'StoriesAbout... Assessment': understanding and enhancing students' experiences of assessment in art and design higher education using on-line storytelling and visual representations

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Abstract

This thesis aims to investigate students' qualitative experiences of assessment in art and design higher education using storytelling and visual representations. It aims to investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment. In order to examine these aims, an on-line tool, 'StoriesAbout… Assessment' was designed and developed, based on an adapted model of storytelling as a reflective tool in higher education. Visual representations of students' experiences were also used to identify the affective aspects of the assessment experience. In using these novel methods, the research aimed to highlight the whole student learning experience and how assessment affects that experience. Traditional methods of surveying and evaluation do not usually focus on this, nor do they provide a reflective, learning process for students.

The analysis of stories led to a greater understanding of students' experiences of assessment in art and design by identifying a number of key issues: the impact of negative experiences, the need for greater clarity of assessment criteria due to the subjective nature of the discipline, the tension students perceive between their role as creative practitioners in an educational setting and their role in the wider art world, the value of peer support and appropriate feedback. The storytelling model enabled students to view stories from different perspectives and to consider changes to their practice, and the model has demonstrated its efficacy in supporting reflective thinking and transformative learning. The emotional aspect to students' experiences was particularly evident in their visual representations which often used strong imagery to depict how the stress of assessment affected them. The drawings also showed stereotypes of assessment, such as images of exams, indicating that these previous experiences had become synonymous with assessment, despite there being few formal exams in art and design.

In summary, this thesis contributes two new methods for understanding and enhancing the student learning experience, which have been proven in the context of art and design higher education.

Acknowledgements

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Thanks to Mungo and Morag for their unconditional love and support, for walking across my keyboard on many occasions, and for purring and shedding all over this thesis. You may discover Mungo and Morag 'hiding' in this thesis.

To Stuart, for understanding what it is like to be a bat… (no, wrong thesis!) ... I mean, for understanding what it is like to undertake a PhD and agonise over the writing of the thesis, as well as the need to eat pizza.

Thanks also to everyone who kept me sane and put a smile on my face.

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Publications

Material from this thesis has been published in the following publications:

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Assessment Island

Here be dragons

Peninsula of wisdom

Cave of despair

Cove of creativity

Mountain of dreams

Here be examiners

Rock of determination

Cape of hope

The creek

Pass of failure

Loch of learning

Swamp of past memories

Forest of success

Bay of experience

Reef of emotions

'[Stories] are like mountain tops jutting out of the sea. Self-contained islands though they may seem, they are upthrusts of an underlying geography that is at once local and, for all that, a part of a universal pattern.'
Jerome Bruner

Prologue

Aesop: *So, Socrates, nice to meet you. I've been wondering for ages now what all this Socratic dialogue is and what's it got to do with education?*

Socrates: *Well, have you read that book my student Plato wrote, with me as the protagonist?*

Aesop: *Yes, yes I did. The Meno. It was jolly exciting and I think you were portrayed very intelligently.*

Socrates: *Thank you, that's very kind of you to say. Can you remember much about it?*

Aesop: *Oh, yes, Socrates...er... you were talking to a slave about something, but it wasn't just what they were saying which was important, it was the way they were talking.*

Socrates: *What were they talking about?*

Aesop: *It was something to do with... hang on a minute, I do know, but my memory is failing me a bit these days. Oh, yes... whether virtue could be taught.   But that's not just what people take from it.*

Socrates: *Isn't virtue important?*

Aesop: *Oh, indeed it is, and they make some very interesting points. However, we have been put here today in this dialogue to discuss education. And I think that the way they discussed virtue illustrated some nice educational points too.*

Socrates: *Oh really! That was a bit clever of my student. Obviously had a good mentor!*

Aesop: *Yes, of course, of course.*

Socrates: *Now, as I recall, Socratic dialogue, used in education these days, means that a tutor facilitates a dialogue in which the student is actively engaged in finding the solution, supported and guided through a dialogue with the tutor. This helps the student to learn for themselves and to put forward ideas and*

thoughts to be discussed and explored without fearing their ideas will be dismissed. That's an overview of Socratic dialogue – wasn't it so nice of them to name it after me!

Aesop: *But Socrates, I find that dialogue often goes on and on and sometimes never gets to the point. In fact, sometimes it is hard to work out what the point is or how we got to the point or even whether there was a point to begin with. And having a tutor who is patient enough to sit with a student or even a group of students and support them like that. It just wouldn't happen these days, what with marking, timetabling, papers to write for the RAE and if you are a Professor, that round of golf to get in before the rather important strategic meeting you have to go to. No, no, Socratic dialogue is all very well when you have the time for it.*

Socrates: *Yes, yes. I do see your point Aesop, but wouldn't it be nice if there was another type of narrative to complement my lovely Socratic dialogue.*

Aesop: *Well, Socrates. It is interesting that you should mention that. Now, let me tell you a story...*

Chapter 1 – Introduction

'The universe is made of stories, not of atoms'.
Muriel Rukeyser

1.1 Introduction

This thesis proposes the use of non-traditional methods for understanding the student learning experience in higher education: namely, storytelling and visual representations.   This thesis describes the use of these methods as a way of understanding students' experiences of assessment in art and design.   The research also aims to develop storytelling as a reflective tool for students.   Therefore, this aspect of the research has a dual role: to understand the student experience using storytelling and to develop storytelling as a reflective tool (see Figure 1.1).

Figure 1.1.
Dual aspect to research

This chapter will explain why the decisions were taken to investigate this area and why these methods were chosen.   We[1] will consider more traditional methods of understanding the student experience and discuss their limitations.   These methods are generally employed to evaluate the effectiveness of teaching and student satisfaction levels with a course or module.   They take an institutional perspective, not a student perspective and, as such, are not used as reflective tools.

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[1] The language of this thesis has been chosen to be Constructivist in style and to include the reader in the discussions of the research. This style is discussed further in Chapter 3, p87.

We will then look at the changes that have taken place in higher education in the UK and show how these changes have led to an emphasis being placed on the student as a reflective, independent, and lifelong learner. The introduction of Personal Development Planning (PDP) has led to renewed interest in engaging students in reflective activities. We will show where this research is placed within this context: that of seeking to understand the student experience and provide engaging reflective tools which support a deep approach to learning.

We will then show why we chose storytelling as a method, discussing its important role in our everyday lives and our need to understand our *self* and our interaction with others. We will explain the role of the visual representations within the research and how these have been used as a method which can gather more instinctive and affective responses, to complement the storytelling method. We will then state the research question and objectives of this research, before giving a chapter by chapter overview of the thesis. The aim of this chapter is to set the scene for the unfolding story in the rest of this thesis.

1.2 New approaches to understanding the student experience

Traditional approaches for understanding student experiences largely consist of end of module surveys, focus groups or interviews. These methods may encourage a rationalisation of experience and the resulting comments may be influenced by concerns about who will see them. We argue that these techniques are conducted from the institutional perspective and are framed in institutional policy.

The standard end of course evaluation form consists largely of tick boxes and rating scales that aggregate out the data in an attempt to ensure the results are valid and can be generalised. It is an approach befitting of the positivist paradigm (Popper, 1989). Whilst free text space may be supplied, the approach:

> "…devalues the subjective quality of personal opinion and experiences because it holds subjectivity to be a problem…" (Johnson, 2000, p 423)

Furthermore, Johnson (2000) argues that these types of evaluations are not reflective, nor are they learning processes where students' views are valued.

These methods have been criticised for not providing adequate information regarding students' actual experiences (Ludlow, 1999). Some suggest that using multiple methods for evaluations can be more effective at capturing the whole experience (McKenzie et al., 1998).

This thesis proposes that storytelling and visual representations can provide further insight into the student experience. Storytelling is a natural process we engage in everyday and stories encompass our everyday experience, our feelings, our very selves. In predominantly visual and creative subject areas, such as art and design, it is worth investigating whether we can draw on the creative abilities of our students to improve our understanding of their learning experiences.

Challenging assumptions: learning from art and design

Art and design has 'traditionally' been at the forefront of challenging assumptions, pushing boundaries and for attempting to take steps in pursuit of new knowledge and ways of thinking and doing. Eisner (2002) argues that art enables us to notice our world in different ways, resulting in these new ways of knowing. Art and design's long social, political and cultural history (see, for example, Tanner (2003); Goldblatt (2006)) together with its ability to transform and reinvent itself, serves to legitimise this approach and, in most cases, we expect art and design to be bold and innovative, rather than comfortable and predictable.

In conducting research within an art and design higher education context, I have attempted to adopt the creative thinking of art and design (a new discipline to me), and to challenge some of the traditional ways of conducting student learning research and to establish innovative methods which are rarely considered as methods which can be used for the purpose of understanding the learning experience. The approach I have taken draws on my background in the cognitive sciences and previous educational research.

These methods are not new to art and design. Storytelling and narrative are used extensively in art and design. Artefacts often have stories to tell and the artist or designers will have their personal narratives about why and how they came to produce the artefact. In fact, some would argue that the stories we generate about art are a literary art form in themselves (Carrier, 2003). In art, the artefact becomes an object for storytelling and this is exploited in art and design education through the use of the 'crit' (Oak, 2004), in which art and design works are discussed and debated by tutors and peers.

PDP and higher education

Before carrying on with the story of how this research was constructed, we must first look at the many changes in higher education that have taken place, and are taking place, since the Dearing Report (Dearing, 1997). A particular outcome of this has been the introduction of Progress Files (QAA, 2001) which emphasise the importance of reflection in learning. Both components of the Progress File, the Transcript and the Personal Development Planning (PDP) document make specific reference to supporting reflection in the learning process. The Transcript provides a record of the student's learning that should assist them in reflecting on their progress and planning for future development. The PDP element is a supported process to enable a student to reflect on their learning as well as being able to plan for personal, career and academic development. The guidelines aim to foster lifelong, independent learners who have an understanding about how they are learning and progressing.

With the growing requirement to have the components of the Progress Files in place, and with no specification for their actual implementation, a number of approaches have been taken. In previous research with Dr Julian Malins, we reviewed various strategies, focusing in particular on on-line approaches to implementing the PDP component (Malins & McKillop, 2005). We found considerable variation in the way the Quality Assurance Agency (QAA) guidelines had been interpreted, with some implementations being paper-based and others on-line, some incorporating reflective activities to check on progress, whilst others gathered largely factual information about the student. Much of the emphasis of these systems concerned inputting

information into on-line forms, with less emphasis being put into incorporating this process into reflective, learning and feedback processes. We proposed that PDP tools for art and design should be more discursive in nature to suit the experiential and practice-based nature of the discipline. The largely text-based nature of these tools may not suit the visual learning styles of creative arts students or the mode of their discipline (James, 2004).

The dilemma is to introduce these processes in line with the QAA guidelines, but to ensure that these processes are actually of benefit to the students and not just the institution who can then state that they have introduced these processes. There is no requirement to evaluate the effectiveness of these processes and indeed, what would constitute an effective evaluation criterion?

The QAA in Scotland introduced a number of 'Enhancement Themes' aimed at enhancing the student learning experience in higher education by identifying key themes for development. This has led to more emphasis being put on the actual student and consideration of a more holistic approach to student-centred learning. The enhancement theme for 2003-4 was assessment and a series of workshops aimed to identify key issues, share experiences of good practice in learning and teaching, and to develop strategies to support quality enhancement throughout higher education.

This PhD research has much in common with the core beliefs underlying the introduction of Progress Files as well as the Scottish QAA's initiative in aiming to enhance the student's learning experience. The research proposes to understand the student's learning experience and to construct new learning tools which are not just learning tools per se, but tools which actually have real benefit to the student and their learning experience.

Storytelling

We have adopted storytelling as a key method to drive this research, but storytelling is such a natural process that it may not be apparent why it is so important to this thesis. We all tell stories to each other on a daily basis and many of these stories can

be dismissed as gossip or amusing bits of trivia. But there is something pervasive about storytelling, something about it that anchors it very closely to us as social beings. In fact, our development and status as social beings may be crucially linked to our seemingly natural ability to tell stories. Read & Miller (1995) suggest that stories are fundamental to us because of our need to understand and interact with each other. Dautenhahn (1999) suggests that this may have an evolutionary origin which arose from an increasing size of social groups which led away from more 'animal' forms of bonding such as grooming, towards the more 'human' trait of storytelling as a form of social bonding. The creation and sharing of stories enabled group members to relate and empathise with each other. Without an ability to tell or understand stories, it is all too easy to lose our sense of 'self' and our ability to relate to others:

> "The constructions of selfhood, it seems, cannot proceed without a capacity to narrate." (Bruner, 2002, p86).

To capture a story is to capture a perceived experience, and this thesis proposes to capture the experiences of students in art and design through their stories. It does this to understand their experiences of the assessment process and to encourage them to discuss their experiences using a model of storytelling as a reflective tool in higher education (McDrury & Alterio, 2003). This model will be introduced in the next chapter.

Do we need a definition of storytelling?

There could be many definitions regarding what constitutes a story and these would depend on many factors, such as whether it was a literary story, a factual story, a written story, an oral story, and so on. We tell stories in many contexts and the more informal types of stories are common in everyday use: anecdotes and gossip. Some stories need not even be narrated as we have a shared understanding of them. For example, a particular well known story at work may not need to be retold as merely referring to the story will enable the shared understanding to be accessed. How many times have we said, 'This reminds me of the story when X did Y' and then no further story or explanation is needed to those in the know?

Gabriel (2000, p60) uses the term 'proto-story' to refer to stories which have:

> "...the seed of a story without actually achieving the poetic imagination and narrative complexity that would make them proper stories – or reports – that is, descriptive accounts of events, emphasizing factual accuracy rather than narrative effect."

As we shall see later in this thesis, many of the students' stories could come under this definition.

For the purposes of this research we have not taken a strict approach to defining the term 'story'. Whatever experience or opinion a student wished to express as a story was accepted as valid. The storytelling method was developed to help students express their experiences. Part of this investigation considers the effectiveness of this method.

1.3 Research question and objectives

The thesis argues that approaches seeking to support higher cognitive thinking skills such as reflection should be grounded in a pedagogical approach such as Constructivism. Storytelling is proposed as a Constructivist and cognitive tool which provides an engaging and complementary approach to developing reflective thinking skills. The underlying theory to a Constructivist approach in education is critiqued as is the theoretical basis for using storytelling and its role as a reflective tool in higher education.

The aim of this research is to gain a better understanding of the assessment and learning processes in art and design higher education, in order to bring about improvements in pedagogical strategies.

The main research question explored in this thesis is:

> To what extent can on-line storytelling be used as a collaborative reflective tool to enable students to reflect on, and learn from, their experiences of the assessment process in art and design? What can we learn about their experiences from the stories they tell?

This was explored through the investigation of the following 4 objectives:-

1) To investigate students' qualitative experiences of the assessment process in art and design through the use of storytelling.
2) To investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment in an art and design context.
3) To develop and evaluate an on-line tool to support collaborative and reflective storytelling.
4) To investigate art and design students' experiences of assessment by asking them to visualise their experiences using drawings.

1.4 Overview of thesis

In investigating the above research question and objectives, we have taken a model of storytelling as a reflective tool in higher education (McDrury & Alterio, 2003) and developed this into an on-line environment by means of a web site: 'StoriesAbout… Assessment' (www.storiesabout.com). This web site serves as a reflective tool for students in art and design to discuss their experiences of the assessment process. The stories and discussions generated by this storytelling model were used as the basis for gaining greater insight into how assessment processes in art and design were affecting students.

The reflective storytelling method was contrasted by a parallel investigation using visual representations of students' experiences of art and design assessment. The intent of the visual method was to investigate students' drawings to see whether they elicited more affective responses to assessment. Both storytelling and drawings provided emotional responses, but it was speculated that the drawings might show a stronger emotional angle.

