creativity development when he said, ‘we don’t necessarily teach as well as we should and part of our arrangement of utilising things and chopping up the day into 50 minutes and all those sorts of things tend to actually tell against’.

PvT3). Equally significant, however, was how a majority of participants defended their use despite being unable to offer other value to these measures beyond merely ‘numeracy and literacy’ indicators. Therefore, what emerged from the data was a paradox that was preventing further development and recognition in other areas, such as the creativity agenda, due to the significance placed on at all levels. Hence, the value placed on individual creativity and difference was seemingly compromised by the certainty participants had established on such narrow measures. This was best represented earlier by the anxiety student felt in regards to such measures and the reflection students had about the responses they received when they did do things differently⁷⁶. A teacher also identified how she felt word limits had compromised students, despite the quality of the content (PsT3).

Authors such as Hee Kim, and other educators in Australia have questioned the premise of such measures and the accuracy of such ‘snapshots’ to achieve even their stated aims (2006; Epping Hights Public School, 2013). Hee Kim further states that even Torrance strongly emphasised how his now widely used TTCT was actually intended as a ‘basis of individualizing instruction for different students’, not simply the procurement of a creativity Index (CI) as means of determining creativity to ‘gauge where you are at’ (2006, p. 4)⁷⁷.

This theme reflected concerns by other participants regarding the use of such data collected by measures such as NAPLAN to create profiles that were narrow and limited in scope (PvA). Wormeli supports this finding and goes further, highlighting that ‘teachers tend to spend a majority of their time on summative assessments’ (2010). This was a trend observed at both schools and by participants, particularly students, during interviews and discussions. Critically, Wormeli stresses that ‘can kids learn without grades, yes, can they learn without formative assessment and the feedback that comes from it, not at all’ (ibid). Thus, many of the measurements highlighted in the study did not reflect Torrance’s thinking or participants own admissions (including students) that where they gained most insight from was areas they felt were least valued by the educational system⁷⁸. Overall, the current measures were perceived as ‘narrow’, ‘emphasised convergent teaching practices’, produced an atmosphere

⁷⁶ Highlighted by PvS1 story being perceived as ‘too dark’ and PsS1 feeling that ‘the government is going to be really critical of me and going to, I don’t know, come in here and take me away. You’re not doing it right!’.

⁷⁷ Ellis Paul Torrance developed the Torrance Tests of Creative Thinking (TTCT). A test that involved tasks surrounding divergent thinking and problem solving that used four scales; Fluency, Flexibility, Originality and Elaboration.

⁷⁸ PsT2 highlighted how NAPLAN was ‘overused’. PsT 2 used ‘positive value statements’ based on rubrics but did not give grades unless required because of formalities. PvS1 & 2 also said they appreciated the value of formative assessment, discussions and interactions over summative exams to know where and how improvement was required.

of anxiety in students, and said very little about them or why they got the score they did (PsT2; PvA; PvS2; PM1).

The stratifying of individuals through standardised measures and turning the term creativity into merely another quotient measurement, such has been done with IQ, has been an imperative theme that has been maintained throughout the literature and the study. Participants were regularly juxtaposed between measurement as a means of self-development to understand and nurture a person's creativity and measurement that was increasingly used to produce a static measure of person's ability through a composite score. Teachers highlighted that personally they would use more formative assessment to inform and develop students but often static measures were emphasised because of their simplicity (PsT2; PvT3). It was a trend that echoed throughout the study where participants saw more value in formative assessments, yet summative assessments were still given greater priority because of their use and emphasis in reporting and by higher education institutions for entry. Hence, a rethinking regarding measurement that adopts a creative agenda must challenge many of the certainties regarding measurement that are currently imbedded and continue to persist despite participant's universal acknowledgment of their deficiencies.

While both frameworks of the study emphasised that the challenges would require a 'shared discourse, informed policy, and effective teaching and learning practices' as a means to align all stakeholders to continually improve and expand upon the creativity agenda as new evidence emerges, little of this was observed⁷⁹. An explanation is suggested both within the study by PM2, who noted that 'my biggest concern about education in this nation is that it is treated as a political football', and by Chin and Benne's 'power-coercive' strategy for effecting changes in human systems (Quinn & Sonenshein, 2008). Participants often suggested they were subjugated to policy implemented from above. The power-coercive strategy explains how more powerful persons impose his or her will as it delivers supposed effective results rapidly (ibid). This explains why participants felt 'obliged' to follow the agenda they felt governments had set out for them (PvA). However, as was the case within the study, the pressure that the externally mandated measures often applied 'come at the expense of damaging relationships, destroying trust, and forfeiting voluntary commitment' (ibid, p.70). Thus, participants at all levels often attempted to give the perception of

⁷⁹ This was evident in situations where PM2 failed to provide any solutions for improvement to the current measurement context, PvA suggested that they did not collaborate with neighbouring schools, and teachers often believed that creativity and academic subject matter 'probably doesn't correlate' (PvT3).

cooperation and collaboration but in reality were always in competition with one another for funding, status, or grades⁸⁰. This strategy therefore prevented actual support and development of the creativity agenda at a fundamental level and instead promoted a competitive nature from policy (at a political level) through to practice (at a school and student level).

The use of the framework within the *All Our Futures* report has to that end been instrumental. It attempts to redefine ‘standards’ and ‘measures’ by building on the holistic work of classic writers such as Dewey and Freire, and utilises the contemporary writings of Robinson, Pink, Craft, Burnard and others, that have attempted to move beyond simply using a static word or number as way of describing or measuring someone’s educational journey, to a process of development that all participants spoke of in theory but found difficult to achieve in reality (Burnard, 2006; Craft, 2006; Dewey, 1938; Freire, 1993; Pink, 2008; Robinson, 2011). This process encourages one to see the individual as they are and cultivate whatever capacity, trait, or skill one exhibits and seeks to make you better at it. The move from labelling, defining and the concentration surrounding semantics regarding creativity to a discussion that simply says ‘we are all creative in some way, let’s encourage that creativity whatever it may be’ is a challenging one however.

Due to its holistic principles, Robinson notes that ‘creativity is now as important in education as literacy, and we should treat it with the same status’ (2006). This was an important point that emerged from data by participants whom wanted more support for creativity but felt the emphasis towards these areas through the curriculum and further felt it reaffirmed by the types of testing used and the use of it⁸¹. This trend reflects international pressures, such as PISA that focus heavily in such areas, that was also recognised in the study by participants to add stress on these areas despite widely differing goals regarding education. Yet none of the participants suggested that they had collectively collaborated to discuss creativity as an agenda to establish a framework to develop it beyond its current form despite its important recognition. In fact, PM1 suggested that currently when they did discuss creativity ‘we’d talk about innovation’⁸². Additionally, to further highlight the recognition of the current creativity agenda, yet divide amongst participants themselves, PM1 noted that ‘it’s almost like we say let’s teach creativity art...and that’s fallacious’. This assessment by PM1 was representative of both Robinson’s and Lassig’s framework. Firstly, because of failure to produce a clear

⁸¹ Highlighted by teachers and students views that maths and English had more weight than other subjects. This was also felt to be due to the use of literacy and numeracy reporting on the My School website.

⁸² He suggested that he felt they ‘talk about it in a pedagogical sense but not using the word creativity’.

understanding of what the creativity agenda in Australia is seeking to achieve when compared to the various challenges outlined by Robinsons framework, and secondly through a fundamental failure to establish the ‘building blocks’ to support it from policy to practice (1999; 2006).

Due to the absence of any framework in order to establish the ‘building blocks’ of a creativity agenda it was hardly surprising to see fundamental misconceptions of what creativity meant during interviews and in practice. The most significant of these misconceptions relates to the aforementioned point by PM2 regarding creativity being domain specific, such as in art or within certain parameters. It is also a distinction made in the *All Our Futures* report regarding certainties between ‘teaching for creativity’ and ‘creative teaching’ (1999). These are certainties individuals hold that often relate to the culture regarding an educational system, a school, a subject, a topic or even an idea. They manifested when participants that by simply showing students things in different ways or using ICT, felt they were catering to creativity. Therefore, rather than students being challenged to explore their own ways and develop their own individual creativity to demonstrate or produce something, in reality, others were often defining the ways they could be creative for them. Craft identifies this ‘dilemma for the educator’ by suggesting ‘teaching of some concepts as if they were universal’ (2003, p. 122; 2014). But for Craft and others such as Couros, like any concept, creativity does not have to be taught this way. This means that by its very nature, alternatives and possibilities that challenge assumptions regarding perceived norms may be considered, evaluated, and adopted to express ourselves in new and diverse ways. A feature that was predominant at the beginning of each of the interviews but gradually dissipated as participants delved deeper into the realities and certainties each felt they currently faced.

5.1.2 Challenges Regarding Creativity in Schools

The allure of creativity due to both a fear of obsolescence in business and the notion that a creative individual is a fulfilled one has made it a feature that make it difficult to perceive it as anything other than ‘a good thing’ (Maslow, 1970)⁸³. However a significant challenge regarding creativity in schools, put forth in the *All Our Futures* report and drawn from the findings, was that development of creativity and other educational goals, such as the attainment of academic subject matter, were often conflicting in both policy and practice

⁸³ Apparent at the policy level by declarations such as *The Melbourne Declaration* and at the school level by the use of flyers to promote their institutions as ‘one of Victoria’s most creative learning environments’.

(1999; Craft, 2003). Discussed in depth in the findings chapter, participants when asked specifically about each (creativity and the attainment of academic material) felt both were significant goals that they desired to achieve. The first, predominantly due to personal principles surrounding the creativity agenda that were reflected in the Melbourne declaration that encouraged Australians to be ‘motivated to reach their full potential’; and second, due to the practical necessity that dictated that students ‘know’ the academic content because of the various exams and measures to ensure ‘students are prepared for that’ (Ministerial Council for Education, Early Childhood Development and Youth Affairs, 2008, p. 8; PvT2).