The following thesis will develop and explain these ideas in more detail. We will now give an overview of each chapter:

Chapter 2 provides a review of the background literature which encompasses many areas, resulting from the research being interdisciplinary in nature. The review considers reflection and assessment as key components of the learning process and explores where their importance lies. We look at art and design specific educational issues which make discussing assessment and reflection more challenging. Storytelling will be reviewed in more depth as its strengths are fundamental to this thesis. We will consider its role in education and focus on the model of storytelling that is central to this thesis. The review will also encompass a review of on-line tools for reflection and collaborative learning in order to position the research being conducted in this thesis in context.

Chapter 3 outlines the underlying methodological and philosophical approach taken in this research. A Constructivist and student-centred approach is vital in driving the research and is an approach which values the individual student experience. We explore the concept of Constructivism in education and show how it enables a holistic approach to be taken. The qualitative component to the research is established by describing the types of data that will be gathered: largely students' stories of their experiences. The methods used will be introduced, as will how they will be used to investigate the research objectives. We will legitimise our qualitative approach by reframing positivist terms within a qualitative paradigm. A number of other considerations will be raised, not least of these being the style of this thesis and the voice of the researcher within it.

Chapter 4 outlines the design of the first prototype of 'StoriesAbout… Assessment'. The rationale behind the adaptation of the storytelling model will be discussed as well as the reasons behind the design decisions and techniques used. This chapter will conclude with a guided tour of the web site.

Chapter 5 describes an initial study where students used the web site. There were two parts to this study: an informal observation with students and a further study where students used the web site for a longer period of time. Issues arising from the students' stories are discussed. The analysis from a focus group and questionnaire are discussed. The findings from this study provided initial information about

students' experiences of assessment in art and design and also about their experiences of using the web site.

Chapter 6 describes the redesign of the web site following insights from the initial study described in Chapter 5. The reasons for the changes are explained and a guided tour is given of the new look site.

Chapter 7 presents the main analysis arising from this thesis and describes and evaluates the methods used during this investigation. Two main studies were conducted at this stage of the research: the first was the more widespread use of the 'StoriesAbout… Assessment' site; and the second was the distribution of an 'Assessment Experiences' survey. This survey aimed to gather responses to an example story to investigate the efficacy of the storytelling model and to gather additional information for the research, namely, words describing assessment and learning, examples of using assessment, and to gather more stories. The words were used to investigate the differences in the emotional content of words used to describe assessment and learning.

The story data is presented from three perspectives. Perspective 1 considers what the stories have told us about students' experiences of assessment in art and design. This is presented largely according to the categories arising from the data analysis. Perspective 2 investigates the storytelling model by analysing the responses to the example story. Perspective 3 considers these responses from the viewpoint of undergraduates, postgraduates and staff.

The chapter concludes with a short evaluation of the web site conducted through an on-line questionnaire.

Chapter 8 presents the use of visual representations as a method to investigate students' experiences of art and design assessment processes. The chapter explains how a Grounded Theory approach was taken for the analysis of the drawings. This approach was developed using a two stage process which will be described in the chapter. The main form the drawings took will be described and the main categories that arose from the analysis will be explained and illustrated with the drawings. The

emotional nature of the drawings will be focussed on. A small sub study comparing computing and art and design students' drawings will be discussed. The chapter will end by looking at what these drawings can tell us about the student experience and by proposing that a value of this method lies in the interpretation of the drawings and the wider discussions this promotes.

Chapter 9 will sum up the main considerations of the thesis. Storytelling as a reflective tool will be critiqued, as will the effectiveness of transferring the model on-line. We will look at what we have learnt about students' experiences of the assessment process in art and design using storytelling and will propose ways of improving the student experience. Visual representations as a method will also be critiqued and we will look at the strengths of this method. We will comment on how effective these methods may be in other discipline areas before discussing the limitations of the research. This chapter will conclude by stating the thesis' contribution to knowledge and outline future research.

Chapter 2 – Literature review

'There is no greater agony than bearing an untold story inside you.'
Maya Angelou

2.1 Introduction

This review will focus on key areas of research which underpin the research described in this thesis. The research is inter-disciplinary in nature, drawing on key texts in a number of discipline areas and the aim of this review is to show how these different areas fit together. To guide the discussion of the review in this chapter, Figure 2.1 provides an overview of the key areas of the literature with storytelling shown as the common thread running through the core of the research.
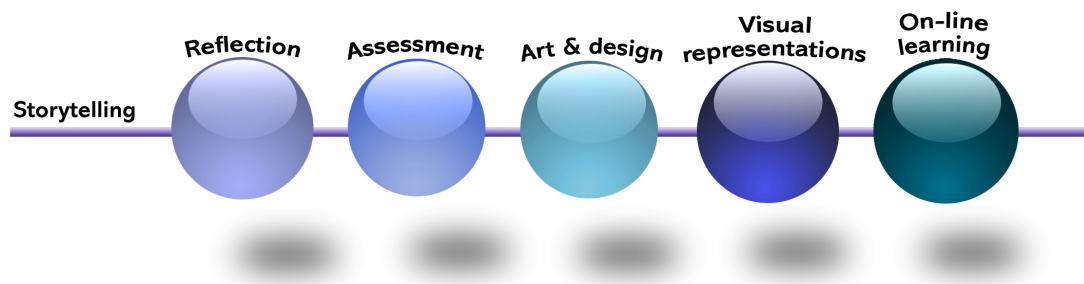
Figure 2.1.
Areas of literature

We will start by considering two key elements of this research, reflection and assessment. We will use the literature to explore why these elements are important in the learning process and some of the difficulties associated with them. We will then bring together these two elements, usually seen as separate entities, to show how their strengths can be combined.

The discipline area of this research will then be discussed, largely in relation to educational issues. Art and design has some less tangible concepts, such as tacit knowledge, aesthetics and subjectivity, and creativity, which make its assessment processes more complex than other disciplines. Understanding these areas will help

us later in this thesis when we attempt to understand the stories that students tell about their assessment experiences.

Following this we will focus on the core method which runs through this research: storytelling. We will explain why storytelling is so important to us as social beings and explore what storytelling has brought to organisations, medicine and communities, in order to highlight its powerful effect. The value of storytelling in the learning process will be demonstrated, in particular, how it can support reflective thought, sense making and construction of meaning, and collaborative inquiry. In summary, we show how storytelling is a Constructivist tool.

We end this review by investigating a number of on-line environments which have been designed to support collaborative learning and reflection. In doing so, we demonstrate the value of viewing computers as cognitive tools. The increasing role of computers in our lives will also be highlighted, as will the increasing use of computer-based technologies in art and design higher education.

2.2 Reflection and assessment

Importance of reflection

The introduction of PDP has put reflection high up on the learning agenda and much is said about the importance of the role of reflection in learning. However, it is easy to ask a student to reflect, but, ensuring that they do and that they learn from the process is another thing. Reflection is often seen as an internal and solitary process which is not shared with others and a private process which we may not wish to intrude upon. Although an important skill, do we really wish to intrude upon this process and test a student's skill level by specifying learning outcomes for the reflective process as we do in assessment? Taking a Constructivist approach, we may be unlikely to do so as we would wish the student to be free to construct their own meaning, rather than frame their thinking solely in response to the learning outcomes. We wish to encourage reflection, but adding learning outcomes to this process could be a detrimental move – the student could just be going through the motions, doing what the teacher told them to do, and constraining their thinking.

Indeed, Boud & Walker (1998) suggest that there is a real danger that introducing reflective processes can lead to a surface approach to reflection. They warn against the 'recipe' approach to reflection whereby students follow prescribed reflective steps and are required to reflect on demand. Checklists of questions requiring answers can turn the reflective process into one that can be memorised and applied with little thinking. This form of 'teaching' is easy to implement, but understanding the effect it has on the student is another matter. Sometimes it is all too easy to produce a detrimental effect rather than the enhancing effect expected.

However, there may be less able students who need some support to enable them to develop reflective skills. There are a number of ways in which this is being done, for example, through incorporating reflection tasks into the assignment process (Thorpe, 2000), although assessing reflection can be problematic. What is being assessed – the reflective ability, strength of subject knowledge, or a mix of both? This is even more difficult when you consider the strong emotional aspect to the reflective process. The student must be able to safely express themselves in a supportive environment where there will be no negative consequences (Boud & Walker, 1998).

Being asked to reflect can also result in the tutor's position being questioned by the student as they implicitly or explicitly take the role of tutor as authority figure (Boud & Walker, 1998). Asking students to reflect and question the knowledge of the tutor is challenging for an Instructivist led curriculum, but quite in keeping with the Constructivist position taken by this research.

So, is keeping reflection an individual and private process the best approach? As just stated, we are taking a Constructivist approach, and this approach emphasises the social aspects of making meaning. Kemmis (1985) stresses that reflection is not just individual, it is a social process. He views reflection as if it were a conversation with oneself, one which will result in some form of action. However, the ideas which we reflect upon are socially given and the result of reflection is some form of action which can only be meaningful in the social world in which other people can understand that action. He states that our thinking is shaped by society which is

shaped by thought which results in action. He sees reflection and its outcomes as having potentially more far reaching consequences than just at the individual level.

Herrington & Oliver (2002) point out the difference between individually and socially mediated reflection in learning and the difficulties in successfully supporting them. They state that individual reflection can be supported using a learning journal, however, asking students to keep a learning journal is no guarantee of effectiveness. The quality of reflection varies from simply descriptive writing of, for example, events, to personal judgments, to a dialogue with oneself exploring possible reasons, to more critical writings that take into account the wider context for making those connections. They suggest the level at which students engage with their writings can be supported through a number of techniques ranging from simply providing questions for them to think about, to how to structure their journal. However, they state that the quality of the reflection depends on the reflector's skills. This can be enhanced through the process of socially mediated reflection which can be further enhanced by collaborative work.

Reflection is a key component in Kolb's (1984) Lewinian derived experiential learning cycle (see Figure 2.2). The experiential learning cycle is central to learning in art and design as students' studio-based experiences and process of critical reflection enable them to gain the tacit knowledge they need to be able to become effective practitioners. Kolb's theory is important in that it emphasises the importance of experience in the learning process, but also addresses the issue that experience alone is not sufficient for learning to take place, it is the reflection on that experience that starts off the learning cycle.
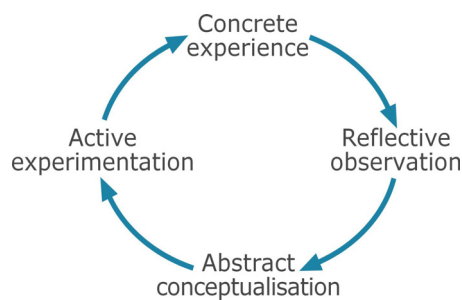
Figure 2.2.

Experiential learning cycle

This model is often used when discussing educational processes and is a simplification of a complex problem. Others have added loops into the process in order to address this complexity (Cowan, 1998).

Reflection defined?

Here we have already run into the trap of discussing reflection without due consideration of what it is, if indeed it is something that can be defined. What are the processes involved, and are students really aware of what is expected of them, or do we end up in the surface reflective state as previously considered? Let us now look in a bit more depth about some of the issues we have just discussed to see if we can come to a consensus about what reflection is and how to most effectively use and support it during the learning process.

One of the earliest writers on reflection, and one who has influenced the thinking of most current educational researchers, is John Dewey. Dewey (1991) was clear that thinking goes on in our minds whether we are aware of it and regardless of our intelligence. Reflection, however, was viewed as having a special place amongst our thoughts. He saw the reflective process as having some order to it:

> "Reflection involves not simply a sequence of ideas, but a *con*-sequence – a consecutive ordering in such a way that each determines the next as its proper outcome, while each in turn leans back on its predecessors. The successive portions of the reflective thought grow out of one another and support one another; they do not come and go in a medley." (Dewey, 1991, p3)

He also viewed reflection as a process that arose out of some need:

> "*Demand for the solution of a perplexity is the steadying and guiding factor in the entire process of reflection.*" (Dewey, 1991, p11)

Without some need to resolve this state of perplexity, our thoughts are merely random. However, to bring about this resolution, prior experience is important. In fact, Dewey (1991) states that prior experience governs the difference between good and bad thinking. Prior experience enables analogies to be drawn upon to resolve the problem. He goes further and shows that it is not sufficient to use prior experience,

but this must be employed carefully as it is all too easy to see a possible solution and accept its promise of a resolution at face value. Reflective thinking is more than that, it is about suspending judgement until all lines of enquiry are considered (Dewey, 1991). This form of thought is not easy and Dewey (1991) proposes that there is a need for the training of thought. This proposal could be considered similar to today's requirement for, and emphasis on, meta-cognitive skills.

Like Dewey, Boud, Keogh, & Walker (1985b) emphasise the importance of experience in the learning process, though they add that it is not sufficient for learning to take place. They suggest that it is the way in which the individual engages in and explores those experiences that can lead to new understanding. They suggest that this process comprises three stages: preparation, the actual experience, and processing the experience.

They consider that the reflection required at these stages is not simply one way of thinking, rather it is a multi-faceted concept covering a range of ideas. To expound on this, they provide a number of examples. At the preparatory stage students may be thinking about the aim of a particular field trip or the requirement for a workplace placement and what will be required of them. During the actual experience students may be engaged in recording their thoughts on the experience and clarification with others involved. After the experience students may have to write a report requiring them to make sense of their experience. All this type of reflection is conscious and purposeful, in keeping with Dewey's (1991) definition and description of reflection. Though Boud et al. (1985b) point out that the student may not be fully aware of all the goals of the experience at that time.

The experiences that Boud et al. (1985b) describe are experiences which are generally outside of the normal 'classroom' situation, such as field trips, etc. However, that experience *can* include the more direct forms of on-campus learning such as the traditional lecture.

Boud et al. (1985b) state that there are three key aspects which must be considered when looking at the reflective process. First, only the learner can learn and reflect, the tutor can provide guidance and advice, but it is the student who must take control.

Second, reflection is a purposeful activity, there must be some intent behind it. Third, there is an affective aspect to learning. Negative feelings can create barriers to learning and positive ones can enhance it. We will look at affect and its role in the reflective process in more detail in a moment.

In order to enhance learning, Boud, Keogh, & Walker (1985a) suggest that the link between the learning experience and its following reflective activity should be strengthened. At the simplest level, they suggest simply adding in time for reflection. Boud et al. (1985a) propose three elements which they believe are vital to the reflective process:-

- Stage 1: Returning to the experience
- Stage 2: Attending to feelings
- Stage 3: Re-evaluating experiences

Stage 1 is about re-looking at the experience, paying close attention to detail and maybe writing observations down. Boud et al. (1985a) suggest that by looking at the experience in more detail, aspects of it emerge that could easily have been overlooked. This enables the person to distance themselves and look at the wider context of the experience, perhaps looking at it from a different view or perceiving themselves as others might view them.

Stage 2 acknowledges the affective component of the experience and its role in learning. Here Boud et al. (1985a) state that positive feelings can be an important motivational influence, especially in challenging situations. However, negative feelings can erect a barrier to reflective thought, leading to fixedness of interpretation. In these circumstances, the barrier needs to be carefully removed to enable creative and responsive thought to pervade again. They state it is not sufficient to simply 'repress' negative feelings since this does not adequately deal with them. They can be resolved by, for example, discussing them or writing about them.

Stage 3 could be carried out immediately after the experience, however, Boud et al. (1985a) suggest that the first two stages need to be addressed to avoid false conclusions to be arrived at too quickly due to misinterpretations of the experience. They suggest four areas which can aid the re-evaluation of experience: association, integration, validation and appropriation.

Schön (1983) has introduced us to the idea of the critical practitioner and his view of reflection is grounded in the work of practitioners. Key to his observations on reflective practice are the concepts of 'reflection-in-action' and 'reflection-on-action'. The latter occurs after the experience and encompasses the re-evaluation of that experience after it has occurred. This type of reflection highlights an important aspect of reflection that is often seen as crucial for reflection to take place: distancing. Boud et al. (1985a) also propose that a key part of reflection is conducted some time after the experience. However, Schön (1983) offers us a way of introducing reflection into the actual experience through his description of 'reflection-in-action'. This covers reflection during an experience and illustrates the way a practitioner is able to think on their feet and adapt to the unfolding situation. Schön (1983) has also described how 'knowing-in-action' is a form of practical knowledge applied during the practitioner's action to help them with their 'reflection-in-action'. This type of knowledge is equivalent to tacit knowledge and the importance of tacit knowledge will be discussed in a later section.

As we can see from the above discussion, the concept of reflection has been widely explored from a number of angles, in fact, we could say that reflection has prompted a great deal of reflection. Moon (2002) attempts to bring together the many key writings on reflection in an attempt to focus on their commonalities. She identifies nine stages of reflection which appear to be common in experiential learning research. They are:

1. Experience
2. Need to resolve
3. Clarification of issue
4. Reviewing, recollecting
5. Reviewing the emotional state

6. Processing of knowledge and ideas

7. Resolution

8. Transformation

9. Possible action

Moon (2002) then bases her five stages of learning on these, which map into the concept of surface and deep learning (see Table 2.1). As we shall see later, this research is based on these five stages of learning and how to engage the student with them and support them during the reflective process.

Table 2.1.

Moon's five stages of learning

Stages of learning	Deep/surface learning
Noticing	
Making sense	
Making meaning	Surface learning
Working with meaning	
Transformative learning	Deep learning

Now that we have examined the nature of reflection and its place in the learning process, we will now consider metaphors for reflection to help us understand it more. Reflection is often thought of with regard to its everyday meaning: a reflective surface reflecting back an object, a mirror image, etc. This common everyday usage of the term is often the way in which it is applied in education when students are asked to reflect: they are asked to re-look at their learning, consider what has just happened in the learning situation they have just experienced. It is hoped that this will provide them with an opportunity for deep learning to take place. However, is this the case and are students' understandings and definitions of reflection on a par with what is being expected of them? Previously, we found three levels of reflection when students were asked to define what reflection meant to them (Malins & McKillop, 2005):

- **Level 1: A Review**

  Looking back at what they did and what they had learnt

- **Level 2: Areas for change**

  How they could have done things differently in that particular context

- **Level 3: Planning for change**

  How they could improve on this for future situations

Level 1 corresponds with a surface learning definition, whereas Level 2 shows a move to engaging more deeply in the learning process and Level 3 demonstrates reflective thinking which brings about action and change. About half the students' definitions were at Level 1, a quarter at Level 2 and a further quarter at Level 3.

It may seem then, that it is simply too easy to use the term 'reflection', and to initiate the everyday meaning of that term resulting in masking the expected process, which is intended to produce deep and active learning.

Therefore, the mirror metaphor alone can be seen as inducing surface learning. So, could there be another way of presenting reflection which could avoid getting stuck in the negative associations of that metaphor? At the University of British Columbia, a conference on e-Portfolios during 2004 was entitled 'Reflection Is Not a Mirror, It's a Lens' and I would like to suggest that going beyond the 'mirror' type metaphor and considering a 'lens' type metaphor might be more productive in the educational setting. A lens helps us focus on aspects we cannot see and helps us to explore as we move the lens around and in and out of focus, gaining differing perspectives (see Figure 2.3).

Mirroring back   Focussing

Figure 2.3.

Metaphors for reflection

Presenting reflection in these terms might just focus students' thoughts from the more surface definitions described above in Level 1, through the deeper thinking in Level 2, and towards the action planning and change in Level 3 descriptions.

This research is not proposing to use a precise definition of reflection, rather, it is attempting to apply the productive and creative aspects of reflection which we have discussed to their full, using processes such as storytelling and collaboration to facilitate this. By doing this it is hoped that any counter productive processes which may induce surface learning will not come into play, or at least will not be the prime motivating factor in the reflective act.

Importance of assessment

Assessment is at the heart of learning. However, one of the reasons that assessment is a difficult area is due to the many stakeholders it must serve (Brown & Knight, 1994). Students wish assessment to serve their need to know how well they are doing on a course and what to focus on. Tutors wish to know how well their students are doing so they can support them better. Institutions wish to know how well students are doing so they can sing the praises of their particular institution over another. And employers wish to know just what their prospective employee may or may not be able to do. These conflicting demands run the risk of resulting in a detrimental effect on the student. Not only are there conflicting demands from multiple stakeholders, but assessment itself is a multi-faceted entity. Assessment comes in two main flavours, formal and informal. Formal assessment is commonly what comes to mind when thinking about assessment. It is generally more summative in nature, covering exams, essays, etc. which are assignments set and marked by a tutor. More informal aspects lend themselves more to a formative approach such as self or peer assessment.

Rowntree (1987, p1) once stated about assessment:

> "If we wish to discover the truth about an educational system we must look into its assessment procedures."

Assessment processes reveal many things, including the underlying pedagogical approach taken to learning. It can show whether learning is rooted in behaviourism, takes a cognitive and Constructivist approach, or slants towards the socio-cultural and situated theories of learning (James, 2006). Snyder's (1971) concept of the 'hidden curriculum' can be useful here. He found that it was not teaching which influenced students most, but assessment. There may be other aspects of the 'hidden curriculum' which we, as researchers, have yet to identify.

For example, there are many issues when considering assessment which may not be apparent on initial review. Boud (1995) states that a student can escape effects of bad teaching but not of bad assessment, which can lower self-esteem, lead to a loss of self-confidence and ultimately put the student off the subject. He suggests that whether the student takes a deep or surface approach to learning can be affected by the nature of the assessment as it can sometimes be easier to maximise marks by taking a surface approach. A tutor-driven approach to assessment encourages student dependence as the student learns about assessment through attempting to second guess the tutor's marking criteria (Boud, 1995). The student is not being provided with opportunities to gain and practice the skills needed for self-assessment and understand the assessment criteria.

Traditional assessment is inherently biased as the tutor provides the final judgement (Boud, 1995). Such assessment is usually at the end of a course, or module, therefore there is no room for dialogue on the marks or feedback provided. The language used is often final and leaves no room for improvement. Words such as 'right' or 'good' do not explain what was right or good, nor do they suggest that it could be improved, let alone give any indication as to how to improve it. Feedback is often directed at the person, not the work, and so it can be seen as judging the person.

In reviewing how assessment influenced student learning, Gibbs & Simpson (2002) found that little is known about how students actually use feedback, although feedback is viewed as fundamentally important to learning. There is also a tension between providing a mark and written or oral feedback, with students tending to

focus on reading their mark first (Gibbs & Simpson, 2002). As we will see later in this thesis, feedback is a key issue for students.

Elton & Johnston (2002) suggest changing assessment to change the way students learn and many universities have adopted approaches where the learning objectives match the assessment criteria, termed 'constructive alignment' (Biggs, 1999).

Assessment has become a hot topic, indicated by the increasing recent literature in this area and attempts to change assessment processes (see, for example, Gardner (2006); Bryan & Clegg (2006); Falchikov (2005); Rust et al (2003)). Many of these attempts are necessary and need to be tried out, but we must be careful not to take a bricolage approach to assessment before we fully understand the effects that assessment is having on students, so that we may determine how subsequent changes may also impact on their overall learning experience.

This thesis takes the view that we need to understand the student learning experience in much greater detail before we make these changes and it is hoped that the experiences revealed through the methods adopted will help with that understanding.

Despite the many difficulties surrounding it, assessment remains one of the key drivers of learning for most students. With the aforementioned changes in higher education practices, students are becoming increasingly involved in peer, self and group assessment.

The synergy of reflection and assessment

Reflection and assessment are often seen as two separate entities with differing goals. Reflection – about learning. Assessment – making judgments, etc. Both are two important processes, but if we bring them closer together, we can enhance each other's strengths. McDrury & Alterio (2003) view assessment and reflection comprising each side of a rail track (see Figure 2.4).

Assessment   **Reflection**

Figure 2.4.

Railway track metaphor

Each track is separate but connected through the sleepers enabling insights and outcomes from each side to influence each other, though in the distance they appear to merge. McDrury & Alterio (2003, p119) state that:

> "In terms of reflection and assessment, the separation allows learning and exploration to be distinct from evaluation of outcomes. Through the connectedness it is possible that outcomes revealed while reflecting can be used as part of assessment and insights gained through assessment may provide direction for future development."

Assessment is viewed as something that happens to students. Generally, students are told by the tutor to complete an assignment, they hand in the completed assignment and await their mark and feedback. Although there is a two stage information flow, it is the second information flow that is generally of importance to the student, i.e. the mark/tutor feedback. When the information reaches the student, that is usually the end of the process (see Figure 2.5a.) There is not enough research to have a clear idea about what the student does with their feedback (Gibbs & Simpson, 2002) and Ding (1998) suggests that even if students do read their feedback they don't do much with it. Students appear to be viewing the return of the marked assignment as the end of the process. This research proposes to extend this process, by encouraging students to reflect on, and discuss, the assessment process with other students. The aim here is not to see the assessment process in isolation, but to share experiences

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and to continue reflecting on, and learning from, those experiences with peers (see Figure 2.5b).
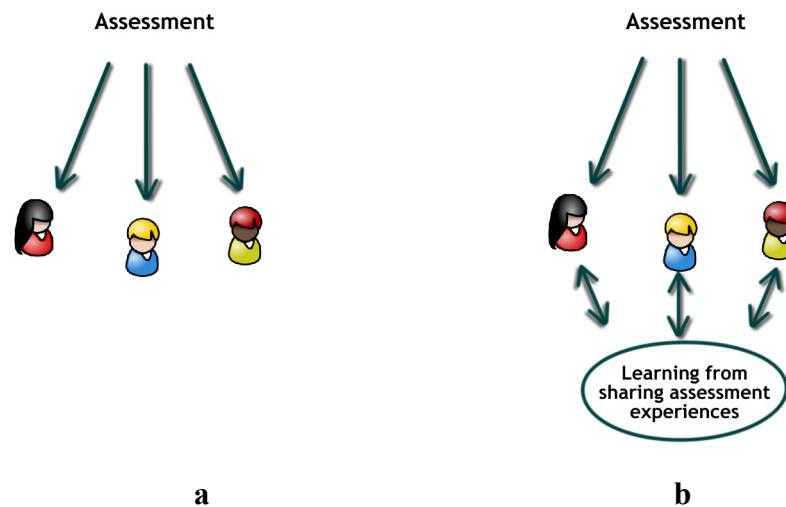
Figure 2.5.
Developing the assessment process

Sharing stories enables students to express themselves and to gain insights from others in a less formal and less challenging situation than orthodox assessment. Whilst aspects of assessment are being discussed, it is how the student feels and experiences the situation that is important. Lessons learnt can then be fed back and used in the formal assessment processes.

2.3 Art and design issues

We have looked at a number of general issues regarding reflection and assessment, so let us now consider some of the specific issues regarding art and design which are relevant to this research.

Teaching, learning and assessment

As well as the more general changes in higher education discussed earlier, there have been changes in the educational processes of art and design. In art and design, the 'Atelier' method of teaching, where a student would learn by emulating their tutor in an attempt to internalise the tutor's tacit and explicit skills and knowledge, has

become much rarer as teaching methods become more enlightened. The new model is moving towards recognising the importance of fostering independent learners taking a deep approach to their learning, transferable skills and the effectiveness of peer assessment and support (Davies, 1997).

Even as far back as the 1950s, these changes were underway in art and design education. This 'revolutionary' change (Thistlewood, 1981) resulted in a move away from students simply acquiring technical skills, imitating and conforming, to the emphasis being placed on the process of learning, learning by doing and experiential and discovery learning – strongly suggesting a shift from Instructivist principles to a Constructivist-led curriculum.

This newer approach to teaching in art and design echoes the wider approaches in higher education that are currently taking place. Consequently, in art and design, there has been an increase in collaborative learning requiring self, peer and group assessment skills to be made more explicit.

In some cases, assessment in art and design has focussed on the quality of the artefact rather than what the student has learnt during the process of producing it, resulting in a surface approach to learning where pleasing the tutor is the motivation (Davies, 1997). There has also been an assumption that only tutors are reliable and experienced enough to make judgements on students' work (Jackson, 1995). However, it is important that students also learn how to judge qualities such as creativity in a domain where work is often highly individual and subjective. In art and design there are particular issues for assessment. Gordon (2004) highlights these as being the 'wow' factors, qualities which are not easily reducible to quantifiable and defined components. Nevertheless, they are important qualities which comprise the creative worth of an artwork or design. We discuss this more in the following section.

A student in art and design invests a great deal of their *self* and personal experience into their work, so it is important to understand how they feel about having their work assessed. Do tensions between objective measurement and the creative, subjective and personal qualities of the work affect their experience? We shall see in

Chapter 7 that this is indeed the case and show how the storytelling method used in this research has identified this.

The 'crit' (critique) is a key process in art and design education. It is during the crit that the student has to present their work to their tutors and fellow students and discuss the nature and context of the artefact they have produced. This is a reflective process whereby the student needs to go beyond the initial understanding of the artefact and explain their decision making process and how the 'user' may interact with, or interpret, the artefact. The crit is essentially about the student telling stories based around the artefact (Oak, 2004). Therefore, the storytelling proposed in this research can be viewed as a natural extension of the narratives that students are already engaging with in their studies.

The concept of the critically reflective practitioner (Schön, 1983) is now paramount in art and design. The experiential learning model (Kolb, 1984) is central to learning in art and design as students' studio-based experiences and process of critical reflection enable them to gain the tacit knowledge they need to be able to become part of the wider community of practice. In order for this learning to be effective, processes for reflection and assessment must be in place. However, this is an area where tacit knowledge abounds and tacit knowledge by its nature is not easy to make explicit and therefore not easy to teach, to reflect on, or necessarily to know how well one is engaging with it or employing it in practice.

Intangible elements of art and design

Aesthetic appreciation and subjectivity

Issues concerning aesthetics and subjectivity can be problematic in art and design due to their personal and individual nature. Our previous experience and knowledge will affect the way we think about, interpret and perceive an art work. We tend to dichotomise our relationship with an artwork: we either like or dislike it. Yet art is fundamentally not about an acceptance of the object, it is about a wider dialogue. Eisner (2002, p3) states that art is:

> "... a way of creating our lives by expanding our consciousness, shaping our dispositions, satisfying our quest for meaning, establishing contact with others, and sharing a culture."

He argues that art is about extending our ways of knowing and enables us to consider different possibilities. It is a cognitive process, not merely an affective one.

Dewey (1934) also puts forward a similar view and stresses the role of experience in interacting with an artwork, effectively that an artwork exists by perceiving it and that the perceiver must put some effort into that process. Of those who are not prepared to engage in the process, Dewey (1934, p54) states:

> "The one who is too lazy, idle, or indurated in convention to perform this work will not see or hear. His "appreciation" will be a mixture of scraps of learning with conformity to norms of conventional admiration and with a confused, even if genuine, emotional excitation."

If this is just a personal and subjective process, then how do we externalise the assessment in an educational setting? Gordon (2004) explores the difficulties of assessing many areas of the creative arts and illustrates this by giving an example from a fictional book where a famous painting has the paint removed and the pigments separated and then analysed in an attempt to discover the artistry involved in the painting. She uses this as a way of illustrating the effect that purely objective measurement can have in assessing creative works.