The relationship between this educational certainty regarding academic achievement and the further development of the creativity agenda was therefore revealed as a major theme in the study. Zhao highlights a term taken from Orwell to label this phenomena ‘doublethink’ (2012a). This, Zhao points out, is ‘to hold simultaneously two opinions which cancelled out, knowing them to be contradictory and believing in both of them’ (ibid). In this case, the question that was highlighted was how do we nurture an individual’s creativity, encourage them to seek new diverse ways of thinking and yet continue to measure everyone the same way? In some cases ‘doublethink’ was due to how participants used the word creativity interchangeably to refer to it as a thing that was ‘had’ by some or something and not others. It was not reflected as it was through the *All Our Futures* framework and others as ‘lifewide’; a process that described the application of creativity to the breadth of contexts in everyday life (Craft, 2002). ‘Doublethink’ also presented itself by participants in classrooms through references to themselves and their ‘creative teaching’ rather than the creativity inherent in their students⁸⁴. However, ‘doublethink’ was most notable when PM2 was asked to reflect about the creativity agenda and academic subject matter. Deflecting, PM2 replied that ‘you’ll get better answers from an academic’. He did affirm that he felt that ‘we get the balance pretty right’. However, he was unable to explain how the ‘balance’ was ‘pretty right’. PM2 went on only to suggest that ‘I think we do it pretty well in Australia, but I don’t have any evidence to give you on hand on that...that’s a good question’⁸⁵.

Some of the participants felt that creativity and academic subject matter ‘go hand in hand in a lot of ways’ (PsT2). A view also supported by PM1⁸⁶. Nonetheless, this only presents part of

⁸⁴ A teacher suggested she wanted to ‘make it (material) interesting for them and with creativity as well’ (PsT3).

⁸⁵ PM2 valued individual creativity reflecting upon his own daughter on numerous occasions but also defended the measures as ‘essential’. However, his ‘doubletalk’ was clear by difficulty answering the question and his inability to offer any solutions for further development to improve the relationship currently.

⁸⁶ PM1 felt that ‘why is academic subject matter not creative?’

the picture and was reflected by PM1's own view that only 'islands' of creativity were evident in schools (Zhao, 2012b). The larger picture regarding many of the certainties currently embedded in schools can therefore be described as a continuation of the once held belief that was explored in the literature review, one that developed a culture that perceived creativity is an innate, unteachable ability (Galton, 1868). It is why there has been such a dichotomy between eminent and 'lifewide' perceptions regarding creativity that persist in people's minds to see themselves often as either creative or not. Due to the social, economic, technological, and personal challenges outlined in the framework, these perceptions have now manifested to a point where the arguments in favour of 'lifewide' creativity have become increasingly apparent to the health of all areas of human life (NACCCE, 1999; Runco & Richards, 1997). This underlined why teachers found themselves contradicting their own views about many of the established certainties, and policy makers found it problematic to align both agendas amid the current culture of measurement and standardisation. PvT2 poignantly highlights this.

It goes from the top down and our final product here, (pause) at many schools is to do year 12. It is exam driven and SACs [School Assessed Coursework] regulated. What we have to do is make sure that students are prepared for that. That may be in the type of format leading up to it. But then there is the types of subjects that are chosen as well. Someone who want to do studio art...there is a lot of creativity in that. The teacher can still, (pause) most of the time (pause) not so much hmmm. I'm sort of contradicting myself. [After reflection] In year 11 and 12 the pressure to get through all of this can stiffer creativity...there is still creativity available in *things* to done. It is probably not a daily thing. You know, we can't be creative daily.

Through the difficulty PvT2 has in even explaining, she finds herself in constant 'doubletalk'. PvT2, like all other participants in the study, is clearly trying to balance the certainties that the current culture has developed over the holistic challenges presented by addressing creativity agenda. It is the central theme not only here but supported by many papers from Maslow to Robinson (1970; 2011). However, PvT2 demonstrates that due to a lack of any support to develop a framework through the formation of Lassig's 'building blocks', the challenges laid down by the *All Our Futures* report will continue to be 'not a daily thing' that will be realised within either school.

Both schools were able to provide the provision to develop creativity, however each demonstrated unique sets of circumstances that was preventing this from happening. At the public school, this orientated primarily around meeting the requirements for accountability to the state. As in the private school, it was primarily about accountability to parents. A focus on creativity at both schools was often seen as deviation from a focus on academic material.

While both were not recognised as ‘mutually exclusive’, as PM1 suggested, both schools felt ‘obliged’ to focus on academic material over developing creativity due to its emphasis by current measures and easily justifiable outcomes through exams and metrics. Hence, the public school focused on these items to satisfy the state it was ‘improving’ and the private school did so to quantifiably justify its high fees and tuition that it felt ensured its survival (PsA2; PvA). This reflects not only the amount of time teachers spent talking in class, but Firesteins warning relating to testing methods and evaluation that suggests you will get what you select for (2012). Hence, participants at the private school appeared more influenced by the pressures that the current evaluations had placed on them. This meant they were less likely to spend time developing creativity but more likely to perform well on the various measures they undertook.

5.1.3 The Challenges Towards Transformation

As maintained thus far, addressing the economic, technological, social and personal challenges highlighted by the *All Our Futures* report regarding the creativity agenda may appear quite diverse and overwhelming. Data that emerged from the study signalled an increase in cooperation, collaboration, to a complete reimagining of how education is delivered in order to further develop creativity. Principally however, the occurrence of conflict that arose regarding deeply embedded beliefs about performance, in terms of rewards for achievement at all levels and in terms of performance simply as a means of measuring progress, made developing creativity with any continuity or clarity extremely difficult. Therefore, the most significant finding that arose was poignantly highlighted by PM1 when he suggested that ‘culture eats strategy for breakfast’. Hence, throughout the study it became increasingly apparent that addressing any form of transformation became impossible without recognising the embedded culture that was currently preventing this from happening.

The various themes that emerged were not frequently unified across the participants because each often expressed context specific rationalisations as to why they perceived or felt their situation was the way it was. While this offered deep and rich understandings of their situations, it also emphasised why it was so difficult for participants to provide overall solutions for improvement. As discussed, in some circumstances partnerships had been established to expand, share and cater to individuals. Yet largely, each of the levels and schools were quite isolated from one another. This meant that rather than collaborating or

cooperating to establish a common discourse to nurture the creative agenda further at a theoretical and practical level, each of the individual findings collectively demonstrated that the isolation (both in terms of theory and practice) reaffirmed a culture that manifested to emphasise the competitive nature found within the educational system, between policies, schools, and ultimately students. The competitive culture, observed internationally but reflected locally here, highlights why participants had so much difficulty embedding their ideas surrounding creativity with any certainty or continuity (Marginson, 1997).

Australia is far from unique regarding the international and national pressures orientating around performance and competition at all levels. However, the competitive pressures on education in Australia have not improved efficiency or innovation. It has strengthened the dominance of leading institutions and forced a greater conformity to the established model (Marginson, 1997). According to Kohn and Pink, rewards, which are commonly used to motivate greater performance, are no more helpful at enhancing achievement than they are at fostering good values (Kohn, 1994; Pink, 2008). However, at an international level, rather than asking more critical questions, performance, used in rankings of universities, to literacy and numeracy testing such as PISA, as a means of argumentation for improvement or concern based on relativist terms, is a commonality (Pyne, 2015). Paradoxically, in Australia (as elsewhere), they are often hailed if they increase or deplored if they decrease (Nature, 2010). From the data gathered, the findings affirmed that education in Australia still largely orientates itself around pre-determined measures as a means of evaluating whether someone is accepted into a school, course, or vocation through some form of entrance requirement. Therefore, as participants of the study were about to move into their final years of secondary school, the significance of these requirements, particularly for university, was underlined on numerous occasions.

The Organisation for Economic Co-operation and Development (OECD), have suggested that education in Australia is a 'high quality/low equity' system (Argy, 2007; 2004). This reflects the high quality of educators observed during the study and emphasises their inability for transformation due to the lack of support towards the creative agenda. While this lack of esteem was a point that increasingly emerged from all participants in the study, the students' voices were most poignant, as it was them that were the recipients of the current education. At both schools, students demanded a more active role in their learning and emphasised a 'broadening' of their education to recognise their difference rather than feeling like 'you have

to do it like this' (PvS1). Furthermore, it became apparent that students wished for teaching to adapt to their 'learning curve or learning process' in order to 'understand the student a lot more' (PsS1). Overall, the feeling from students was that education was preparing them for the future. While they felt that it was sometimes, the narrow focus was a repeating theme they emphasised. Students had a sensible approach and logical understanding of the role of testing. They valued the ability to 'test' their skills, knowledge, and understanding, but they also desired the ability to ask questions in order to receive feedback that was less stressful and orientated around their own differences. Essentially, students valued learning the fundamental academic tools to enable them to express their creativity, yet unanimously believed that creativity and difference was not a feature that was catered for with any frequency. This was highlighted consistently by their feelings towards the current measures and the anxiety they felt in the school and amongst their fellow students.

This theme was underscored by the continued absence of a systemic strategy that addresses the 'balance of the school curriculum, teaching methods and assessment, [and] how schools connect with one another' (NACCCE, 1999, p.6)⁸⁷. Hence many of the transformations they felt they would like to see to develop creativity, such as 'the way we are expected to assess students' because of the difference in schools and individuals, was felt to be improbable due to the 'crowding of the curriculum' that many said lead to significant 'time restraints' due to the conflicts in policy and practice highlighted by Craft earlier (PM1; PvT3; PsT3; 2003)⁸⁸. Within the *All Our Futures* report, a system that is rigid and predetermines the speed in which something must be learnt, often leaves the majority who have not learnt within that time to be seen as not as intelligent or capable as those that have (1999). This was a theme that was echoed within the study by some students whom felt devalued when their creativity was neither nurtured nor accommodated (PvS2)⁸⁹.