In assessment in the creative arts, she calls for an approach that allows 'wow' factors to be considered, though it is yet to be demonstrated how effective such an approach will be. The 'wow' factors she lists are qualities such as creativity, originality, inventiveness, inspiration, ingenuity, freshness and vision, which she suggests do not easily lend themselves to objective measurement. She proposes that using multiple examiners and a log or portfolio of the creative processes, in conjunction with assessment criteria, could enable these qualities to be more effectively assessed. She argues that objective criteria may lead students away from creative and innovative approaches, which may have wider consequences beyond the student experience. She states:

"As practitioners of those fields, we should argue that ultimately society will be impoverished as graduates come to feel that basic technique is always valued above a 'wow' factor." (Gordon, 2004, p63)

Figure 2.6 provides a visual representation which sums up the difficulties with aesthetics, subjectivity and objective assessment in art.

Figure 2.6.
Metrics for the arts

Its inclusion has a purpose beyond the current discussion in this section, it also serves to demonstrate how a visual representation can succinctly depict issues which can take a considerable amount of text to sum up. Here, Bennett & Teed (2006) sum up the difficulties of assessment in the arts using a cartoon strip and few words. The official men in suits and looks on the faces of the staff members say it all.

Tacit knowledge

We have already briefly mentioned tacit knowledge and we will now look at it in more depth. Polanyi (1966) has been instrumental in deepening our understanding of the nature of knowledge, of which he has identified an important distinction: the difference between tacit and explicit knowledge. He succinctly sums this up by stating:

"...*we can know more than we can tell*" (Polanyi, 1966, p4)

Explicit knowledge is easy to articulate, to write down and to elicit from another. It is the stuff that text books are made of. Tacit knowledge is a more intangible form of knowledge. We often know we know something, yet we are not able to articulate that knowledge sufficiently for someone else to have our understanding. Tacit knowledge is synonymous with skill learning, for example, we may know how to ride a bike but it is difficult to explain to someone how to do this successfully without either showing them or having them try while you explain. The studio based skills that students acquire rely heavily on them acquiring tacit knowledge through practice.

Tacit knowledge has uniqueness to it, it is arrived at through experiencing and interacting with our world, therefore it is unique to the individual. Rust (2004) states that, as such, it is not generalisable knowledge and criticises the knowledge management field for attempting to extract and impose a canonical structure on it.

Imposing structure on tacit knowledge or breaking it apart by attempting to reduce it to its component parts results in the 'gestalt' of the knowledge being lost and in Polanyi's (1966) view, this can destroy our overall understanding. In fact, Polanyi (1966) turned to Gestalt psychology to help explain how we have knowledge of something without being able to explicitly identify its component parts. As we shall later discuss, storytelling helps keep the 'gist' (Schank, 1998) of a story together and to convey its overall meaning.

Polanyi (1966) also looked at the role of tacit knowledge within scientific enquiry. He claimed that tacit knowledge is part of all knowledge and described this by referring to the initial stages of a scientific problem. Research starts with a problem, but Polanyi (1966) asks – how do we know that there is a problem or whether it is a good problem? Initially this does not seem to be in keeping with the art and design approach here, however, there is a close parallel with the following discussion on creativity. Polanyi (1966, p21) states that:

"For to see a problem is to see something that is hidden."

So, we have a feeling that there is a problem which is hinting at a possible solution – a hunch, but yet we are not fully aware of why we have that feeling or why we must pursue its exploration. This is very similar to the following discussion on the nature of creativity, which is also a difficult process to articulate and would seem to come under the category of 'tacit knowledge'.

Creativity

Creativity is a concept which seems to have a fundamental and symbiotic relationship with art and design. As we have seen, it shares similar properties to that of tacit knowledge and it would therefore not be unreasonable to describe creativity as a tacit process.

Creativity seems an intangible concept to pin down and explain. Boden (1992) discusses how creativity is about bringing into existence something from nothing, whether it is a 'new' concept or thought. She points out that any individual can think things which are new according to their own thoughts, but that doesn't necessarily make each thought creative. It is the extent of that novelty that makes it creative and also how surprising it is. She states that:

> "Where creativity is concerned, we have to do with expectations not about probabilities, but about possibilities. Our surprise at a creative idea recognizes that the world has turned out differently not just from the way we thought it *would*, but even from the way we thought it *could*." (Boden, 1992, p30-31)

But what of the creative process itself? Boden (1992) shows how many key historical moments of creativity arose when a person was thinking about, or doing, something else, such as Archimedes in his bath, or Kekulé who came up with the idea of the Benzene ring after dozing off in front of the fire and imagining a snake curled in a circle holding its tail. Creativity often seemingly comes out of nowhere, with the solution suddenly appearing. Although the example of the Benzene ring is highly visual, creativity does not depend on the visual medium. These examples demonstrate how difficult it is to define and understand when much of this process is hidden from us, and may in fact depend on aspects of it being hidden in the unconscious.

Boden (1992) discusses how the unconscious is set in motion by a thought or problem which is being considered. Ideas combine and some enter conscious understanding. However, whilst the unconscious mind may gain the credit for the combining of ideas, the conscious mind takes the credit for deciding the appropriateness and effectiveness of that idea, and for setting those ideas in motion in the first place. Ultimately consciousness makes the judgment. The concept of reflection is critical here in its conscious, evaluative act of judging whether to accept or reject the idea.

The ideas discussed by Boden (1992) reflect the stages in one of the first models of creativity. Wallas (1926) proposed four stages in his model of the creative process: preparation – where initial work on the problem focuses the mind; incubation – where the subconscious mind works on the problem; illumination – a flash of insight into a new idea; verification – ensuring the validity of the solution.

But could we just follow a set of rules to help us consciously combine ideas and bypass this whole elusive process? Here we can turn to Boden (1992) to offer us some insight by taking an unusual and creative approach. She appeals to the nature of Artificial Intelligence in helping us understand creativity. In attempting to make computers do things which in humans would be termed creative, we open up possibilities for discussing the process of creativity and also what creativity may or may not be. Computer programs (such as AARON) have been 'successful' at producing art works, at improvising jazz and creative writing such as haiku and stories (Boden, 1992). Some people would judge their works as creative, though how many would accept that the processes were creative if the computer had no understanding of the process and was simply following rules, even if those rules had an adaptive nature? Perhaps looking at creativity in this way can give us a more objective insight into its elusive properties and help us to look at wider issues such as the assessment of the creative properties of an artefact and the creative processes that the student has used.

However, Schank and Cleary (1995b) argue that creativity is based on complex knowledge structures which are essential for everyday cognitive processing. They

view creativity as essential in all cognitive processing and not just in forms of processing which are considered as having special status by society. They propose that creativity should be encouraged in education and that the educational environment should support the exploration of skills needed for creativity and that dialogue should be encouraged. Thus, developing creativity assists in developing higher cognitive skills, not just specialised ones.

The above topics highlight possible difficulties when asking people to reflect on assessment experiences which cover the processes in art and design. The nature of the context of this research, art and design, has many areas which are not easy to quantify, such as those described. We can see from the above discussion that they have similar intangible properties. We have demonstrated that there is a lot more than mere subject knowledge when it comes to art and design education. We will see later in Chapter 7 how the storytelling model used in this thesis has uncovered the difficulties facing students as they tackle the more intangible elements of the creative process.

2.4 Storytelling

The importance of storytelling

In Chapter 1, we introduced the concept that storytelling is of fundamental value to us as social beings. We use storytelling to understand the world we live in and to make sense of our interactions with others.

Bruner (2002) demonstrates how the neurological disorder dysnarrativia – the inability to tell or understand stories – results in losing our theory of mind ability. Without this ability, we are unable to work out what others might be thinking or feeling, thus our lives as social beings are empty. However, it is possible that in attempting to get the balance between being an autonomous person and one whose roots are in the wider social world where one's self can relate to others, that this balance between autonomy and commitment to others can go awry. Bruner (2002) explains this by telling the story of Christopher McCandless, a young man who

sought a totally autonomous existence, alone in the Alaskan wilderness. McCandless eventually died of starvation, having been successful as an autonomous being. However, in the end, he still felt some commitment to others by scratching out a message on plywood to those who eventually found him, to try and explain that he had felt free. Bruner (2002) asks the poignant question, was McCandless the victim or victor in his own story?

The stories we tell are about how we experience things and not necessarily about how things actually are. In stories we are less inclined to be seeking universal truths, and more inclined to be considering intentions or possibilities. This opens up the possibilities for discussion on the interpretation of meaning and how to relate this new understanding to our models of the world. Stories enable our messages, our points of view, to be conveyed to the listener or reader, though sometimes these messages are not initially obvious and may not even be clear to the storyteller (Bruner, 2002). They can help us deal with unexpected situations and consider the 'what could happen' as well as the 'what did happen' (Bruner, 1990). They are a Constructivist tool, enabling us to explore the many representations of our worlds.

We often find that we can remember stories, or at least their gist, with ease, but we struggle to make sense of abstractly presented facts and figures. Schank (1998) proposes that we have cognitive structures to enable the indexing of a story to enable its retrieval and linkage to other stories. The more a story, or aspects of a story, are indexed in memory, the more knowledge it is linked to and therefore the more useful that story and its knowledge will be. However, the listener or reader cannot simply be a passive recipient of that knowledge, the more connections they actively make with previously stored knowledge then the more they will gain from the story. We actually tell stories to help us remember them and can also choose not to tell stories in order to try and forget something (Schank, 1998).

Schank & Abelson (1995) take a bold step in asserting that nearly all knowledge is story-based. Their assertion is based on three key propositions, that:

- Nearly all knowledge is based on stories centred around prior experience.

- New experiences depend on old stories to aid their interpretation.
- The remembered story depends on whether, and how, it is told to others and that these reconstructed memories are key to a person's concept of self.

We can then apply knowledge from old stories to new situations to help us make sense of them. However, anomalies may occur where the knowledge from one story does not help you understand the current situation. In this case, Schank & Abelson (1995) propose that when we fail to understand we re-evaluate the situation and ask questions. Understanding that there is an anomaly, that there is something we do not know and need to know, is an important aspect of learning. It is the spark which can set off the reflective process.

One of the reasons why storytelling is so prevalent could be what Schank & Abelson (1995) describe as the 'functional' component to knowledge. That is, that its structure enables us to use that knowledge in our everyday lives. Indeed, Graesser & Ottati (1995) discuss the psychological validity of such a claim and find some evidence to support Schank & Abelson's (1995) assertion. However, others (Brewer, 1995) question Schank & Abelson's (1995) broad assertion and query their definitions of the terms 'story', 'knowledge', and 'narrative' which can be used interchangeably but have different intentions.

Brewer (1995) is concerned with whether the types of stories that Schank & Abelson (1995) are describing are actually a subclass of narrative, therefore they are only dealing with a subclass of knowledge, for example, information about shapes is factual, not story-based. That may be true, but when we think of shapes and the knowledge we have about them, we can think of stories to explain and describe this, so perhaps our initial information regarding shapes came to us in story form. Brewer (1995) also uses the example of the 'method of loci' memory tool where objects are sequentially placed. He states that this method for remembering knowledge is not story-based, but a spatial and event sequence. However, the manner in which this event sequence is remembered is like a short story and I would suggest that if a story can be constructed around this spatial event sequence it must surely be able to be remembered better.

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This research takes the more middle line position and asserts that a significant part of knowledge can be arrived at through stories. Moreover, we are capable of using that knowledge and translating it into stories which we can share with others. These stories can be reciprocated, thus enhancing our original understanding.

In these discussions we have emphasised the importance of the social nature of learning and reflection and it is no surprise that the social context of storytelling is also emphasised. We are influenced by who the listener is and the cues they give out when listening influences the direction or emphasis that the story takes (Schank & Abelson, 1995). But before we get to that stage, we must decide what story to tell and the factors determining this are complex and usually social.

Storytelling is a word that conjures up images of children sitting cross-legged on the floor being read a story by their teacher. However, this 'traditional' view of storytelling is simply one aspect and storytelling is an influential presence in many surprising areas. We will now look at some of those areas to understand how storytelling is being applied and to gain greater insight into why it is being used. The areas we will consider are organisational storytelling, narrative medicine and the rise of digital storytelling. The subsequent section will then focus on the area covered by this research: storytelling and learning.

Organisational storytelling

The use of storytelling in organisations seems, at first glance, an unlikely place to turn to when looking at the subject of reflection in art and design. However, this is an important area due to the value organisations place on tacit knowledge, and the experiential nature of art and design results in tacit knowledge being an important tool for learning and practice in this discipline.

Organisations are increasingly seeing the value of storytelling as a knowledge management tool which can increase their leverage as a learning organisation (Gabriel, 2000), and storytelling has been recognised as a way of capturing the organisation's valuable tacit knowledge. Sole & Wilson (2003) have looked at the role of storytelling in organisations and found that storytelling was being used to

transfer tacit knowledge, share norms, develop trust and commitment, evoke an emotional connection, and ensure that unlearning takes place if necessary. They propose that the essence of a good knowledge sharing story is twofold. First, it offers a 'streamlined experience' in that it makes a specific point without going into too much extraneous detail. Second, it provides a 'surrogate experience' where the reader or listener feels that they are vicariously experiencing the tellers' situation. However, they also point out that stories can be so compelling that readers or listeners can fall into a number of 'story traps': stories are easy to accept as true and can be difficult to critically evaluate. Stories can be limiting if told only from one point of view, and stories can suffer from having to be 'captured' at a particular moment in time for a particular audience and this can lead them to being distanced and static and needing to be updated over time.

Gabriel (2000) also proposes the value of storytelling in organisations and views stories and experience as being intrinsically linked, like Siamese twins. He states that the value for organisations is in the fact that:

> "...not only do stories transform into experience, but experience turns into stories."
> (Gabriel, 2000, p18)

These stories appear in many forms, from narratives that are simply opinions or reports of a situation to proto-stories, narratives which contain many elements of stories. Gabriel (2000) grouped these types of stories in their thematic content and identified the following type of stories: comic, epic, tragic romantic, gripes, traumas, practical jokes. He sees these stories as constantly evolving within an organisation, competing against differing versions, merging, or disappearing then reappearing. Some stories may even become part of company folklore – reduced to a mere sentence which sparks the story, "remember the time when Mr A did X, Y, Z".

Boje (1991) also views stories within organisations as constantly changing and being presented from different points of view to different audiences. He proposes that storytelling is a 'sense-making currency' in organisations in which internal and external stakeholders engage in this dynamic process of storytelling. He stresses the importance of storytelling as a joint performance with turn taking, responding to

paralinguistic or gestural cues such as nodding and directing the story through questioning, as playing an important role in the story's co-production and shared negotiation of meaning.

Lawrence & Thomas (1999) looked at using technology to increase the sharing of knowledge in organisations through the use of storytelling. For them, storytelling is a fundamentally social process and they are interested in the implications this has for designing electronic story-bases. They have found that there is a natural reluctance to tell stories, and that people need reasons to tell stories and may be reluctant to tell their stories for fear of losing face. Consequently, the seed stories in a story-base need to ensure that people feel comfortable and empowered enough to tell their own stories, for example, using a range of stories including those where the teller has made a mistake. Though once a story is being told, the storyteller commands considerable power as they choose the story, what to include and what to exclude, resulting in them being able to put across events from their point of view.

Narrative medicine

The stories we tell and the knowledge that they contain may be so important, though we may not be aware of their importance, and ultimately that they could save our lives. Bruner (2002) introduces the concept of 'narrative medicine' which seeks to move away from the traditional view that doctors often take: that of sticking to the facts, only looking at the factual information on a patient's chart. Narrative medicine goes beyond this, and encourages doctors to actually listen to the stories that the patient is telling them as they often reveal a lot about what is wrong with them and how well the treatment is working. The patient's narrative can often gives clues as to the way their physical illness is affecting their mental state which in turn affects their prognosis. By implementing these changes and listening to patient's stories, death rates are being reduced. The moral of this story is the importance of stories.

Empowering communities

Storytelling has long been used to give a voice to groups who have traditionally found themselves powerless and to help build a sense of community within these groups, thus empowering them. Digital storytelling is a new medium for the collective voice of these communities and the globalisation of the Internet has led to

its widespread use (Freidus & Hlubinka, 2002). There are now large numbers of sites, groups and resources on the Internet dedicated to the growing use of digital storytelling, whether for the individual, local groups or disparate communities[2]. Freidus & Hlubinka (2002) have investigated the use of digital storytelling as a form of reflective practice in communities of learners. They found that the use of digital storytelling enabled individuals to become more effective communicators and enabled them to look at their work from a different perspective. Through the stories, tacit knowledge was shared amongst the community which resulted in a more knowledgeable and more empowered community. Students can also be viewed as a group who often feel they do not have a voice and have little power within an institutional system. Storytelling can give them the opportunity for an individual and collective voice.

This section has shown us how important, diverse and valuable stories and storytelling can be. We have seen how storytelling is central to our concept of self and our ability to relate to others. We can use storytelling to share and discuss our multiple world views, making new connections and meaning from that knowledge. Stories can capture tacit knowledge and enable its transmission to others. We can vicariously share in another's experience through the stories they tell. We can begin to see how storytelling can be a collaborative activity which can help to facilitate the reflective process. Ultimately our stories help us make sense of our past, our present, and help us understand our possible futures (Sole & Wilson, 2003).

Storytelling and learning

Since the remit of this research is learning, we will now focus on the role of storytelling in learning, specifically higher education.

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[2] http://www.creativenarrations.net/site/staff.html
http://www.storycenter.org/
http://crcp.mit.edu/
http://www.storylink.org/storiesoverview.html
http://www.callofstory.org/en/archive/resources.asp

In McDonnell, Lloyd, & Valkenburg's (2002) view, the construction and telling of a story requires the teller to do more than simply passively retelling the experience, they have to construct the story with the audience in mind. In supporting the story construction process, they propose that video can be a valuable tool. Industrial design students coming towards the end of their undergraduate studies were asked to video workshops they were involved in and to produce a video story of the workshops. Although the video in itself is simply a passive recording device, it can be used to deepen reflective thinking when constructing stories. Lloyd (2000) has proposed that even though the engineering design seems a largely technical process, the social aspects are equally as important and it is storytelling which brings this together.

McDonnell, Lloyd, & Valkenburg (2004) considered the depth of reflection required for the designer to progress from novice to expert. They propose this is characterised by three levels of reflection:-

- Level 1 – is equivalent to Schön's (1983) 'reflection-in-action' and is focussed on thinking about the task and responding to a particular task during that task
- Level 2 – is equivalent to Schön's (1983) 'reflection-on-action' and is focussed on critically reviewing the task
- Level 3 – focuses on making interpretations on the task and considering multiple perspectives

Using video alone is not sufficient to support level 3 reflection; an additional device needs to be used to guide a more active process. They are using storytelling to facilitate the move from level 2 to level 3 reflection, as the construction of narrative, in the form of a story to be told, requires the construction of knowledge and consideration of possibilities. As McDonnell et al. (2004, p514) explain:

> "To arrive at the point of being able to tell a coherent story demands that construction has taken place, that events can be explained. Stories convey a rich and complex understanding of an event or situation. They are both a powerful and

an accessible means of sharing knowledge and their value and pervasiveness in conveying knowledge is well-recognised."

The workshops were intended to provide multimedia skills and the opportunity to challenge their practical and theoretical design education through making the videos. Opportunities for reflection were provided in which specific tasks were suggested which encouraged individuals to share their reflection with the others, as Moon (2002) suggests that reflection is enhanced when it can be shared with others.

Students were asked to work together to produce a ten minute video to show how they designed the packaging of a beer bottle and a glass for a drinks promotion. The video was intended to provide an explanation of the decisions made during the design process. Evidence that the process had supported level 3 reflection was taken from the final video and workshop discussions. McDonnell et al. (2004) found that students were aware of the value of the story making process and that the discussions moved from talking about the design task to talking more abstractly about the design process. In moving to the deeper reflection needed for level 3, the ability to look at the task from multiple perspectives is important. This level of reflection was demonstrated in the videos where one group told the story of the design process from a negative and positive perspective using the same footage to illustrate how differently it could be perceived. Another group highlighted the design perspective and the way the process was experienced by the individual.

McDonnell et al. (2004) state that the value of such a task lies in giving the students the freedom to set their own goals, thus supporting self-organised learning and giving the opportunity to develop the skills needed for this. They also emphasise the importance of being aware of multiple ways of viewing events and the importance of this for learning, by stating:

"Making a case and seeing the ways others do this are both important mechanisms for deeper learning." (McDonnell et al., 2004, p525)

The value of stories in the learning process continues to be recognised with Barrett's concept of the ePortfolio as digital stories of deep learning (Barrett, 2004). She proposes that an ePortfolio can be seen as telling a story, the story of the student's

learning, in their own voice from their particular perspective. Therefore, viewing ePortfolios as storytelling enables a Constructivist view to be taken where the purpose of the ePortfolio is concerned with 'assessment *for* learning' which puts the learner in control of their learning, rather than 'assessment *of* learning' which takes the control away from the learner. The student, through telling their story in an ePortfolio, is encouraged to reflect on their learning and construct meaning from their experience.

A model of storytelling for higher education

McDrury & Alterio (2003) not only value the role that storytelling can play in the higher education learning process, they have developed a model of storytelling which emphasises reflection and experience. This model is based on face-to-face storytelling, though we will explain later how we have adapted the model for an on-line context. They have based their model on Moon's (2002) five stages of learning onto which they map their five stages of storytelling (see Table 2.2).

Table 2.2.

Mapping of stages to Moon

Moon	McDrury & Alterio
Noticing	Story finding
Making sense	Story telling
Making meaning	Story expanding
Working with meaning	Story processing
Transformative learning	Story reconstructing

The first stage in the storytelling process is not the telling of the story, but in finding the actual story to tell. The reason for telling a story can be just as important as the actual story itself, though people may not even be aware of why they have a need to tell a particular story: sometimes there is simply an emotional need to share an experience. However, in asking people to tell stories about their experiences, we must remember the previously mentioned natural reluctance that people have when asked to tell stories. To alleviate this, McDrury & Alterio (2003) provide a number of activities to help spark off stories in peoples minds, such as providing the

beginning sentence to a story or looking at stories of professional practice in newspapers.

Telling stories requires the individual to make some sense out of an event or experience and to organise and order the content so that the listener can understand and relate to that experience. The emphasis here is on making sense of the story, but in telling the story a social link between teller and listener is also being established. At this stage the listener can pick up on the values, beliefs and attitudes of the storyteller and be able to relate these to their own. They can also become enculturated into a particular group by understanding the group norms and values and pick up vital information about the language genre that the group uses, thus enabling them to more easily become a valued member of that group and also to feel a sense of belonging to that group. In a situation where the listener is less experienced or knowledgeable than the storyteller, they can gain new knowledge which is grounded in the context of the story.

Expanding the story requires the teller and listener to concentrate on the making of meaning from the experience. Their model emphasises the interaction between the teller and listener with questions being asked of the storyteller. This active process enables meaning to be made and for the knowledge to be assimilated with pre-existing knowledge and experiences. This stage is important for deep learning to take place, as explained by (McDrury & Alterio, 2003, p48):

> "When meaningful and reasoned connections are made and there is evidence of an holistic approach to shared events, a shift from surface to deep learning takes place."

It is also worth noting that this interaction starts to consolidate the social nature of the exchange between teller and listener.

The story processing stage is associated with deep learning and reflection and can be viewed as a review process where aspects of the story are critically explored, multiple perspectives considered, new relationships made, and a stage where other stories may arise. During the story reconstruction stage both teller and listener are

engaged in critically evaluating possible resolutions to the story and the impact these may have on the individual. Ultimately, this stage enables changes in practice to happen.

In devising this model of storytelling, McDrury & Alterio (2003) have looked at the nature of knowledge, the importance of reflection in learning, especially its social role, and the nature of storytelling itself. For them, storytelling is important because it is a multi-faceted tool which is capable of supporting and enhancing many aspects of the learning process. They discuss how education has often separated the 'knowing what' from the 'knowing how' and disregarded the context bound nature of them both. However, there are many aspects of a practice that cannot easily be represented or explained, especially the tacit knowledge gained through experience. As we have already discussed, stories are a valuable tool in capturing and presenting tacit knowledge.

McDrury & Alterio (2003) have investigated their use of storytelling largely in the health care practitioner setting. This is one in which the concept of the critically reflective practitioner is also highly valued and where experience and tacit knowledge is vital to the learning process. This leads to close parallels with the concept of the critically reflective practitioner in art and design and suggests that their model may be successfully employed in this area.

The nature of storytelling has a long association with the development of humankind which can be traced back to its evolutionary roots. We are social beings who have a need to understand each other and our world around us. We frequently do this using storytelling and losing our ability to tell and understand stories can lead to a loss of self. Storytelling can be used as a reflective tool in education to enable students to reflect on their learning experiences in order to make sense out of that experience.

2.5 Using visual representations to understand experience

One other aspect of this research is to investigate whether students' visual representations can help us understand their experiences of the assessment process in art and design. In Chapter 3 we will outline the method used in more detail, but here we will explore the background as to why visual representations could provide a novel method for understanding students' experiences. There are high levels of visual literacy in this discipline so it is worth investigating what aspects of students' experience of the assessment process can be revealed through their drawings and to contrast this with the text-based storytelling method.

Using visual representations is more commonly used to understand children's cognitive development (Karmiloff-Smith, 1990) or for therapeutic reasons (Malchiodi, 2002). The method has also been used in the educational setting, largely looking at children's perceptions of educational processes (see, for example, Evans & Reilly (1996); Wheelock et al. (2000); Haney et al. (1998)).

One of the difficulties of this approach is in the potentially subjective element in the interpretation and validity of the images. Wheelock et al. (2000) used drawings to explore students' perception of MCAS (Massachusetts Comprehensive Assessment System) and acknowledged the difficulties with their form of inquiry as students tend to use stereotypical images or use highly memorable experiences. In interpreting the images, they developed a coding scheme (see Appendix 2.1) which focused on areas of the testing that students chose to represent and included recognisable features such as posture, testing materials and other students. Clearly observable affective components were also included in the coding scheme. Inter-rater reliability testing was used to check the coding.

Using visual representations in the higher education setting is less common. However, researchers are beginning to see the value of using similar approaches to understand the student learning experience in higher education. We will now look at a number of approaches that have been taken in the area.

Bracher (2003) asked first year students, from a variety of subject areas, to construct group posters of their experiences of university. She found that social experiences preoccupied the first year of university life and categorised a number of areas according to their images: for example, time management was illustrated by a clock with wings or without hands; relationships with smiling stick figures and hearts; study issues with open books, equations, or money signs.

Ludlow (1999) explored the use of drawings after concluding that the standard end of course evaluation surveys offered little insight into the student experience in his statistics classes. He found that drawings provided a richness of information that could not be conveyed using standard course evaluation techniques. The way in which students conveyed negative experiences and moments of learning (often difficult to communicate in a survey) enabled him to think more about what he did in the classroom and the impact this had on his students. Many of these drawings represented the classroom with rows of desks and the teacher as an authority figure at the front. They often reflected the 'aha' moments of learning which Figure 2.7 illustrates. This drawing also gives insight into how the student perceived the role of the tutor and student, as demonstrated by the tutor being labelled 'Yoda' and the student 'Luke', in reference to the Star Wars films.
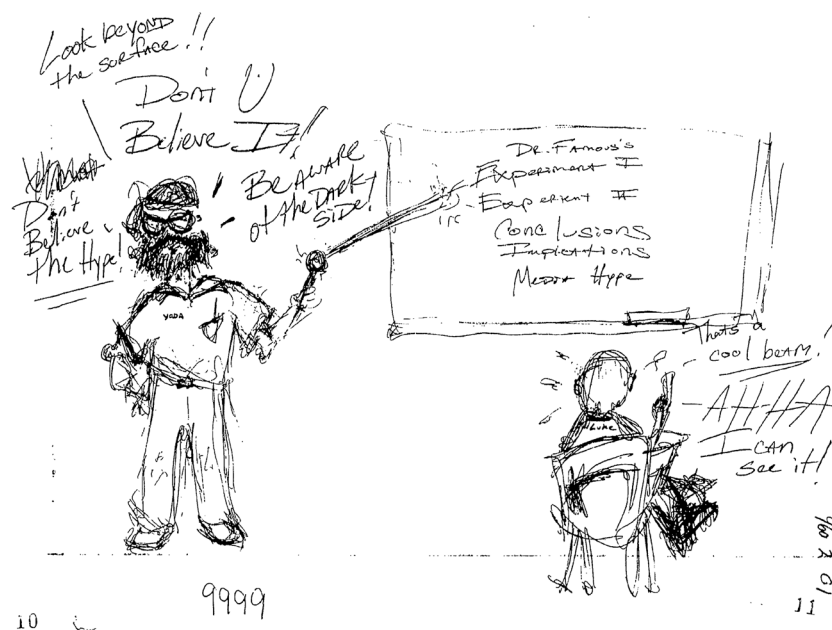
Figure 2.7.
Yoda and Luke learning representation

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The drawings also represented how students interacted with their peers and how they perceived each other in the classroom, for example, students who were baffled by the lesson being shown with '!!!!???' above their heads, and lines of arrows representing communication amongst students.

Drawing as a course evaluation technique was also investigated by McKenzie et al. (1998) using architecture students. They were asked to summarise their preceding year by drawing on the back of an evaluation form. McKenzie et al. (1998) found the students' drawings focussed on feelings and added an extra dimension to the information that was gathered from the text-based comments. For example, the drawing in Figure 2.8 depicts a number of aspects of the learning experience which would be hard to express in a few short sentences.

Figure 2.8.
Aspects of the learning experience

This type of information, they suggest, is rarely gathered in course evaluation forms. It is this more affective component that we are proposing will be more likely to be elicited through the drawings.

Drawings have also been used to explore medical students' perceptions of themselves when they started medical school and as they saw themselves currently,

ten months later. McLean et al. (2003) found that the student drawings could be classified as disparaging, ambivalent or affirming, and demonstrated whether the student had progressed successfully through the course. They concluded that drawings:

> "... can give us valuable insight into the world of the learner, providing us with information that cannot be gleaned from any other evaluation." (McLean et al., 2003, p 895)

Figure 2.9 depicts one of the student drawings which they gathered. As we will see in Chapter 8, there are many commonalities in the way students from disparate disciplines represent their experiences.

Figure 2.9.
On top of the world

One aspect is common in all these studies: that using drawings provides a rich data source that provides information beyond more common methods of understanding the student learning experience.

Using drawings to elicit the student experience has been successful in a range of disciplines, therefore, it was explored as a method as part of this research in the art and design context. While this method is already being used by some tutors in art

and design and there is anecdotal evidence for this, the research attempts to take a more analytical approach to the use of drawings in art and design higher education.