Measurement, in the context of transformation, constrained self-development and improvement amongst educators at a systemic level, between schools and individuals alike. This is because measurement that provides no context, nor explanation, offers very little (Wormeli, 2001). Therefore, for participants, the way in which education is measured and how those measures are used is of great concern because the pressure created by these

⁸⁷ This includes how people, resources, training, and development of teachers and others is prioritised and managed.

⁸⁸ The time restraints 'bigger projects'

⁸⁹ Some students also suggested that despite the use of ICT and the like they were often simply substitutes rather than variations in actual approaches that catered to their creativity.

measures is now heavily reflected and exacerbated in the wider community (see image 8 in appendix 7)⁹⁰. This emphasised the illusion of static measures as a reflection of broader educational progress, rather than as narrowly defined indicators of features within education itself as argued within the framework (NACCCE, 1999). This challenged transformation because it often overshadowed attempts at more ‘deeper learning’ because they were not measurable on NAPLAN or by a TER (PM1). Therefore, the continued stress on static measures, often used to suggest we are incapable or improbable of more in the future cripples millions from opportunities to educate themselves when they do discover what they perhaps want to do, want to become, and are more motivated or capable of achieving it due to the myriad of personal, economic, or social reasons that may have existed at that time (Wormeli, 2001).

The challenges teachers faced suggested that ‘marring up’ the relationship between academic elements and assisting students realise their creative potentials was an ongoing one (PvT3). In fact, schools felt they could develop creativity, but setting up an agenda which the ‘society endorses’ by ‘developing a discourse around skills rather than results on a test’ was for many the first step towards transformation by changing the focus completely (PsA1; PvA). Even though some felt they had catered to creativity in some circumstances, and indeed they had, the underlying feeling was that the challenges regarding the creativity agenda were currently too great to address.

Addressing imbalances will involve a review of ‘styles, purposes and ethos of education at many levels’ (NACCCE, 1999, p. 190). Yet the existing attention on university entry and measures has meant that both schools remained very much orientated around consumption, compliance, finding out prescribed information, and generally adhered to a schedule that was sequential in nature. Therefore, the challenges to promote an agenda that is divergent, centres on creating, promotes learning about your passions and interests, is personal and non-linear, still requires significant work (Couros, 2014). It requires a focus on people rather than numbers. However, while 12 years of study, across domains, experiences, and ideas, are then reduced into a single number, the difference between what educators want to do and students want to see, versus what they were doing and what students were experiencing, will remain.

⁹⁰ The image highlights how the marketing of these NAPLAN books in department stores only increases the significance, role and pressure associated with these kinds of measures.

5.2 Limitations

While efforts were made to address shortcomings, sometimes it is simply impossible. The greatest limitation was access to individuals and managing a short time frame to actually include the necessary people that would provide greater validity to the study. This was evident in the difficulty experienced to secure schools and participants in Australia from Norway. In the end, this had to be done face to face. Also, time, combined with difficulty in coordinating permission slips through students whom would often forget to pass them on or return them, resulted in the exclusion of parents. Another limitation is also the sheer volume of data gathered. While the study benefited greatly from the depth of information the study gathered not all data could be presented due to the requirements of this paper. This influenced themes that would have otherwise been explored to provide even more depth and context.

5.3 Conclusion

The broader aims of the study was **to provide a better understanding within the education system in order to further understand the conditions in which people thrive, and conditions in which they don't** by taking into account the abundance of research regarding theoretical and practical elements of the creativity agenda and using it as a lens to view **fundamental questions concerning the purpose of education**. By doing so the paper provided both personal and practical information about an area that had little continuity before through its inclusion of various levels and the schools it compared. The theoretical framework of the study therefore had to be dynamic enough to support the possibility of various perceptions regarding creativity, yet concrete enough to provide a suitable understanding of how various perceptions can indeed contribute towards the creativity agenda. Hence, the socio-cultural framework that was adopted was adopted from two studies.

The first, NACCCE's *All Our Futures Report*, drew attention to the difficulty in defining the term creativity (1999). Instead, supported by others, the term 'lifewide' creativity was highlighted to underscore the challenges education currently faces (Craft, 2003). These were categorised as technological, economic, social, and personal. The theories accounted for the difficulties and discrepancies participants encountered with aligning their beliefs regarding creativity with their practices surrounding measurement and standardisation. This was further supported by Zhao's notion of 'doublethink' that accounted for many cultural influences that have embedded themselves in Australian education. The second study in the framework then

further explained and accounted for, through the use of Lassig's 'three building blocks' the lack of informed policy, shared creativity discourse and effective educational practices observed in the study (2009). Furthermore, the responsibility of the impact of these systemic and structural factors, and the significant role they play in all students' creative development were also discussed.

Dewey once stated that 'old ideas give way slowly; for they are more than abstract logical forms and categories. They are habits, predispositions, deeply ingrained attitudes of aversion and preference' (1910). While this statement highlights many of the complexities uncovered during the course of this study. The paper also explored many of these 'habits, predispositions and deeply ingrained attitudes' to recognise that it is only through interested persons, the relevance of those ideas, by a group deeply concerned with the same question, problem, or set of possibilities that people have appreciated aspects of creativity within history. Runco and Albert, whom were quoted earlier in the paper, asserted that the 'when' determines 'what' will become important, and throughout the study it was clear that participants believed that the time for the creativity agenda was now (2010, p. 4). In fact, the overwhelming support and belief that emerged regarding the creativity agenda and the challenges education now faces made it easy to see why participants felt increasingly frustrated that it had not happened earlier. Yet 'how' this change was supposed to happen while so many continued to invest and defend the very standardised and measured approach that was preventing creativity from occurring on anything more than islands is a question that the education system, as a whole, will now have to address.

From the onset, the study presented the views of key individuals in the creation, through to the delivery, of the creativity agenda in Australia to demonstrate just how significant it has become. Not just locally but globally. The increasing mortality rate among companies demonstrates just how vital the development of creativity is in order to think differently and adapt in today's rapidly changing economic landscape. This unpredictability also underscores the strains on our political, financial, social, cultural, and of course our educational institutions. Yet, the personal and intrinsic benefits that further development of the creativity agenda has attempted to rationalise during the course of this study are perhaps the most significant due to the influence it clearly had on students whom felt engaged, interested, and motivated when they felt their creativity was nurtured. Without purpose, even the most capable and creative of individuals lie dormant, unrealised and uninspired to produce

anything. Hence, an increased recognition of the need for change both within government, through mandates such as the *Melbourne Declaration*, and in society reflected by growing discontent about education catering to the few and not the many. The rationale to explore the imperatives that the creativity agenda provides by challenging many of the perceived certainties and realities regarding education in Australia are therefore seen as more essential than ever.

The findings strongly indicated that participants reflected many, if not all, of the theoretical frameworks theories regarding the creativity agenda. Participants recognised how the various challenges to education were influencing the system they were a part of. However, each felt to some degree that a platform from which to build lasting change, such as that reflected by Lassig, did not currently exist. The fact the politician in this study identified he had a ‘deep, deep passionate interest in education’ is of great importance, yet the fact he himself identifies a politician and not educator is perhaps where the beginning of where the problem lies. Generally speaking, a doctor is not in charge of a building site, nor is a dentist in charge of church. Therefore, it cannot be surprising to a politician, nor was it to the findings of the study, that education was used as a political football when it was politicians whom are in charge of it. Hence, a significant recommendation regarding this discovery involves a greater convergence between politicians and their experience to the field of education, along with an evidence based approach to educational policy development through a committee of diverse educational representatives from existing organisations such Australian Curriculum, Assessment and Reporting Authority, Australian Institute for Teaching and School Leadership, Tertiary Education Quality and Standards Agency, and the Australian Research Council. This could further remove the politics out of education to provide diverse, expert representative knowledge regarding educational directions that ministers oversee rather than dictate to.

This reflected central themes in the study that at a philosophical level recognised people as different but at a practical level maintained the premise that ‘we should test them the same’, since politics and politicians required quickly digestible metrics that often gave the appearance of improvement rather than actual development that addressed the burgeoning challenges (NACCCE, 1999). Furthermore, political pressure to measure and standardise was found to deter cooperation and collaboration and rather promote separation and competition both between schools and amongst all stakeholders at every level. This premise explains why

aligning the creativity agenda within the current educational system was so difficult despite its recognition and importance both locally and globally.

The reality at both schools was that the often strict, tightly structured curriculum often left zero input and few opportunities for students to choose their own learning paths. Policy documents touted the importance of creativity and participants clearly understood its significance. Yet in an environment where everything, including syllabi, assignments, tests, and grading procedures were predetermined, engagement was difficult to maintain for teachers besides the few times they were afforded the time to do so. This is where a recommendation on improvement based upon individually identified elements, rather than merely performance, would both serve the individual and the system preferably towards creative development and realisation. A further recommendation concluded from the study is that while we may accept the truth that not all will be served best within a school, as was the case here in the study, it is primarily because participants still saw schools how they are (or were), versus how they could or participants wanted them to be in order to best cater to the uncertain future. Therefore, a fundamental focus on creativity development that at its core embraces a more holistic approach to education, supported by the building blocks, to offer the new cooperative paradigm so many participants sought in order to cater to rapidly changing circumstances, technologies, cultures, and environments.

The recognition of difference is therefore imperative. It, as argued, allows us to appreciate the capability of that difference within all forms of creativity. Exploring options is at the heart of lateral thinking, and as a system, a further recommendation is to embrace and coordinate more effectively with more partners rather than competing against them to provide more choice and options to the individuals it attempts to cater for (NACCCE, 1999). This would help circumvent scheduling difficulties and allow people to do what they really want rather than what a single institution alone can offer. Students, teachers, schools and policymakers wanted to be identified for their difference. Hence, assessment that perpetuates and focuses on singularity was perceived as artificial and meaningless. It defeats the very purpose of having schools do things differently if they are forced and measured the same way. People that endure hardship in the most challenging of environments create products or ideas born of that experience and the same is true of any individual. It is why we cannot ensure that any one person will ever follow the same path of accomplishment of another. The most we can do

is support it however and whenever we can so that it grows and possibly inspires others who witness it to do the same in whatever capacity they have.

During the study, curiosity was identified, and is the starting point of any creative endeavour and rather than restricting it through further standardisation where answers are largely predetermined, we must find ways to reassure individuals that knowledge is just as much about what we don't know about something as much as it is about what we do. Hence, confirming a perpetual drive for further creative discovery in all capacities and areas of life. An approach that could foster creativity could include elements that invite students to answer questions around a given field by firstly finding out what it is they know about it, what they find interesting about it, and what issues the field raises and what impact it has on each of their lives. By doing so, it encourages a more proactive approach rather than reactionary one where students are simply a recipient of information they may or may not find relevant to their lives. Creativity requires time and it was raised as a continual theme. While policy makers were reluctant to suggest that teachers 'did not have enough time', the reality in schools were that placing more restrictions due to over-scheduling only reduced the ability for students to express and explore their capacities properly.

This study built itself upon and drew from the foundations of many studies before it. Yet none provided the comparative scope of two schools by including so many from such a wide base. Hence, the ability to extend the study further through refinement based upon the findings here would provide even more valuable data to field of comparative education to answer the elusive 'how' question regarding the development of the creativity agenda. Extending the study to include lower and higher classes, and parents would also yield more data that would add even more context to an area that is need of investigation. As would more specific research into some of the systemic factors identified.

The study has maintained and uncovered the significance of the creativity agenda in Australian education. It has argued that we must move beyond the need to simply avoid failure or achievements based upon summative performance on standardised examinations within education. Students need to see the value of possibility as a means to self-improvement in all areas in life. By pointing out what someone cannot do or hasn't done, particularly through comparisons with others, we think it will inspire them to work harder. This however often leads to further disillusion and withdrawal. The value of possibility focuses our attention forward so we harness our ambitions to drive us towards the aim and the

goal of our labours with increased vigour. It provides a purpose for learning something, one that is valued because it is internalised and unique to our own lives, not predefined and standardised to the point of sterilisation. It is happening in small instances already, but as mentioned, it is often in spite of rather than due to the current system, and this must be addressed at all levels in order to create realities that conform to our beliefs about what education can do for the many and not the few. Appropriately then, this paper concludes with the same question I was left with by a student during an interview– not, ‘Do you want us to be creative?’ but ‘How creative do you want us to be?’

References

- Abbott, J. (1997). *To Be Intelligent*. Alexandria: Education 2000.
- Adobe. (2013). *The State of Creativity in Education: A Special Report*. n.a: Adobe.
- Airley, D. (2013). *What makes us feel good about our work?*. Retrieved March 3, 2014, from TED: <http://www.youtube.com/watch?v=5aH2Ppjpcho>
- Alonoaimi, T., Hinostonza, J. E., Issacs, S., Kozma, R., and Wong, P. (2011). Using ICT Policy to Transform Education. In S. a. United Nations Educational, *Transforming Education: The Power of ICT Policies* (pp. 191-218). Paris: United Nations Educational, Scientific and Cultural Organisation.
- Argy, F. (2007, May). *Education inequalities in Australia*. Retrieved Feb 22, 015, from The University of Western Australia: <http://www.ias.uwa.edu.au/new-critic/five/educationinequalities>
- Asthana, A. (2008, May 25). *They don't live for work ... they work to live*. Retrieved Feb 7, 2013, from The Guardian: <http://www.theguardian.com/money/2008/may/25/workandcareers.worklifebalance>
- Aunger, R. (1995). On Ethnography: Storytelling or Science? *Current Anthropology*, 36(1), 97-130.
- Australian Bureau of Statistics. (2012). *Media release – National*. Retrieved Aug 8, 2013, from Australian Bureau of Statistics: <http://abs.gov.au/websitedbs/censushome.nsf/home/CO-59?opendocument&navpos=620>
- Australian Bureau of Statistics. (2014). *Victoria*. Retrieved April 3, 2014, from Australian Bureau of Statistics: <http://www.abs.gov.au/ausstats/abs@.nsf/Products/3218.0~2012-13~Main+Features~Victoria?OpenDocument#PARALINK4>
- Australian Curriculum, Assessment and Reporting Authority. (2013). *My School*. Retrieved May 13, 2013, from My School: <http://www.myschool.edu.au/>
- Australian Government. (2011). *Review of Funding for Schooling*. Canberra: Australian Government.
- Australian Government. (2012). *Australia in brief*. Retrieved May 19, 2013, from Department of Foreign Affairs and Trade: <http://www.dfat.gov.au/aib/>
- Australian Labor. (2013). *Innovation Makes Sydney Home to Future Industries and Jobs*. Retrieved April 2, 2014, from Australian Labor: http://www.alp.org.au/cm13_280813

- Barber, M. (1999). Taking the tide at the flood – Transforming the Middle Years of Schooling. *National Middle Years of Schooling Conference*. Melbourne: National Middle Years of Schooling Conference.
- Barnard, N. (Ed.). (2010). The NAPLAN debate. *Professional Voice*, 8(1).
- Becker, G. (2002). *The Age of Human Capital*. Retrieved 3 30, 2012, from Hoover Institution : http://media.hoover.org/sites/default/files/documents/0817928928_3.pdf
- Beghetto, R. (2013). *Killing ideas softly?: The promise and perils of creativity in the classroom*. Charlotte: Information Age Publishing Inc.
- Beghetto, R. A. (2010). Creativity in the Classroom. In J. C. Kaufman, & R. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 447-463). New York: Cambridge University Press.
- Bernard, H. R. (2006). *Research methods in anthropology: qualitative and quantitative approaches*. Oxford: AltaMira Press.
- Blake, S. (2013). *Australian children's education dropping further against world standards*. Retrieved Aug 19, 2013, from News.com.au: <http://www.news.com.au/lifestyle/parenting/australian-children8217s-education-dropping-further-against-world-standards/story-fngqim8m-1226669722037>
- Boretz, E. (2004). Grade Inflation and the Myth of Student Consumerism. *College Teaching*, 52(2), 42-46.
- Bray, M., Adamson, B., & Mason, M. (Eds.). (2007). *Comparative Education Research: Approaches and Methods*. Hong Kong: Springer.
- Brown, C. (2013). *ATARs - you may as well use postcodes of university admissions*. Retrieved Feb 24, 2014, from The Conversation: <http://theconversation.com/atars-you-may-as-well-use-postcodes-for-university-admissions-19154>
- Bryman, A. (2008). *Social Research Methods* (3rd ed.). New York: Oxford University Press.
- Burke, G., and Spaul, A. (2001). *Australian Schools: Participation and funding 1901 to 2000*. Retrieved March 24, 2013, from Australian Bureau of Statistics: <http://www.abs.gov.au/Ausstats/abs@.nsf/0/A75909A2108CECAACA2569DE002539FB?Open>
- Burnard, P. (2006). Reflecting on the creativity agenda in education. *Cambridge Journal of Education*, 36(3), 313-318.
- Burrell, G., and Morgan, G. (1979). *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life*. Aldershot: Gower.

- Canalys. (2013). *11% quarterly growth in downloads for leading app stores*. Retrieved June 2013, 2013, from Canalys: <http://www.canalys.com/newsroom/11-quarterly-growth-downloads-leading-app-stores>
- Carrington, D. (2013). *Melbourne spotlight: Living and working in Australia's creative capital*. Retrieved April 2, 2014, from TNT Magazine: <http://www.tntmagazine.com/lifestyle-career/work-abroad/melbourne-spotlight-living-and-working-in-australias-art-capital>
- Chadbourne, R. (2001). *Middle Schooling for the Middle Years: What might the jury be considering?* Southbank: Australian Education Union.
- Chakalisa, P., Mapolelo, D., Totev, D., and Totev, E. (2006). Modern Methods for Stimulating Creativity in Education. *Infomatica*, 421-425.
- Claxton, G. (2006). Thinking at the edge: developing soft creativity. *Cambridge Journal of Education*, 36(3), 351-362.
- Clifford, S. (2012). *Tipsheet - Qualitative Interviewing*. Retrieved March 27, 2014, from Duke University: <http://www.dism.ssri.duke.edu/pdfs/Tipsheet%20-%20Qualitative%20Interviews.pdf>
- Couros, G. (2014). *School vs. Learning*. Retrieved Jan 29, 2015, from The Principal of change: <http://georgecouros.ca/blog/archives/4974>
- Craft, A. (2002). *Creativity in the Early Years: a lifewide foundation*. London: Continuum.
- Craft, A. (2003). The Limits To Creativity In Education: Dilemmas For The Educator . *British Journal of Educational Studies*, 113-127.
- Craft, A. (2006). Fostering Creativity with Wisdom. *Cambridge Journal of Education*, 36(3), 337-350.
- Cresswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). Thousand Oaks: Sage Publications.
- Crocker, J. (2002). The Costs of Seeking Self-Esteem. *Journal of Social Issues*, 58(3), 597-615.
- Csikszentmihalyi, M. (1990). *FLOW: The Psychology of Optimal Experience*. Global Learning Communities. New York: Harper & Row.
- Csikszentmihalyi, M. (1988). Society, Culture, and Person: A systems view of creativity. In R. Sternberg (Ed.), *The Nature of Creativity: Contemporary psychological perspectives* (pp. 325-339). New York: Cambridge University Press.
- Csikszentmihalyi, M. (2004). *Flow, the secret to happiness*. Retrieved Aug 30, 2013, from TED: http://www.ted.com/talks/mihaly_csikszentmihalyi_on_flow.html