2.6 On-line learning environments for collaborative learning and reflection

We will conclude our review of the background literature by reviewing a number of on-line learning environments that have been designed to enable collaborative learning or reflection to take place. Many of these environments have been designed to support collaborative group work, with collaborative reflection being one component of it, however, the focus of this research is reflection, so this section largely concentrates on that aspect. The environments discussed have been selected as they offer some insight into how to support the reflective process in an on-line setting. The review will not limit itself to environments designed specifically for art and design, nor that of higher education. Taking this broad approach will facilitate an understanding of how an on-line environment could support the reflective processes discussed in this research and also where the pitfalls may lie, based on prior research. It is how they support reflection that is of concern here, not the actual implementation and technologies they employ. We will then look more specifically at the role of on-line learning in art and design. First, the concept of viewing computers as cognitive tools will be discussed.

Computers as cognitive tools

Computers are often used as tools to deliver the instruction and convey the information to the students, thus mimicking the teaching process. This can be done using a Virtual Learning Environment (VLE) or a form of Intelligent Tutoring System (ITS). In some forms of ITSs the information is stored in the computer and students' interaction in the teaching and learning process is in response to a query from the tool which judges the correctness of the answer and gives feedback according to particular models (Self, 1999). However, Jonassen et al. (1998) argue that this form of interaction takes away any meaningful control of the learning process from the student. They suggest that students should view themselves as

designers and that computer tools should enable the organisation and interpretation of knowledge. Jonassen et al. (1998, p24) sum this up by stating:

> "...we argue that technologies should not support learning by attempting to instruct the learners, but rather should be used as knowledge construction tools that students learn *with*, not *from*."

Jonassen et al. (1998) give examples of how even the most basic of software tools can be used to engage students in critical thinking. For example, the construction of a database involves the student in the active construction and representation of knowledge which can subsequently be used to search and analyse data. More complex tools, such as microworlds, simulate a real world situation enabling the student to have control over the environment and thus explore complex relationships and test out hypotheses. The emphasis is on students applying their cognitive skills and using the tools to support the learning process. Jonassen & Reeves (1996) emphasise the unintelligence of such tools, unlike ITSs, as it is the student who is responsible for the planning and decision making in their learning process. In the same way that an electronics expert uses a tool to enable them to solve a problem and the tool does not control what the expert does, a computer should not control learning, it should simply facilitate the learning (Jonassen et al., 1998).

Herrington & Standen (2000) demonstrate how they moved from an Instructivist to a Constructivist model within a learning environment to teach research skills to business students and they have highlighted nine key criteria enabling this transition: an authentic context, authentic activities, access to expert thinking, multiples roles and perspectives, reflection, collaborative construction of knowledge, articulation (discussion of task), coaching and scaffolding, and authentic assessment. The environment that we are proposing does not seek to be an all encompassing subject teaching and learning environment, therefore, of the nine criteria, only four are crucial to this research: multiples roles and perspective, reflection, collaborative construction of knowledge, and articulation.

In considering an on-line environment to support reflection we are taking the perspective that viewing computers as cognitive tools (Jonassen & Reeves, 1996) can

bring many advantages. That is, they can support and enhance the cognitive processes required during thinking, learning and problem solving. Jonassen & Reeves (1996) propose that cognitive tools can promote the reflective thinking required for meaningful learning to take place. Additionally, they propose that this can be most effectively implemented within a Constructivist-centric environment where learning is viewed as a process that students are actively engaged in by constructing their own ideas and meaning based on current and prior knowledge and experience. This enables the learner to go beyond simply passively storing received information (Bruner, 1990). It is knowledge construction that is important, not knowledge reproduction (Jonassen & Reeves, 1996).

Interaction with computers is often viewed as a process between person and computer, an individually mediated process (see Figure 2.10a), very similar to our previous discussion on the reflective process. However, just like that process, the interaction can go beyond the individual and can become a socially mediated process (see Figure 2.10b)

a   b
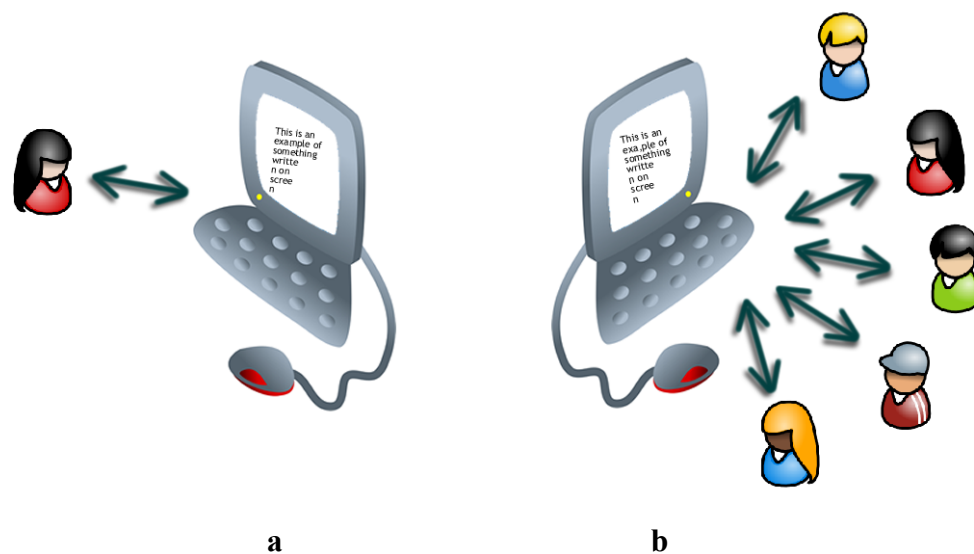
Figure 2.10.

Individual and socially mediated on-line reflection

This enables the student to have access to multiple perspectives and for them to discuss their interpretations of these perspectives with others, thus providing a richer representation of reality for them to compare to their own experience and construct their own meaning. Doolittle (1999) suggests that the on-line setting can support the

socially mediated process through asynchronous and synchronous forms of communications. As previously discussed, Herrington & Oliver (2002) stress the importance of both individually and socially mediated reflection and they suggest that socially mediated reflection is enhanced through collaborative work which can be supported by using appropriate communication technologies. Their efforts to incorporate reflection into an on-line course are described in the next section.

Jonassen et al. (1998) also agree that the social nature of learning is important and point out that a great deal of learning is conducted through a socially negotiated learning process, not just through being taught. However, they also assert that many students are not fully able to participate in cogent discussion because they are so used to simply memorising what they are being told that they are not used to offering their opinions and points of view. Therefore, appropriate support and guidance within any on-line environment *must* be provided.

Review of on-line learning environments

The **Progress Portfolio** (Loh et al., 1998) designed to develop the skills necessary for 'reflective inquiry' in the science classroom at K12 level in the USA. It aims not just to document the work carried out by the students, but to highlight the progress they make during the process, in particular, the reasoning behind their decision making.
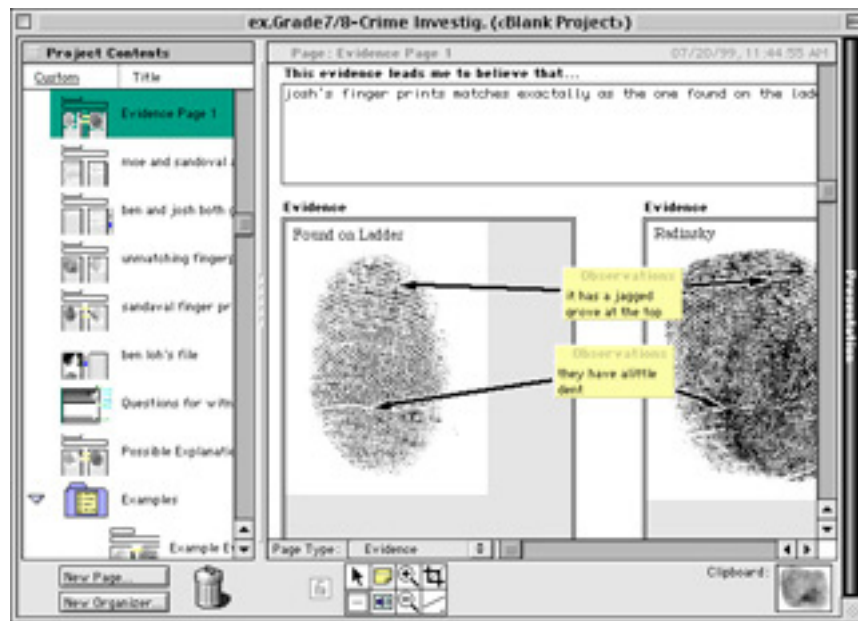
Figure 2.11.

Progress Portfolio screen shot

Tools are available to enable students to capture screen images, draw on, or annotate next to the images (see Figure 2.11) and to help organise the work through categorisation. Teachers can use templates to structure the activities by offering prompts or areas for the students to think about. Students are encouraged to view reflection not just as an individual process, but as a collaborative process. Using the environment can serve as the focus for collaborative discussion in the classroom on the processes they went through. Ultimately, the aim is for students to become effective storytellers of their own work.

A structured environment such as this demonstrates how you can support the development of the cognitive processes needed to establish a reflective approach to enquiry. Loh et al. (1998) state that this is not just a skill needed for school based enquiry but one which will foster a wider approach to reflective practice in the workplace. As mentioned earlier, the concept of the critically reflective practitioner (Schön, 1983) is important not just in many educational settings, but also in the workplace, and is paramount in the area of art and design.

Conanan & Pinkard (2001) designed **Studio Zone**, a web-based environment constructed to support design critiques. Images of creative works currently under progress can be posted and feedback given asynchronously. Prompts to the critiquing process in the form of guiding questions are given to support the dialogues and aid reflection. Although originally intended for design education critiques, it has now been adapted for use in other areas (see Figure 2.12).
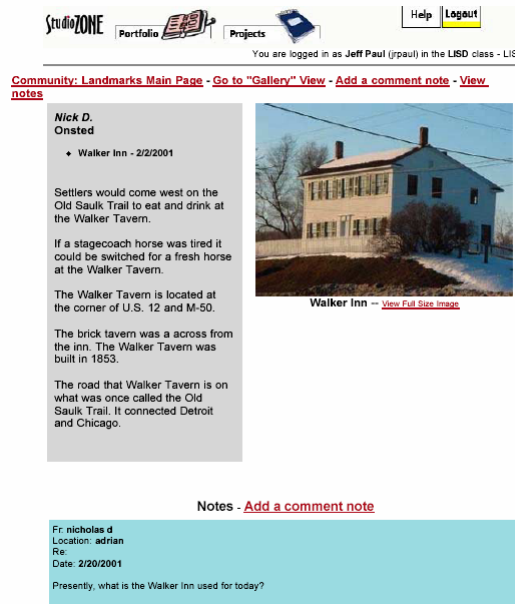
Figure 2.12.
Studio Zone screen shot

Studio Zone was designed to support a Constructivist pedagogy where reflection and the social context of learning were key. Receiving critiques can be difficult so the aim was to provide an environment where students could supportively critique each other's work. However, Conanan & Pinkard (2001) found that many students had difficulties in critiquing as they didn't know how to or felt they did not have enough expertise to do so. Some were worried about other people's reactions to their comments. There were no agreed shared norms for how to best offer a critique and students lacked an understanding of their own critiquing style. Although the environment made it easier for the students to engage in the critiquing process, the resulting critiques were not critical enough and were considered too 'nice'.

The design of Studio Zone had the intention of students learning from each other using Vygotsky's (1978, p86) concept of the Zone of Proximal Development (ZPD), defined as:

"... the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers."

In this case, the students with greater knowledge would be able to support and encourage the learning of those with less knowledge. However, students felt more comfortable receiving critiques than giving them, showing a reluctance to be that 'more capable peer'.

Lecturespace (Malins, 2001) was designed as an on-line lecture environment for art and design which enabled the student to view the lecture at any time or place (see Figure 2.13). A visual overview of the content enabled students to navigate through the material according to their differing learning styles. Visual and audio representations are available and the content is divided into sections enabling the student to make use of the question or reflection points and to use a note pad tool to take notes and post these to a shared area, thus encouraging collaborative reflection. Templates are provided in order for lecturers who are non-programmers to easily design their lecture.

Figure 2.13.

Screen shot of Lecturespace

Swann et al (1997) discuss the introduction of web site and computer mediated communication (CMC) into a **Master of Design** course. The asynchronous interaction was intended to enable discussion between students and staff, students and students, peer review and assessment. As with the previously discussed project, the students' use of CMC was also intended to give them some experience of how professional designers use this technology in the design process. A Constructivist approach was taken and group work provided opportunities for students to actively engage in knowledge construction. Students were also encouraged to take responsibility for their own learning through self and peer assessment. The importance of the social aspect of collaborative learning was emphasised through the 'critical friendship' concept where students submit an essay for other students to review and contribute comments on-line. This concept is based on Vygotsky's (1978) belief that learning is best conducted in a social setting. The student and a fellow student assess the essay in a process moderated by the tutor.

Herrington & Oliver (2002) discuss an on-line unit of a **Graduate Certificate of On-line Learning** which was designed to support students reflecting on their learning by fully integrating reflection into the course. Students chose a task, such as

evaluating or designing a unit, requiring them to keep an on-line reflective journal which would form the basis for an article of publishable quality. The on-line reflective journal is considered to be central to the task which would be difficult to complete without the journal entries. On-line support for this unit is provided through on-line links to journal articles and web sites, including those on reflection. A discussion board enables students to discuss, and reflect on, issues with students and staff. The writing of an article of publishable quality requires the student to consolidate the experiences they have written in their reflective journal.

Kim & Lee (2002) reviewed a number of environments designed to support collaborative reflection in **e-Project-Based Learning** (PBL). They propose that reflection is key in such environments and should be continuously supported, unlike some environments which they criticise for only supporting learning at particular points in the process, or even only at the end of the learning activity as an evaluation process. They emphasise the social aspect of reflection is every bit as important as individual reflection. Peer learners can provide a wider context to help support the development of higher level cognition through the multiple perspectives and range of experiences on offer. In order to achieve successful collaborative reflection, Kim & Lee (2002) offer 3 guidelines:

- students should be offered opportunities to externalise their thoughts
- students should be able to practice taking different perspectives during groupwork
- collaborative reflection should enable divergent thinking through different ideas and perspectives

The **Virtual Participant** (VP) was designed to support teaching in asynchronous computer conferencing for distance education students (Masterton, 1997). The VP took a case-based approach by contextualising cases from previous years' conferences and presented them to current discussions covering similar areas (see Figure 2.14). This enabled students to be immediately, and automatically, presented with relevant stories from previous years' conferences without having to search for the information.
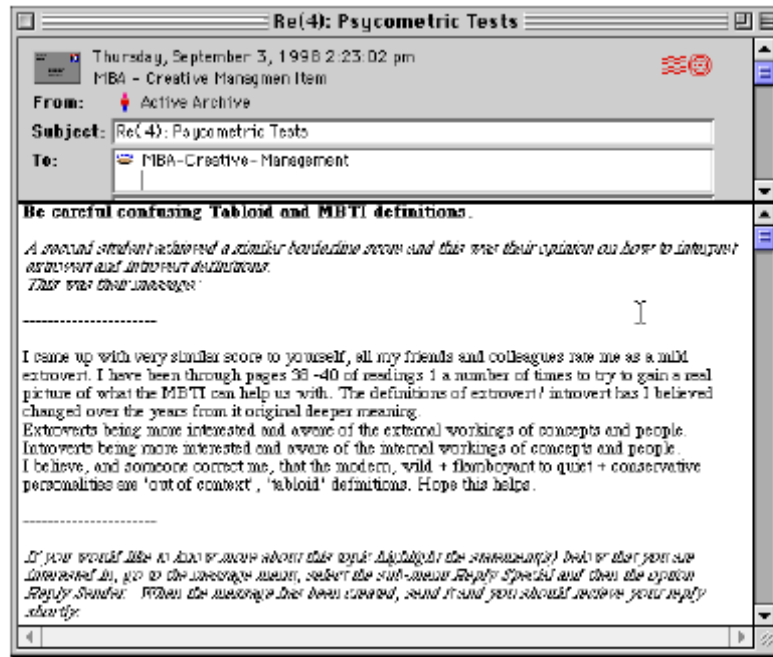
Figure 2.14.