- Davis, D. (2002). *Creative Teachers for Creative Learners – a literature review*. Retrieved April 2, 2014, from <http://www.steveslearning.com/Teacher%20Training%20resources/Dan%20Davies%20Bath%20Spa.pdf>
- Department of Education and Early Childhood Development. (2009). *Understanding Year 9 Students Forum Report*. Melbourne.
- Department of Education and Early Childhood Development. (2013). *Parent Payments in Victorian Government Schools*. Retrieved June 2, 2014, from Department of Education and Early Childhood Development: <http://www.education.vic.gov.au/school/parents/financial/pages/parentpayments.aspx#H3N1005C>
- Department of Education and the Arts. (2005). *Developing Lifelong Learners in the Middle Years of Schooling*. Melbourne: Ministerial Council on Education, Employment, Training and Youth Affairs.
- Department of Education and Early Childhood Development. (2013). *Our Department*. Retrieved May 24, 2013, from Department of Education and Early Childhood Development: <http://www.education.vic.gov.au/about/department/Pages/default.aspx>
- Dewey, J. (1910). *The Influence of Darwinism on Philosophy*. Retrieved April 4, 2015, from Natural Law, Natural Rights, And American Constitutionalism: <http://www.nlnrac.org/critics/social-darwinism/documents/dewey-darwinism>
- Dewey, J. (1938). *Experience & Education*. Retrieved July 27, 2013, from School for Educators: <http://www.schoolofeducators.com/wp-content/uploads/2011/12/EXPERIENCE-EDUCATION-JOHN-DEWEY.pdf>
- Donnelly, K. (2012). *Writing is on the wall as standards trend down*. Retrieved Aug 16, 2013, from The Australian: <http://www.theaustralian.com.au/opinion/writing-is-on-the-wall-as-standards-trend-down/story-e6frg6zo-1226536451971>
- Donovan, M. (2013). *World leading education is critical to Australia's success*. Retrieved Aug 31, 2013, from Independent Australia: <http://www.independentaustralia.net/2013/life/education/world-leading-education-system-critical-to-australian-success/>
- Education Council. (2014). *Preparing Secondary Students for Work: A framework for vocational learning and VET delivered to secondary students*. Carlton South: Education Council.
- Epping Heights Public School. (2013). *The effectiveness of the National Assessment Program - Literacy and Numeracy*. Senate inquiry into the effectiveness of the National Assessment Program - Literacy and Numeracy, Epping.

- Finn, A., Kraft, M. A., West, M. R., Leonard, J., Bish, C., Martin, R., and Gabrieli, J. (2014, Jan 16). Cognitive Skills, Student Achievement Tests, and Schools. *Psychological Science*, 1-11.
- Firestein, S. (2012). *Ignorance: How it Drives Science*. New York: Oxford University Press.
- Fleer, M. (2002). Curriculum Compartmentalisation?: a futures perspective on environmental education. *Environmental Education Research*, 8(2), 137-154.
- Flyvberg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J. Gubrium, & D. Silverman (Eds.), *Qualitative Research Practice* (pp. 420-434). London: Sage.
- Freire, P. (1993). *Pedagogy of the Oppressed*. London: Penguin.
- Gabora, L., & Kaufman, S. (2010). Evolutionary Approaches to Creativity. In J. Kaufman, & R. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 279-300). Cambridge: Cambridge University Press.
- Galton, F. (1868). *Hereditary Genius*. New York: MacMillan.
- Gardner, H. (2011). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Gibbs, R., and Poskitt, J. (2010). *Student Engagement in the Middle Years of Schooling (Years 7-10): A Literature Review*. n.a: Ministry of Education, New Zealand.
- Gladwell, M. (2008). *Outliers*. London: Penguin.
- Glaserfeld, E. (1989). Cognition, construction of knowledge, and teaching. *Synthese*, 80(1), 121-140.
- Goleman, D. (2012). *Emotional Intelligence: Why It Can Matter More Than IQ* (10 ed.). New York: Random House Publishing Group.
- Goodrich, D. (Director). (2009). *We Are the People We've Been Waiting For* [Motion Picture].
- Google. (2013). *Google*. Retrieved Aug 13, 2013, from Google:
<http://www.google.no/search?hl=en&q=creative&meta=#bav=on.2,or.&fp=d62baeaf89031d0d&hl=en&q=define+creative>
- Government of New South Wales. (2005). *Focus on the middle years of schooling*. Retrieved March 31, 2014, from NSW Public Schools:
<http://www.schools.nsw.edu.au/media/downloads/schoolsweb/gotoschool/highschool/middleyears/issues/midyrssum.pdf>
- Graham, C. (2012). *Developing Creativity Across Cultures*. Retrieved May 15, 2013, from Text Journal: <http://www.textjournal.com.au/speciss/issue16/Graham.pdf>

- Grainger, T., Barnes, J., and Scoffham, S. (2004). A creative cocktail: creative teaching in initial teacher training. *Journal of Education for Teaching: International research and pedagogy*, 30(3), 243-253.
- Grant, M. (2010). *University world rankings are pointless, UCL president says*. Retrieved Feb 21, 2015, from The Guardian: <http://www.theguardian.com/education/2010/sep/21/university-world-rankings>
- Guilford, J. (1968). *Creativity, intelligence, and their educational implications*. San Diego: Knapp.
- Hallissy, M., Butler, D., Hurley, J., and Marshall, K. (2013). *Redesigning Education: Meeting the Challenges of the 21st Century*. Dublin: Microsoft.
- Hancock, B. (1998). *An Introduction to Qualitative Research*. Trent Focus Group.
- Harlem Children's Zone. (2011). *Path to Sustainability*. Harlem: Harlem Children's Zone.
- Hee Kim, K. (2006). Can We Trust Creativity Tests? A Review of the Torrance Tests of Creative Thinking (TTCT). *Creativity Research Journal*, 18(1), 3-14.
- Higher Education Funding Council for England. (2008). *Counting what is measured or measuring what counts? - League tables and their impact on higher education institutions in England*. Bristol: Higher Education Funding Council for England.
- Hopmann, S. T. (2008, Jul 15). No child, no school, no state left behind: schooling in the age of accountability. *Journal of Curriculum Studies*, 40(4), pp. 417-456.
- House, R. J. (1971). A Path Goal Theory of Leader Effectiveness. *Administrative Science Quarterly*, 16(3), 321-339.
- Illich, I. (1971). *Deschooling society*. New York: Harper & Row.
- Jeffrey, B. (2006). Creative teaching and learning: towards a common discourse and practice. *Cambridge Journal of Education*, 36(3), 399-414.
- Kaufman, S. (2013). *Ungifted*. New York: Basic Books.
- Kaufman, S. (2013). Why We Need to Redefine Intelligence. (S. Green, Interviewer)
- KEA. (2009). *The Impact of Culture on Creativity: A Study prepared for the European Commission*. Brussels: KEA.
- Kindfield, P. (2004). *Educational Structures and Educational Reform*. Retrieved Jan 15, 2015, from Cavendish Laboratory, Cambridge: http://www.inference.phy.cam.ac.uk/sanjoy/science-society/2004-winter/peters_talk/EducationalStructuresV3_files/v3_document.htm
- Kitea, S., Gablea, R., and Filippellib, L. (2010). Assessing Middle School Students' Knowledge of Conduct and Consequences and Their Behaviors Regarding the Use of

- Social Networking Sites. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(5), 158-163.
- Kohn, A. (1994). *The Risk of Rewards*. Retrieved April 10, 2015, from Alfie Kohn: <http://www.alfiekohn.org/article/risks-rewards/>
- Kozbelt, A., Beghetto, R. A., and Runco, M. A. (2010). Theories of Creativity. In j. C. Kaufman, & R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity* (pp. 20-73). New York: Cambridge University Press.
- Kozma, R. (2011). A Framework for ICT Policies to Transform Education. In S. a. United Nations Educational, *Transforming Education: The Power of ICT Policies* (pp. 19-36). Paris: United Nations Educational, Scientific and Cultural Organization.
- Kozulin, A., Gindis, B., Ageyev, V., and Miller, S. (Eds.). (2003). *Vygotsky's Educational Theory in Educational Context*. Cambridge: Cambridge University Press.
- Kvale, S., and Brinkmann, S. (2009). *Interviews: learning the craft of qualitative research*. London: Sage Publications.
- Lassig, C. (2009). Promoting creativity in education : from policy to practice: an Australian perspective. *Proceeding the 7th ACM Confrence on Creativity and Cognition: Everyday Creativity*. Berkeley: University of California.
- Lauder, H., Brown, P., Dillabough, J. A., and Halsey, A. H. (2006). Introduction: The Prospects for Education: Individualization, Globalization, and Social Change. In H. Lauder, P. Brown, J. A. Dillabough, & A. H. Halsey (Eds.), *Education, Globalization, and Social Change*. (pp. 1-63). Oxford: Oxford University Press.
- Leadbeater, C. (2010). *TED*. Retrieved May 9, 2013, from Charles Leadbeater: Education innovation in the slums: http://www.ted.com/talks/charles_leadbeater_on_education.html
- Lee, J. S., Blackwell, S., Drake, J., & Moran, K. A. (2014). Taking a Leap of Faith: Redefining Teaching and Learning in Higher Education Through Project-Based Learning. *Interdisciplinary Journal of Problem-based Learning*, 8(2).
- Mahuteau, S., & Mavromaras, K. (2014). Student Scores in Public and Private Schools: Evidence from PISA 2009. (8471).
- Marginson, S. (1997). Competition and contestability in Australian higher education, 1987-1997. *Australian Universities Review*, 40(1), 5-14.
- Marginson, S. (2009). Intellectual Freedoms and Creativity. In M. Peters, S. Marginson, & P. Murphy (Eds.), *Creativity and the Global Knowledge Economy* (p. 100). New York: Peter Lang Publishing.
- Maslow, A. (1970). *Motivation and Personality* (3rd ed.). London: Harper Collins.

- McManus, I., Smithers, E., Partridge, P., Keeling, A., & Fleming, P. (2003). A levels and intelligence as predictors of medical careers in UK doctors: 20year prospective study. *British Medical Journal*, 327(7407), 139-142.
- McQuarrie, F. (2013). *Daniel Pink's 'Drive': A Short Journey on a Tiny Piece of Road*. Retrieved March 27, 2014, from All About Work: <http://allaboutwork.org/2013/04/11/daniel-pinks-drive-a-short-journey-on-a-tiny-road/>
- Meyer, J., and Rowan, B. (2008). The Structure of Educational Organizations. In J. Ballantine, & J. Spade (Eds.), *Schools and Society: A Sociological Approach to Education* (3rd ed., pp. 217-225). Thousand Oaks: Sage Publications.
- Miller, J., and Glassner, B. (2011). The "inside" and the "outside": Finding Realities in Interviews. In D. Silverman (Ed.), *Qualitative Research* (3rd ed., pp. 131-148). London: Sage.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Melbourne : Ministerial Council for Education, Early Childhood Development and Youth Affairs.
- Ministerial Council on Education, Employment, Training and Youth Affairs. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Melbourne.
- Mitra, S. (2000). *Sugata Mitra shows how kids teach themselves*. Retrieved April 27, 2013, from TED: http://www.ted.com/talks/sugata_mitra_shows_how_kids_teach_themselves.html
- Monroe, P. (Ed.). (1915). *A cyclopedia of education*. New York: The Macmillan Co.
- Morka, F. (2000). *Circle of Rights*. Retrieved Nov 17, 2013, from University of Minnesota: <http://www1.umn.edu/humanrts/edumat/IHRIP/circle/modules/module16.htm>
- Murayama, K., Pekrun, R., Lichtenfeld, S., and Vom Hofe, R. (2012). Predicting Long-Term Growth in Students' Mathematics Achievement: The Unique Contributions of Motivation and Cognitive Strategies. *Child Development*, 1-16.
- Nature. (2010, March 4). The ratings game. (Editorial) *Nature*, 464(7285), 7-8.
- Nash, R. (1990). Bourdieu on Education and Social and Cultural Reproduction. *British Journal of Sociology of Education*, 11(4), 431-447.
- Nash, R. (1990). Bourdieu on Education and Social and Cultural Reproduction. *British Journal of Sociology of Education*, 11(4), 431-447.
- National Advisory Committee on Creative and Cultural Education. (1999). *All Our Futures: Creativity, Culture and Education*. London: National Advisory Committee on Creative and Cultural Education.

- National Assessment Program. (2011). *NAPLAN*. Retrieved May 14, 2013, from National Assessment Program: <http://www.nap.edu.au/naplan/naplan.html>
- New South Wales Department of Education and Training. (2006). *Our Middle Years Learners - Engaged, Resilient, Successful*. Sydney: NSW Department of Education & Training.
- Ng, E. (2008). Educational reform in Singapore: from quantity to quality. *Educational Research for Policy and Practice*, 7(1), 5-15.
- Olivier de Sarian, J. (2005). *Anthropology and Development: Understanding Contemporary Social Change*. London: Zed Books.
- Olson, M., and Mittler, M. (1996). Dealing with difference: Competing cultures, singular codes. *New Directions for Student Services*(73), 89-98.
- Olssen, M., Codd, J., and O'Neill, A. (Eds.). (2004). *Education Policy: Globalization, Citizenship and Democracy*. London: Sage.
- Organisation for Economic Co-operation and Development, (2004). Education and Equity. *OECD Observer*.
- O'Rourke, M. (2005). *Creativity in Schools*. Melbourne: The Australia Council for the Arts.
- Parliament of Victoria. (1872). *Documenting a Democracy*. Retrieved May 19, 2013, from Museum of Australian Democracy Old Parliament House: <http://foundingdocs.gov.au/item-sdid-25.html>
- Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks: Sage Publications.
- Pelgrum, W., and Law, N. (2003). *UNESCO*. Retrieved May 8, 2013, from <http://unesdoc.unesco.org/images/0013/001362/136281e.pdf>
- Penn State University. (2014). *McClelland's Need Theory*. Retrieved April 2, 2014, from Penn State University: https://courses.worldcampus.psu.edu/welcome/psych484/lesson02_08.html
- Pink, D. (2008). *A Whole New Mind*. London: Marshall Cavendish.
- Poliah, R. (2003). *Enhancing the Quality of Assessment Through Common Tasks for Assessment*. Retrieved April 2014, from Council for Quality Assurance in General and Further Education and Training: <http://www.umalusi.org.za/ur/Conferences/AEAA/Poliah%20R.PDF>
- Pyne, C. (2015). *Q&A - Depression, Drugs and Another Planet*. (Tony Jones, Interviewer) Retrieved March 31, 2015, from YouTube: <https://www.youtube.com/watch?v=LufvNmjdZ3A>

- Quiggen, J. (1999). Human capital theory and educational policy in Australia. *Australian Economic Review*, 130-144.
- Quinn, R. E., and Sonenshein, S. (2008). Four General Strategies for Changing Human Systems. In T. G. Cummings (Ed.), *Handbook of Organization Development* (pp. 69-78). Thousand Oaks: Sage Publications.
- Rhodes, M. (1961). An Analysis of Creativity. *The Phi Delta Kappan*, 42(7), 305-310.
- Robinson, K. (2001). Mind the gap: The creative conundrum. *Critical Quarterly*, 43(1), 41-45.
- Robinson, K. (2006). *Ken Robinson: How schools kill creativity*. Retrieved Aug 24, 2013, from TED: http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html
- Robinson, K. (2009). Education systems too narrow. (K. O'Brian, Interviewer) Australian Broadcasting Corporation. Retrieved May 18, 2012, from <http://www.abc.net.au/7.30/content/2009/s2600125.htm>
- Robinson, K. (2010). *Sir Ken Robinson: Bring on the learning revolution!* Retrieved March 19, 2012, from TED: http://www.ted.com/talks/sir_ken_robinson_bring_on_the_revolution.html
- Robinson, K. (2011). *Out of Our Minds*. West Sussex: Capstone Publishing.
- Robinson, K. (2013). *How to escape education's death valley*. Retrieved March 30, 2014, from TED: http://www.ted.com/talks/ken_robinson_how_to_escape_education_s_death_valley/transcript#t-751623
- Rosenberg, A. (2008). *Philosophy of Social Science* (3rd ed.). Boulder: Westview Press.
- Runco, A., and Albert, R. (2010). Creativity Research: A Historical View. In *Cambridge Handbook of Creativity* (pp. 3-19). New York: Cambridge University Press.
- Runco, M., and Richards, R. (Eds.). (1997). *Eminent Creativity, Everyday Creativity and Health*. Connecticut: Ablex Publishing Company.
- Runco, M., Garnet Millara, G., Acara, S., and Cramonda, B. (2010). Torrance Tests of Creative Thinking as Predictors of Personal and Public Achievement: A Fifty-Year Follow-Up. *Creativity Research Journal*, 22(4), 361-368.
- Seligman, M. E. (2002). *Authentic Happiness: using the new positive psychology to realize your potential for lasting fulfillment*. New York: The Free Press.
- Senior, J. (2014). *All Joy and No Fun: The Paradox of Modern Parenthood*. New York: Harper Collins.

- Serafini, F. (2002). Dismantling the Factory Model of Assessment. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 18(1), 67-85.
- Shaheen, R. (2010). Creativity and Education. *Creative Education*, 1(3), 166-169.
- Shenk, D. (2010). *The Genius in All of Us: Why everything You've Been Told About Genetics, Talent, and IQ Is Wrong*. New York: Doubleday.
- Shor, I. (2002). *Paulo Freire: A Critical Encounter*. (P. Leonard, & P. McLaren, Eds.) London: Routledge.
- Sparkes, M. (2012). *Kodak: 130 years of history*. Retrieved June 17, 2013, from The Telegraph:
<http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/9024539/Kodak-130-years-of-history.html>
- Sternberg, R. (2006). The Rainbow Project: Enhancing the SAT through assessments of analytical, practical, and creative skills. *Intelligence*, 34, 321–350.
- Sullivan, A. (2002). Bourdieu and Education: How useful is Bourdieu's theory for researches. *The Netherlands Journal of Social Science*, 38(2), 144-166. Retrieved from Centre for Longitudinal Studies.
- Talantsmoothie. (2008). *Generation Y: What they want from work: A summary report of the 'Tell it how it is' Research 2008*. Newbury: Talantsmoothie.
- The Australian Curriculum and Assessment and Reporting Authority. (2013). *Critical and creative thinking: Background*. Retrieved Aug 24, 2013, from The Australian Curriculum and Assessment and Reporting Authority:
<http://www.australiancurriculum.edu.au/GeneralCapabilities/Critical-and-creative-thinking/Introduction/Background>
- The Australian Curriculum Assessment and Reporting Authority. (2014). *Development of the Australian Curriculum*. Retrieved March 28, 2014, from acara:
http://www.acara.edu.au/curriculum/curriculum_design_and_development.html
- The Australian Education Union. (2010). The NAPLAN debate. *Professional Voice*, 8(1).
- The Economist Intelligence Unit. (2013). *A Summary of the Liveability Ranking: August 2013*. London: The Economist.
- The University of Melbourne. (2015). *Admissions and application*. Retrieved Jan 29, 2015, from The University of Melbourne:
<http://futurestudents.unimelb.edu.au/admissions/entry-requirements/undergraduate-domestic>
- Torrence, E. P. (1983). The importance of falling in love with "something". *Creative Child & Adult Quarterly*, 50-61. Retrieved 3 22, 2014, from Scott Barry Kaufman:

<http://scottbarrykaufman.com/wp-content/uploads/2014/03/Torrance-falling-in-love-with-something.pdf>

- UCLA. (2009). *Sir Ken Robinson, Hammer Lectures*. Retrieved April 14, 2013, from YouTube: <http://www.youtube.com/watch?v=yJAL21IE9fY&feature=related>
- United Nations Development Programme. (2013). *Human Development Report 2013*. New York: United Nations Development Programme.
- University of Southern California. (2013, Aug 12). *Organizing Your Social Sciences Research Paper*. Retrieved Aug 13, 2013, from University of Southern California: <http://libguides.usc.edu/content.php?pid=83009&sid=618409>
- Vislie, L. (2007). Lifelong learning: A new framework for education in an era of globalisation. *Nordisk Pedagogisk*, 28, 161-172.
- Walberg, H. (1988). Creativity and talent as learning. In R. Sternberg (Ed.), *The nature of creativity: Contemporary psychological perspectives* (pp. 340-361). Cambridge: Cambridge University Press.
- Wormeli, R. (2001). *Meet Me in the Middle: Becoming an Accomplished Middle-Level Teacher*. Portland: Stenhouse Publishing.
- Wormeli, R. (2010). Formative and Summative Assessment. (n.a, Interviewer) YouTube. Retrieved Jan 28, 2015, from https://www.youtube.com/watch?v=rJxFXjfb_B4
- Zhao, Y. (2012a). *Doublethink: The Creativity-Testing Conflict*. Retrieved Jan 29, 2015, from Education Week: http://www.edweek.org/ew/articles/2012/07/18/36zhao_ep.h31.html
- Zhao, Y. (2012b). *World class learners: educating creative and entrepreneurial students*. Thousand Oaks: Corwin.
- Zyngier, D. (2013). *A fairer Australia? Gonski and Labor's class war*. Retrieved May 27, 2013, from The Conversation: <http://theconversation.com/a-fairer-australia-gonski-and-labors-class-war-13483>

Appendices

Appendix 1: Policy Maker Interview Guide

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Narrative Research Guide:

Note: These questions are intended as a guide for the topics I wish to discuss during my interview.