Virtual Participant screen shot

Although primarily a teaching resource, the VP contributes to reflection in the learning process by presenting students with stories from different viewpoints, thus providing a focus for reflection to take place. As we can now appreciate from the preceding discussions, providing multiple perspectives is a key component towards successful reflection and its importance will be discussed throughout this thesis.

There are also some other important lessons to be learnt from the VP. Technical issues regarding the usability of an environment are often of primary concern when considering why people are put off using an environment. However, Masterton & Watt (2000) raise the important and often neglected issue regarding the social acceptance of an environment. People may not wish to contribute as they may feel embarrassed or inhibited by communicating their views or experiences to others. They also emphasise the 'role' of the environment as being a prime factor in the way that people perceive the information and stories contained within it. An environment affording an 'oracle' role would be perceived as one where you could go to get the definitive answer. A 'village gossip' style environment would pass information on to you which it considered would be of use to you. A 'bard' environment would simply present you with its stories and the making of meaning would be up to the student.

They state that these roles can influence the manner in which the individual interacts with the environment and their expectations of it. Getting a balance between social and technical issues of an environment is especially important in environments designed to support reflection.

Blogging

We are moving towards sharing more personal aspects of our lives on-line, whether informally through diary-type blogs and personal sites, more formally through organisational home pages, or by portraying aspects of ourselves in distributed Internet-based games and chat rooms. Turkle (1995) discusses the on-line worlds we inhabit and explored what this means for our concept of self in our increasingly distributed on-line lives. The journey we are taking in sharing our lives on-line is becoming easier as more *digital natives* (Prensky, 2001) embrace on-line technologies and exploit these for their needs.

Blogging has taken off on the Internet and peoples' motivations for keeping blogs are varied (Nardi et al., 2004). It is no surprise that blogs are finding their way into education. They are increasingly being used in higher education as a tool to facilitate reflective learning. Students are being encouraged to reflect on their learning and many methods are being used to facilitate this: learning journals, reflective activities, and more recently blogs. As we have previously discussed, simply asking students to reflect using these tools does not guarantee the quality of reflection or that reflection will take place at all.

Blogs can give students a voice and empower them as a community (Oravec, 2002). They enable personal reflection and ideas to be quickly and easily produced and communicated to others, though this may also be their potential pitfall in education. The danger of blogs is their unstructured nature which encourages a more laid back style. This is evident from their *textspeak* style of language, little adherence to grammar and punctuation and from a multiplicity of thoughts and ideas that can lead the blogger away from their original point (Trafford, 2005).

For blogs, or blog-type environments, to work in an educational context there needs to a clear focus for the blog and an element of structure to guide the blogger's

interactions with their audience. Tagging and categorisation can help on a functional level, but may not provide enough structure to guide the learner's thoughts in exploring the topic area.   Using blogs in higher education as a reflective journal or critique of experience requires some form of guidance, whether as part of the blog writing process or through support from a tutor.

Who the audience will be is also important. If blogs are to be used as a form of reflection to encourage critical thinking, then we must be aware that concern about who will read our personal thoughts may inhibit critical thinking and lead us to self-censoring (Boud, 2001).

On-line PDP tools

Most of the environments which have been discussed are concerned with collaborative learning and reflection. We will now consider the implications of on-line PDP tools in supporting the reflective process and how this can inform the research. We reviewed a number of on-line PDP tools and found that many on-line processes consisted of gathering factual information and filling in forms (Malins & McKillop, 2005). However, we point out that this approach may not be well suited to art and design where the subjective nature of the discipline leads to the need for a more discursive approach. This approach may not suit the visual learning styles of creative arts students or the mode of their discipline (James, 2004). The technical nature of computers ensures that it is easy to construct a database to gather information, however it is much harder to ensure that the tool supports productive reflection.

In an attempt to produce an on-line PDP tool which fitted with a pedagogy that promotes reflective practice, an on-line tool, **GraysNet**, was designed to enable students to reflect on their strengths and weakness, and to complete an 'action plan' based on this assessment (Malins & McKillop, 2005). This would then open up a dialogue with their tutor who could then provide them with feedback. Figure 2.15 shows a mock up of a screen from GraysNet.
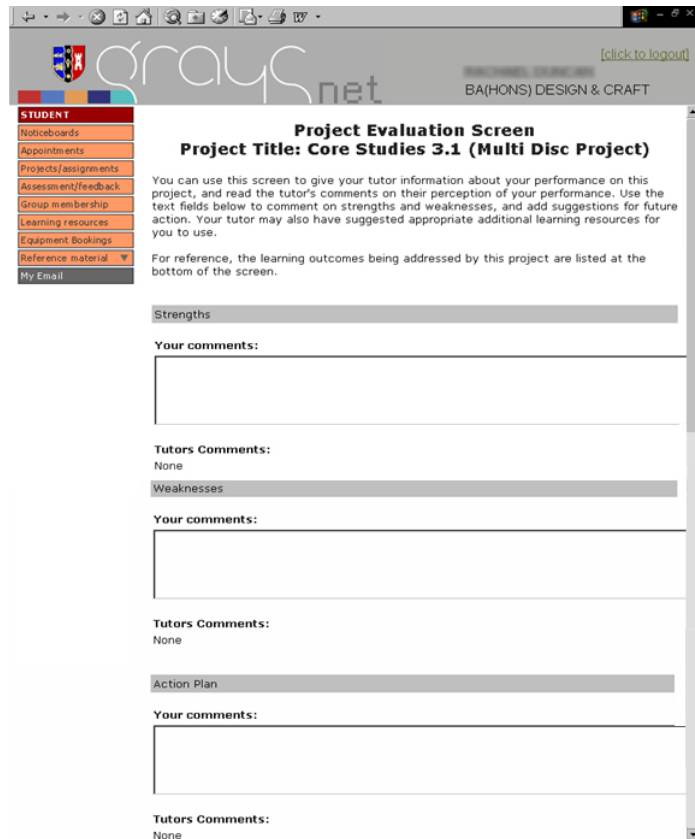
Figure 2.15.

GraysNet screen shot

Students found GraysNet easy to use and were able to complete the sections provided. They found reflecting on their learning helpful and found the process relatively easy.

However, some difficulties were encountered with the term 'action plan' which was not fully understood. This illustrates the problem of using 'jargon' and shows that terminology should be able to be understood by students so the reflective process can be facilitated, not hindered. Although 88% of students found reflecting on their learning helpful, 81% stated they were unsure whether they would reflect on their learning unless they were asked to do so. Providing some structure to support reflection may result in more people engaging in the process, but we must be careful to ensure that these processes do not hinder the process by for example using opaque terminology.

Art & design technologies

As the use of computer technologies increase in art and design, their presence is likely to become a more accepted part of learning in this subject area. On-line learning environments are being constructed in art and design to specifically address discipline specific areas. We will now outline just a few developments in this area.

The Virtual Design Studio (Hutton et al., 2001) was developed as a way of supporting the more technical aspects of drawing, as opposed to more free forms such as sketching. This environment, mediated via a web site, supported the exchange of initial sketches and subsequent technical drawings between students. Technology used in this way can enable designers who are distributed across time and space to be able to work together.

Griffiths et al. (2001) discuss the advantages and disadvantages in developing two MA courses, History of Ceramics and Cybercrafts, for a Virtual Learning Environment. They attempted to provide a rich sensory environment where students could access 'talking head' lectures and use QuickTime VR technology to explore images.

The use of virtual crits was explored by Kelly et al. (2005) who discovered that students found it easier to take on-line criticism than face-to-face. The on-line format also enabled staff to be more considered about their responses.

On-line technologies have been used as a novel approach to teaching colour education (Patera, 2005). She found on-line versions of teaching resources to be equally effective, but the on-line version was more flexible and could be expanded to include the tutor's role.

Developing skills in visual literacy, such as interpreting photographs, have also been supported by on-line technologies (Abrahmov & Ronen, 2005). They explore a blended approach where practical skills were developed on-campus and theoretical skills were developed on-line. This approach successfully integrated theoretical aspects into a largely practical course.

The latter few examples come from a recent conference (2005) entitled 'Designs on eLearning: the International Conference on Teaching and Learning with Technology in Art Design and Communication'. This conference highlighted the growing trend for on-line technologies being incorporated into art and design education.

The on-line environments discussed in this chapter aim to foster collaborative thinking and reflection. However, they vary greatly in many ways, such as: the subject area; whether targeted at school level students or university level students; whether they are intrinsically a subject teaching tool containing content that the student explores or a more general tool which the student is required to add content to themselves in order to engage in the collaborative process; the degree to which guidance and scaffolding is offered, and so on.

The role of multiple viewpoints is important in fostering reflection especially when designing a Constructivist learning environment. When designing such an environment there are not just technical issues to resolve, but social issues too. The way the user perceives the role of the environment and how it supports social interaction are crucial. Above all, any environment should support reflection, not hinder it.

Increasingly, on-line technologies are being adopted in art and design higher education to foster reflective thinking and enhancement of subject areas.

2.7 Summary

In the chapter we have reviewed a wide range of literature and differing on-line environments. Although this review has covered diverse areas, it has focussed on the key concepts in those areas which had a significant influence on the development of the research described in this thesis. A comprehensive review of these complete areas would be prohibitive as they are wide ranging fields in themselves.

We have demonstrated the importance of assessment and reflection in the learning process and highlighted some of the difficulties surrounding these issues. Whilst they are key processes, they are complex areas which must be applied carefully for productive effect. We have proposed bringing these two components closer together in order to use their distinct strengths.

Providing a reflective learning environment which encourages independent and lifelong learners is at the heart of current practices. Rather than simply review these processes, we have considered the effect they have on the student. This thesis takes a student-centred, Constructivist approach where the individual student and their learning experience are of prime consideration.

In discussing the key issues of learning we have identified a number of discipline specific characteristics which make art and design a more challenging area in education. Art and design has a number of less tangible aspects, in particular the 'wow' factors we have discussed, which make assessment and reflecting on assessment more of a challenge.

In proposing to bring together reflection and assessment, we needed to find a bond which kept these two concepts together: storytelling was proposed as that bond. In justifying why storytelling was an appropriate choice, we have looked at the nature of storytelling and the fundamental role it plays in our everyday lives. The link between stories and our cognitive functioning as social human beings was discussed and we have seen how this links with the social nature of learning and reflection. The wider reaching implications of storytelling were discussed to demonstrate how storytelling pervades, and is important in, many disparate areas.

Following this we concentrated on storytelling as a reflective tool in higher education and showed how this could be effective in a number of different ways. We introduced McDrury & Alterio's (2003) model of storytelling as a reflective tool in higher education. This model is central to the thesis as it was used as the basis for the design and development of the reflective tool which is at the heart of the thesis. There is little work being carried out in developing models of storytelling in higher

education, so their research is key to developing reflective processes using storytelling based on a sound underlying theory.

We ended with a review of on-line environments to show the diverse approaches others have taken in fostering reflection and collaborative learning. These examples serve to demonstrate where this research is placed within the wider context and to show its distinctiveness.

Chapter 3 – A student-centred approach

'No story is the same to us after a lapse of time; or rather we
who read it are no longer the same interpreters.'
George Eliot

3.1 Introduction

In this chapter we will consider the underlying philosophical approach taken in the research and explain why it has been important to take this approach and how it has influenced the methods taken. We will do this by taking the chosen approach, Constructivism, and comparing it with its antithesis, Instructivism, to tease out and explain the key issues which are important in guiding this research. In doing so, we will identify the student and their experiences as being of prime importance within the educational process, and this thesis. We will demonstrate how in taking a Constructivist approach to this research, we value the student and those experiences.

We will then introduce the qualitative nature of the research and how it seeks to understand and value the experience of its participants. We show how a storytelling approach can elicit the experiences of the individual and how analysis methods can be used even though we are not searching for the objective truth: we are seeking to understand experience as perceived by the individual. We discuss the difficulties in using the terminology of positivist approaches within the qualitative paradigm and resolve this, to an extent, by looking at the current debate which seeks to re-interpret the terminology in terms of the qualitative approach.

The different methods used to understand students' experiences will be described in relation to how they relate to the research objectives. These differing methods also provide evidence for the triangulation of the data, which serves to minimise criticism regarding bias in the interpretation of the data.

To end this chapter, we will look at a number of other pertinent issues: the story-based approach that will be taken in the methods used; the ethical issues raised by

this research; the language that has been used throughout this thesis and importance of the voice of the researcher within the thesis.

3.2 Constructivism: reality, power and education

The focus of this research is on the student and their perceptions of their experiences of the assessment process, therefore it is necessary to recognise the importance of the individual experience and how they perceive and interpret that experience. Each of these experiences will be unique to the learner as previous experiences will influence how they engage with, and interpret, current experiences. In accordance with this view, the research takes a Constructivist approach. A Constructivist approach emphasises the learner and how they construct a representation of reality through their interactions with the world and their discussions with others (Bruner, 1986). As the learner's experiences will be unique to them, so will their understanding and representation of the world. The learner is therefore encouraged to explore their world, to learn by doing, to look at things in different ways, to discuss their world view with others, and as a result, to continually transform their understanding of the world in light of these experiences.

To contrast this, we can look at the Instructivist approach. Although Constructivist and Instructivist approaches can be seen as opposing approaches, they are really part of a continuum. For the purpose of this discussion, to show the underlying philosophical approach taken throughout this research, we will be discussing them as two distinct approaches and polarising them, but it is important to realise that there are many variations between the two views.

Instructivism has its roots in behaviourism, derived from animal studies, where it was discovered that the external behaviour of the animal could be changed through a process of reward and punishment. Schrock (1995) describes how this approach was transferred to human education in the 1950s and capitalised on previous approaches which emphasised specifying outcomes and planning instruction to achieve them. This approach is concerned with externally observable behaviour and not with what is transpiring in the learner's mind. The emphasis is on the subject matter to be

learnt, not the learner. The subject matter is broken into units to be learnt and assessment will judge whether each unit has been successfully accomplished through the observation of the desired behaviour.

Let us now look a little more deeply into the Constructivist approach, with reference to Instructivism, to help contextualise the following research. Firstly, let us be clear, there is no one type of Constructivism. In fact Doolittle (1999) views it as a continuum which can roughly be divided into three main areas: cognitive, social and radical. Briefly, Cognitive Constructivism is concerned with knowledge in terms of the technical process of acquiring and storing it. Social Constructivism emphasises the social and cultural creation of knowledge. Radical Constructivism focuses on the idea that although external reality exists, it is not possible to truly know it since our understanding of it is mediated through our senses which are not good at giving us an accurate representation of reality. However the Constructivist approach has at its core, the driving motives of:

- active participation in learning
- constructing own meaning of knowledge
- social negotiation and sharing of meaning
- the importance of experience

The relevance of these to this research is their significance to the learning process and these four areas will be discussed further throughout this thesis.

Language

In our Constructivist world, language is viewed as a powerful mediating force. It is language that makes us distinct as a species and language that enables us to act far beyond an immediate stimulus-response mode: we can plan, refer to objects not present and imagine a range of possibilities (Vygotsky, 1978).