- ❖ 1.1 What do you believe is the purpose of education?
- ❖ 1.2 How would you describe the most important aims/goals of education in Victoria?
- ❖ 1.3 What would you say are the most distinguishing features of Australian (Victorian) schools?
 - Why?
- ❖ 1.4 How would you define creativity?
- ❖ 1.5 Can you tell me about what value/purpose is currently placed on creativity in education?
- ❖ 1.6 Can you clarify how creativity is being nurtured in Victorian schools?
- ❖ 1.7 Could you please describe particular strategies, interventions and tools that have been implemented support student's creative potential?
- ❖ 1.8 Could you discuss some of the factors that promote and impede children demonstrating their creative abilities in school?
- ❖ 1.9 How do you see the role of standardised testing?
- ❖ 1.10 How do you feel it (standardised testing) influences on the development of creativity?
- ❖ 1.10 What effects do you feel externally imposed accountability mandates have?
- ❖ 1.11 How would you describe the relationship between students' creative potential and their attainment of academic subject matter?
- ❖ 1.12 Could you discuss what role you feel school administrators, teachers, students, parents have in developing creativity within the education system?

- ❖ 1.13 Thank you for all that valuable information, is there anything else you'd like to add before we end?

Appendix 2: Administrator Interview Guide

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Narrative Guide for School Administrators

- ❖ 2.0 What do you believe is the purpose of education?
- ❖ 2.1 Could you please talk about the educational philosophy of this school?
 - Are there specific aims and goals?
 - Who is responsible for its development? Why?
- ❖ 2.2 What would you say are the biggest challenges to achieving your schools educational goals?
 - Do you prioritize some over others? Why and which ones?
- ❖ 2.3 What would you say distinguishes this school from others?
 - What role do you feel this plays in people's choice regarding this school?
- ❖ 2.4 How would you define creativity?
 - Do you think this view is supported in the wider community? Why?
 - In what ways does this school nurture students' creative capacities?
 - Are people trained specifically for these duties?
- ❖ 2.5 Can you tell me about what value /purpose is placed on creativity in your school?
- ❖ 2.6 Can you clarify how creativity is being nurtured in this school?
- ❖ 2.7 Could you please describe particular strategies, interventions and tools that have been implemented to support/or recognise student's creative potential?
 - How would you define their success?
- ❖ 2.8 Could you discuss some of the factors that promote and impede children demonstrating their creative abilities in school?
 - Could you give me an example?

- ❖ 2.9 How do you see the role of testing?
 - Do you use standardised testing here?
 - For what purposes?
- ❖ 2.10 What effects do you think the testing you administer has on your students?
- ❖ 2.11 How do you think it influences on the development of creativity?
 - Do you feel students are able to demonstrate their differences? How?
- ❖ 2.12 What effects do you feel externally imposed accountability mandates, (Such as PISA or NAPLAN) have on teaching practices?
 - On teachers or students? Why and how?
 - Do you feel it has the potential to reinforce or exacerbate convergent teaching practices?
- ❖ 2.13 How would you describe the relationship between students' creative potential and their attainment of academic subject matter?
 - How would you like to see the relationship developed?
- ❖ 2.14. What influence do you think policymakers and government have on education and how do or have their policies affect you?
- ❖ 2.15. Could you discuss what role you feel school administrators, teachers, students, parents have in developing creativity within the education system?
 - Can you give me an example?
 - Do you have any expectations of each of the groups? If so, what are they?
 - Do any of these groups need to do things differently and if so what?
- ❖ 2.16. Thank you for all that valuable information, is there anything else you'd like to add before we end?

Appendix 3: Teacher Interview Guide

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Narrative Guide for Teachers

- ❖ 3.0 What do you believe is the purpose of education?
- ❖ 3.1 Could you discuss your educational goals and what you see as the biggest challenges to you achieving them?
 - Do you prioritize some over others? Why and which ones?
- ❖ 3.2 How would you describe your classroom?
 - Could you describe your teaching style?
 - Could you describe a lesson you are proud of? Why?
 - Would you describe this as the norm or an exception? Why?
 - How do you think your pupils would describe your teaching methodology? Why?
- ❖ 3.3 What would you say distinguishes this school from others?
 - Why did you choose to work here (at this school)?
 - What role do you feel this plays in people's choice regarding this school?
- ❖ 3.4 How would you define creativity?
- ❖ 3.5 Can you tell me about what value /purpose you place on creativity?
- ❖ 3.6 Could you please describe particular strategies, interventions and tools you have been implemented to support/or recognise student's creative potential?
 - How would you define their success?
- ❖ 3.7 Could you discuss some of the factors that you feel promote and impede children demonstrating their creative abilities in your class?
 - Would you give me an example please?

- ❖ 3.8 How do you see the role of testing?
 - Can you tell me your opinion on the use of standardised testing?
- ❖ 3.9 What effects do you think the testing you administer has on your students?
- ❖ 3.10 How do you think (standardised testing) it influences on the development of creativity?
 - How do you feel students are able to demonstrate their differences?
- ❖ 3.11 Do you feel externally imposed accountability mandates, (Such as PISA or NAPLAN) have an effect on your teaching practices?
 - Why and how?
 - Do you feel it has the potential to reinforce or exacerbate convergent teaching practices?
- ❖ 3.12 How would you describe the relationship between students' creative potential and their attainment of academic subject matter?
 - How would you like to see the relationship developed?
- ❖ 3.13 What influence do you think policymakers and government have on education and how do or have their policies affect you?
- ❖ 3.14 Could you discuss what role you feel policy makers, school administrators, students, parents have in developing creativity within the education system?
 - Can you give me an example?
 - Do you have any expectations of each of the groups? If so, what are they?
 - Do any of these groups need to do things differently and if so what?
- ❖ 3.15 Thank you for all that valuable information, is there anything else you'd like to add before we end?

Appendix 4: Student Interview Guide

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Narrative Guide for Students:

- ❖ 4.0 What do you believe is the purpose of education?
 - Is that what you think a school is for?
- ❖ 4.1 What do you think of this school?
 - What do you like and dislike? Why?
- ❖ 4.2 What would you say are the biggest challenges to you achieving your educational goals?
 - Do you feel the school prioritises some over others? What are they? Why do you think they do?
 - Are they things that you are interested in? What are you interested in?
- ❖ 4.3 How would you define creativity?
 - Do you see yourself as creative? Why or why not?
- ❖ 4.4 What value do you feel is placed on creativity in this school?
- ❖ 4.5 How is your creativity being nurtured in this school?
 - How would you measure their success?
- ❖ 4.6 What are some factors that you feel promote and impede students demonstrating their creative abilities in your school?
 - Would you give me an example?
- ❖ 4.7 How do you see the role of testing?
 - Why do you think the school uses the types of tests they do?
 - How would you like your school to test you?
- ❖ 4.8 What effects do you think the testing has on you?

- ❖ 4.9 How do you think it influences on the development of your creativity?
 - Do you feel students are able to demonstrate their differences? How?
- ❖ 4.10 How would you describe the way you are taught leading up to a test and in between them?
 - Is there a difference? How? Why?
 - Do you feel it has the potential to reinforce or exacerbate a more narrow way of teaching?
- ❖ 4.11 How would you describe the relationship between demonstrating your creative potential and the attainment of academic subject matter?
 - How would you like to see the relationship developed?
- ❖ 4.12 What influence do you think policymakers and government have on education and how do or have their policies affect you?
 - What about the school? And teachers?
- ❖ 4.13 Could you discuss what role you feel policymakers, school administrators, teachers and parents have in developing creativity within the education system?
 - Can you give me an example?
 - Do you have any expectations of each of the groups? If so, what are they?
 - Do any of these groups need to do things differently and if so what?
- ❖ 4.14 Thank you for all that valuable information, is there anything else you'd like to add before we end?

Appendix 5: Request for Interview Letter

UiO : Faculty of Educational Sciences

Re: Application to conduct research study.

Title of research: The culture of creativity in Australian schools.

To [REDACTED],

I am currently a student under the supervision of Professor [REDACTED] at the University of Oslo in Norway. Presently, I am conducting research on curriculum restraints in modern times and its effect on creativity within the classroom. I intend to focus on Australian schools due to the recent changes that have occurred in the national curriculum.

Victorian schools have been identified because of their exceptional performance and the unique educational environment. This is fascinating to me due to the diverse choice of educational approaches. I am also a Victorian and would deeply like for my own state to benefit from the findings of this study. Therefore, I would very much appreciate the opportunity to discuss these changes in order to further understand why they have been implemented.

The study will focus on middle school aged students because of the depth of research that currently identifies the difficulty experienced with retaining student's attention at this age level. The study will also consist of classroom observations and interviews of administrators, teachers, students and parents. Only a representative sample is needed, consisting of three (3) people in each category. This study is unique because, presently, no Australian studies have attempted to present a comprehensive understanding at the various levels and to explain findings in a larger context.

The aim of the study is to better understand challenges within Australian schools by exploring the relationship between curriculum restraints and improved educational outcomes. Therefore, your participation in this unique study is invaluable not only because of your invaluable feedback, but also for your state to better understand how the layers within it perceive the challenges towards further development of your own educational practices.

The primary purpose is to enrich our understanding. All the information I collect will be treated as confidential. You will not be directly identified and names will not be used in the reports of the research to allow you to speak as freely as possible. At the completion of the research I will be more than happy to supply results of the study and talk with you about what I have found.

This study has been cleared in accordance with the University of Oslo's research guidelines and the Norwegian Social Science Data Services (project no 31229). However, you are of course free to discuss your participation in this study with myself or project staff (Prof. [REDACTED] on + [REDACTED]). Alternatively, feel free to contact me either by email ([REDACTED]) or telephone ([REDACTED]) to discuss any concerns.

Should you agree to participate I believe you will find the insights from this study highly rewarding and extremely interesting. The studies greatest value is based on a realization that cuts to the heart of what education is all about, helping people realize their potentials. Therefore, understanding how we can continue to improve is in the interest of us all.

Finally, I just wanted to note that while this may seem a large task your participation is small yet critically vital to me. I am a student, perhaps with an idealistic mentality but I do have faith in the system to support those who wish to improve it, no matter how insignificant. Many have said to me not to bother because you would not respond. However, I believe you will, could and would like to spare whatever time you could to be a part of this. I would be deeply grateful if you could.

Thank you very much for your time,

Yours faithfully,

Peter Nicolacopoulos (MPhil. Comparative and International Education)

Appendix 6: Combined Invitation and Consent Form

UiO : Faculty of Educational Sciences

I want to thank you for taking the time to read this invitation. My name is Peter Nicolacopoulos and I am currently a student under the supervision of Professor [REDACTED] at the University of Oslo in Norway.

I would like to talk to you about your experiences regarding curriculum restraints and the challenges within your school. The interview will consist of questions regarding educational perceptions and feelings in order to understand the challenges that the curriculum is seen to have on the participants school.

The research aims to better understand challenges within Australian schools by exploring the relationship between curriculum restraints and improved educational outcomes. Therefore, participating in this unique study will provide not only invaluable feedback for you school but also greater understanding of how the layers within it perceive the challenges towards further development of educational practices.

The interview should take less than an hour. I will be taping the session because I don't want to miss any of your comments. Although I will be taking some notes during the session, I can't possibly write fast enough to get it all down. Because we're on tape, please be sure to speak up so that we don't miss your comments.

The study will commence on the 9th of September until the 30th of October, 2012. All responses will be kept entirely confidential. This means that your interview responses will only be shared with me and I will ensure that any information I include in the study does not identify you or your school as the respondent. Once the paper is finalized at the end of June, 2013, all information will be destroyed. A copy of the study will also be made available to you if you so wish. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

The research has been cleared with the Faculty of Educational Sciences at the University of Oslo. The Norwegian Data Protection Official has recommended the study and has also been approved by the Department of Education. If you would like to discuss any of the above mentioned with my supervisor, she is available either by phone (+[REDACTED]) or email ([REDACTED]).

Are there any questions about what I have just explained? Are you willing to participate in this interview?

Interviewee

Witness

Date

_____ Legal guardian (if interviewee is under 18)

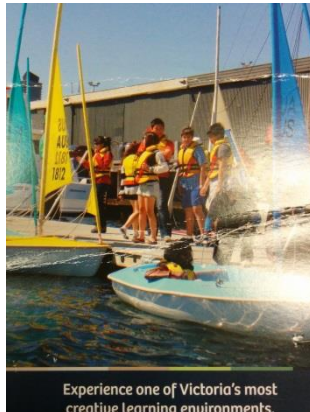
Appendix 7: Images



Experience one of Victoria's most creative learning environments.

Image 1

Flyers from the public school



Experience one of Victoria's most creative learning environments.

Image 1



Image 3

Hallway of the private school at the end of a day. Empty cabinets to the right



Image 4



Image 5

Classrooms at the private school



Image 6

A progressive flyer regarding homosexuality at the public school



Image 7

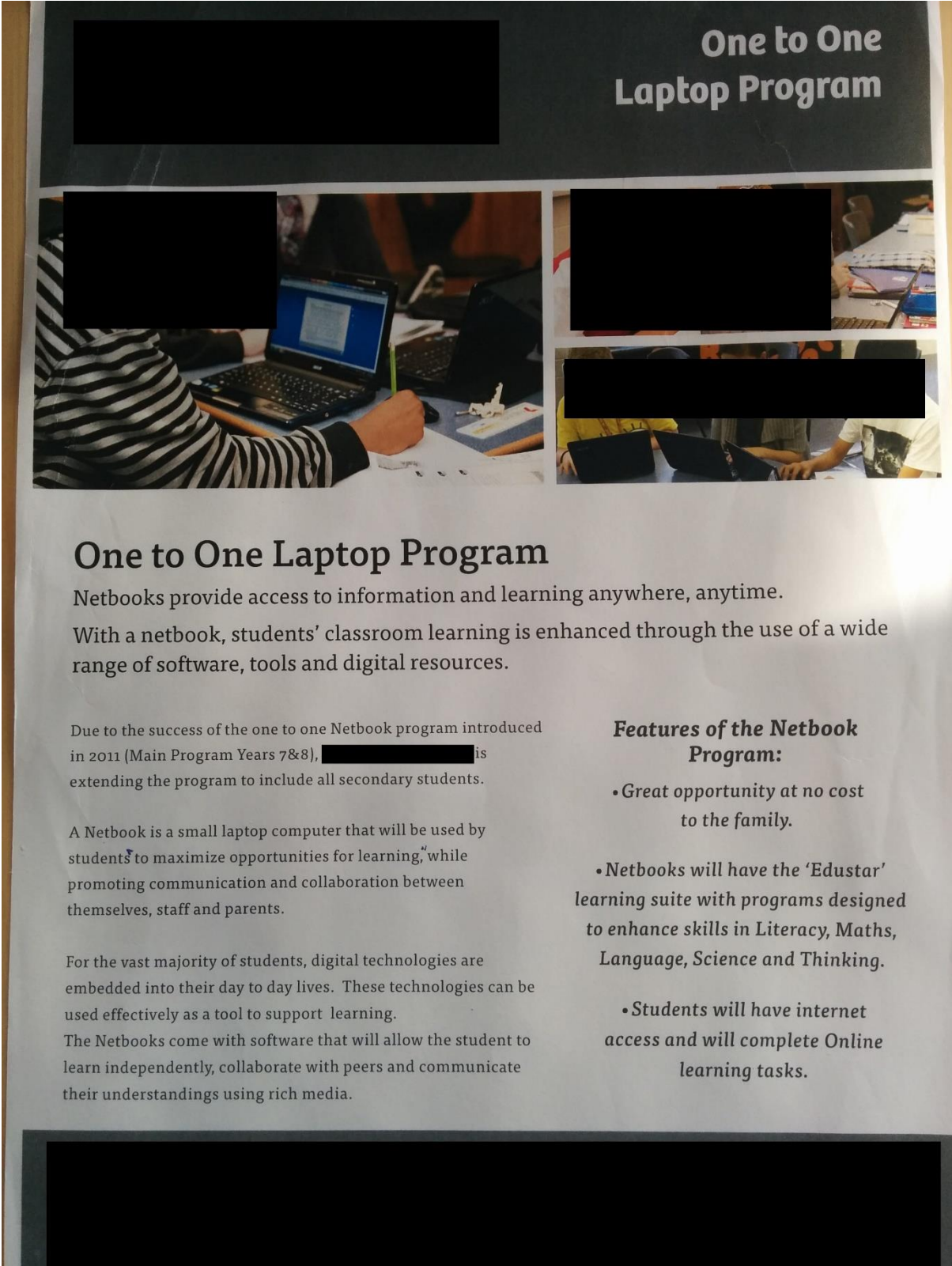
A classroom at the public school



Image 8

NAPLAN preparation books in a large department store.

Appendix 8: One on One Laptop Flyer



One to One Laptop Program

Netbooks provide access to information and learning anywhere, anytime.

With a netbook, students' classroom learning is enhanced through the use of a wide range of software, tools and digital resources.

Due to the success of the one to one Netbook program introduced in 2011 (Main Program Years 7&8), [REDACTED] is extending the program to include all secondary students.

A Netbook is a small laptop computer that will be used by students to maximize opportunities for learning, while promoting communication and collaboration between themselves, staff and parents.

For the vast majority of students, digital technologies are embedded into their day to day lives. These technologies can be used effectively as a tool to support learning.

The Netbooks come with software that will allow the student to learn independently, collaborate with peers and communicate their understandings using rich media.

Features of the Netbook Program:

- Great opportunity at no cost to the family.
- Netbooks will have the 'Edustar' learning suite with programs designed to enhance skills in Literacy, Maths, Language, Science and Thinking.
- Students will have internet access and will complete Online learning tasks.

Appendix 9: Improvement checklist

Name: _____ Teacher: _____

HUMANITIES

Strengths	Areas for improvement
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WAYS TO IMPROVE

- Do I keep my workbook up to date and easy to read?
- Do I separate notes into different topic areas?
- Do I spend at least 15 minutes after each Humanities lesson going over what I have covered and prepare questions to ask regarding anything I am unsure about?
- Do I regularly revise the key words/concepts discussed in class?
- Do I vary the people I work with in groups to ensure my thinking style is challenged?
- Do I use class time effectively – ie. Ask questions, seek help when required, listen to explanations and other students questions and complete all assigned work?
- Do I look to vary the technological tools I use to present my assignments?

Goal	How to achieve goal	Achieved (Y/N)

Student Signature

Parent Signature

Mentor Signature

Date