Bruner (1986, p121) states:

> "...that the medium of exchange in which education is conducted – language – can never be neutral, that it imposes a point of view not only about the world to which it refers but toward the use of mind in respect of this world. Language necessarily imposes a perspective in which things are viewed and a stance toward what we view."

Vygotsky (1978) goes further by suggesting that those doing the shaping may be consciously trying to influence the learner and states that we can't take it for granted that they will be benign in their motivations. This is important for our discussions here as the Constructivist approach attempts to take the more benign approach, whereas the Instructivist approach, we will argue, is more inclined to impose its view.

With language being the dominant form of exchange, the manner in which it is used is of prime importance, both in terms of the language being used with students and the language being used with teachers. Interestingly, Bruner (1986) points out a difference in teachers' language. When teachers are talking to each other they are more likely to use expressions of uncertainty (for example, 'might', 'could') than when talking to students. When talking to students, teachers are presenting a world which is more certain in understanding, and less open to discussion. He suggests this influences how we use our minds, in that we will be less open to 'wonder' and 'possibility'.

A Constructivist approach considers that language in education is about more than using it to convey facts and information. Bruner (1986) suggests we need to encourage a situation whereby this information is presented from a view, and where reflection, discussion and opposing views are able to be included in the process. However, traditional forms of education take the view that the teacher is the controller of knowledge who, as a result, has the power to exert authority over the learner. Its language alludes to the teacher being correct in what they say and in the stance they take. Knowledge is parcelled into some unit of meaning which is transmitted to the learner with the assumption that the learner will understand it and

that there will not need to be any discussion regarding that unit of knowledge. There is little place for collaboration, discussion and negotiation in this approach.

This 'conduit' model of knowledge transmission is pervasive in the Instructivist approach and is seen in the many forms of teaching that are employed throughout education: lectures, textbooks, learning objective driven assessment strategies. Reddy (1979) suggests there are problems with using a conduit metaphor of communication. There is an assumption that the meaning within the words can be extracted in the way intended by the sender of the knowledge, so, is it the sender who is responsible for packaging the meaning up correctly, or the receiver for interpreting it correctly? Education is far more than transmitting packets of information: it shapes our thoughts and ultimately the way in which we represent and view our world. This in turn has wider implications for society as a whole. As Reddy (1979) points out, failure to see the world view of another is at the heart of society's problems.

A holistic approach

The Constructivist approach takes a much more holistic approach, considering the students' motivations for learning, how to engage them in the learning process or even how to deal with a demotivated student. Here we are not simply fixated on the subject matter, but are concerned with "...creating a fully functioning person" (Rogers & Freiberg, 1994, p313). Constructivism shows us that there is more to teaching than the subject. As Bruner (1966, p72) says:

> "We teach a subject not to produce little living libraries on that subject, but rather to get a student to think mathematically for himself, to consider matters as an historian does, to take part in the process of knowledge-getting. Knowing is a process, not a product."

It is this process, which is our primary concern and what leads us, motivates us, to become engaged in the process of learning. Bruner (1966) points out that the will to learn is very basic to us, with curiosity being the prime motivating factor. However, he identifies a problem with traditional schooling where the curriculum is set and the

path fixed which, as a result of its rigidity, can impede the natural flow of the intrinsic, spontaneous desire to learn.

Multiple worlds

Bruner (1986) explores the issues of constructing our own interpretations of reality and points out that many of our encounters with the world are not direct, our meaning and interpretation about an event is through re-looking at it with others. Reality is often a product of our use of language which comes into existence through sharing ideas and negotiating meaning with others. As we have discussed, an Instructivist approach is limited in its consideration of this point. It seems to take the stance that the materials it is presenting to be learnt are factual and are the most appropriate to be learnt. There appears to be little room for negotiation.

So, a Constructivist approach to education concerns itself with multiple viewpoints and representations of the world while the Instructivist approach is only really concerned with one viewpoint, that of the teacher, the transmitter of the information and the representative of the institution, community, or society holding that knowledge. Let us just explore this issue a bit further. We are arguing that the world we live in is created by the mind and that each person's experience will affect their mental representation. This could be a recipe for disaster: if we all have slightly differing mental models of the world and reality, then which is the real world and how do we share information about our differing worlds? Would it not be better to present the world from one viewpoint?

Bruner (1986) argues that there is no one real world and that the world we live in is created by the mind. He refers to Goodman's ideas concerning world views in which there is no one unique and objectively real world, the world is constructed by each individual and no world view is any more real that the others. He states:

> "On Goodman's view, then, no one "world" is more "real" than all others, none is ontologically privileged as the unique real world." (Bruner, 1986, p96)

In fact, our world view is in a constant state of transformation and retransformation, through our interaction with the world and through our negotiations with others. If we all had the same view, then there would be little room for discussions, for discovery, or for learning.

As we can see, there is a tension here between what is considered subjective or objective knowledge and the status which one or other is given. The view is often expressed that subjective knowledge is more intuitive in nature and objective knowledge is better as it is more aligned to the truth and scholarly in nature. For example, Woodward and Watt (2000) consider this in the context of medical knowledge where the knowledge created by the Royal Society was taken to be true due to the high status of the individuals within the society who were considered to be free from the interference of subjective bias. The Instructivist teacher is like a member of the Royal Society, their status is not to be challenged and their view of the world is the correct and objective view. In art and design, there is more subjective knowledge and subjective judgement than in many other subject areas. The nature of this and the influence this may have on the learning process in art and design has previously been discussed in Chapter 2.

3.3 A qualitative approach: applying Grounded Theory

In taking this Constructivist approach, this research values the experiences of the students who have been involved. Students' experiences are accepted as what they have genuinely felt and believe to be true, even though others may have different views on this, for example, their tutor. There is no attempt here to seek a consensus or search for the objective truth regarding an experience; though, as we will see later, other peoples' views and opinions will be used to help reflection on an experience. It is how a student perceives an experience which is important as it is that perception which will affect how they interpret and respond to future experiences.

This discussion leads us to wonder how it is possible to give adequate justice to the analysis of individuals' subjective perceptions of their experiences. We have chosen

to do so by taking a 'grounded' approach to analysing the data. Instead of taking pre-defined ideas and framing the research and data with them, Grounded Theory (Glaser & Strauss, 1967) takes an emergent approach in which the ideas and theory arise from the data. The data is not coded using existing variables, but gives rise to variables which can then be categorised and the variables can be refined. The structuring allows for a systematic analysis to be conducted. This approach enables the experience of an individual or group to be understood in relation to the world which they experience. The analysis is led by their words and experiences, not a pre-existing schema.

A Grounded Theory approach appears to be especially effective at illuminating social and experiential phenomena, and as such lends itself to being a Constructivist tool. Taking this approach alleviates some obvious problems with bias, though potential bias is difficult to completely overcome, for example, this research starts with a justifiable bias – a Constructivist approach.

It should be noted, that it is a Grounded Theory *approach* which is being taken here, and not a rigid compliance to a particular technique. In fact, there has been considerable debate between the originators of Grounded Theory, Glaser and Strauss, as to which one of their variations is actually Grounded Theory (see Punch (2005, p156-157) for a short history of Grounded Theory). Grounded Theory has often been criticised because theory is purported to emerge solely from the data. Barbour (2001) states that this is unlikely to really happen as the researcher will be looking at the data from a particular theoretical stance which is bound to influence the interpretation, and we have already accepted such a bias in this research.

Its efficacy can certainly be debated both ways, and the approach was chosen since it appears to be the one which best suits a Constructivist approach and one which will allow the issues raised by students to emerge as unscathed as possible.

Figure 3.1 gives an overview of the process of research described in this thesis. It shows how the literature review and methodology informed the studies conducted in this research, and the methods used in those studies will now be described.
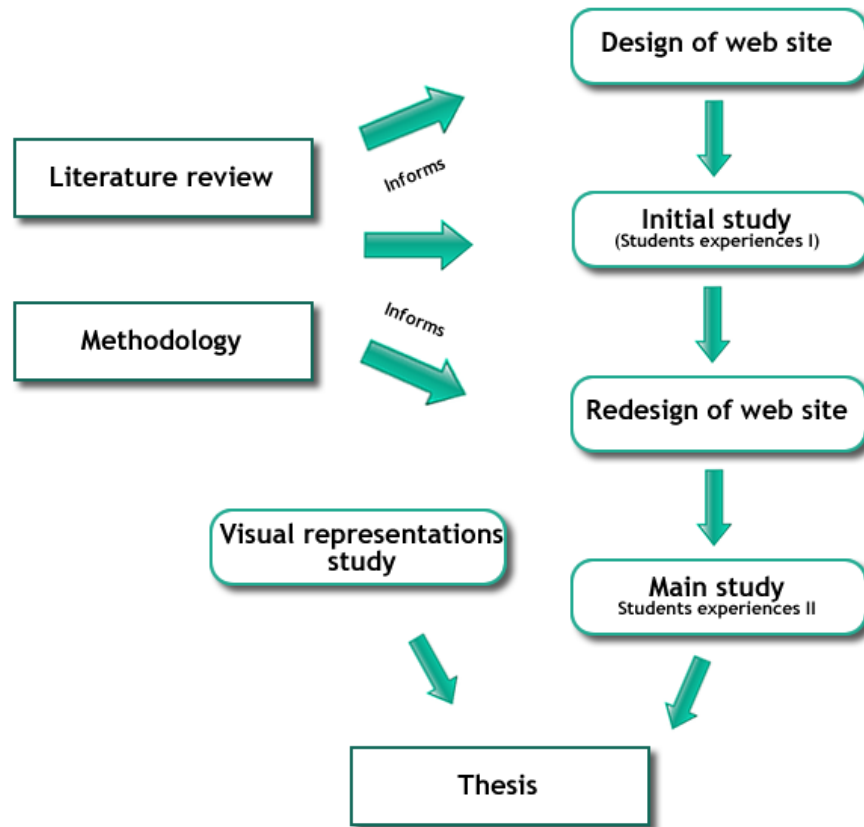
Figure 3.1.
Overview of process of research

'StoriesAbout… Assessment'

Information on students' experiences was largely gathered through a web site which was designed and constructed as part of this research: 'StoriesAbout… Assessment' (www.storiesabout.com). This site was designed to gather students' stories of assessment as well as provide a focus for reflective discussions on those stories. The site formed the central focus of this research and the rationale behind it is discussed further in the following chapter, Chapter 4. This site formed the basis for the investigation of objective 3:

> 3) To develop and evaluate an on-line tool to support collaborative and reflective storytelling.

To investigate this objective, information about students' use of the web site was gathered via questionnaires and an informal observation of students using the tool was arranged. Students' stories on this site also served as evidence for the effectiveness of the tool in supporting the storytelling process. Initially, known groups of students at Gray's School of Art were asked to participate. These smaller groups of students who knew each other did not lead to a sufficient interaction on the site. It was decided to open up the site to students from other institutions to increase numbers and widen participation. Further information on participants can be found in the 'Participants' section later in this chapter.

Students' stories

To locate the heart of students' experiences, the investigation focussed largely on gathering qualitative data in the investigation of the research question and objectives. The main source was the stories the students told and the responses they received to their stories. These stories and responses enabled objectives 1 and 2 to be investigated:

1) To investigate students' qualitative experiences of the assessment process in art and design through the use of storytelling.

2) To investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment in an art and design context.

The stories from both the initial study (described in Chapter 5) and the main study (described in Chapter 7) were analysed using a Grounded Theory approach which enabled the data to be worked on as a blank canvas. NVivo qualitative data analysis software was used to support the coding and analysis of the stories. This software is designed to support Grounded Theory analysis and enables documents to be stored and coded, as well as providing tools for searching, linking and modelling the data (Gibbs, 2002).

Using the software, each story was gone through line by line, identifying key elements of the story. The text relating to these key elements was highlighted and labelled with a word to describe it – its code. These codes sometimes arose from a key word or short phrase used in part of the story or from the researcher's interpretation of what the student was conveying. If one of the codes was applicable to another section of the story, or to a different story, that part of the text would also be labelled with that code.

This process enabled the codes and categories to emerge from the content of the data, rather than examining the data with a predefined set of categories, as in content analysis. In the latter approach, vital information regarding what the student was attempting to convey could have been overlooked.

Once all the stories had been coded and checked to ensure there were no further codings apparent, these codes were examined using the software's modelling tool to enable the codes to be grouped according to categories they shared. An example of this process of coding is given in Chapter 7.

Focus group

A focus group was used to gather additional information on students' experiences of using the site during the initial study, described in Chapter 5. A focus group enabled a freer discussion on student opinions than, for example, a questionnaire can provide. This method ensured the discussion was student-focussed and not simply led by the researcher. Key areas for discussion were introduced by the researcher, but the direction the discussions took was influenced and controlled by the students.

Whilst focus groups are often small (Cronin, 2001), making it difficult to generalise their outcomes, the emphasis of the research was on the individual's experience, so the focus group provided a valuable opportunity to bring a number of students together to collectively discuss their experiences. The focus group provided information to explore aspects of the first three objectives:

1) To investigate students' qualitative experiences of the assessment process in art and design through the use of storytelling.

2) To investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment in an art and design context.

3) To develop and evaluate an on-line tool to support collaborative and reflective storytelling.

The intention was to have more focus groups throughout the research, but following difficulties with participation, questionnaire-type instruments were used to gather data. This was due to the anonymity and geographical distribution of the student groups.

Questionnaires

On-line questionnaires and paper-based equivalents were used to gather additional data. Questionnaires have the advantage that the same questions can be answered by all respondents, which provides data which can be analysed for similarity and differences. They can be easy to construct but hard to achieve effectively. The difficulties of trying to get people to fill them in are well known (see, for example, Porter (2004)), plus there are additional difficulties when using web-based surveying techniques (see, for example, Knapp & Heidingsfelder (2001); Schmidt (1997)). A well designed questionnaire can be quick to fill in and can elicit useful responses. In the questionnaires used in this research, a combination of open and closed questioning was used. Open questioning took the form of free text comments and closed questioning largely used Likert rating scales. The free text comments were analysed largely though grouping similar responses and the quantitative data was analysed using SPSS to produce descriptive statistics and charts of the data.

Using questionnaires supported the investigation of the first three objectives:

1) To investigate students' qualitative experiences of the assessment process in art and design through the use of storytelling.

2) To investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment in an art and design context.

3) To develop and evaluate an on-line tool to support collaborative and reflective storytelling.

A questionnaire was used at the end of the initial study described in Chapter 5. This questionnaire was constructed following the analysis of data from the focus group. Its aim was to gather further information to help understand what students thought about reading and telling stories about their assessment experiences on-line and to gain further insight into how students perceived the assessment process.   This information was used to redesign the 'StoriesAbout… Assessment' web site.

During the main study, a questionnaire was used which had three aims. The first aim was to investigate the efficacy of the storytelling model by gathering responses to an example story. This was carried out due to a lack of responses on the web site. The second aim was to collect data to supplement some of the data gathered from the questionnaire in the initial study.   This was done to ensure sufficient data was gathered to enable its analysis. The third aim was to gather more stories.

Towards the end of the research, a questionnaire was used to evaluate the research. It asked students who had participated in the research for their views on telling stories about assessment and what they had learnt as a result of telling and reading students' stories.

Visual representations

Although the primary focus of this research was storytelling, an exploratory study was conducted in parallel with this which investigated whether students' visual representations of assessment could provide additional insight into the student experience. Drawings were gathered at various opportunistic points throughout the research: from students who had already been invited to tell stories on the web site, from meetings and presentations to art and design students, and at an exhibition of PhD research.

It was proposed that this method may be more effective at eliciting students' affective attitudes towards assessment, and would supplement the information gathered using the storytelling method.

4) To investigate art and design students' experiences of assessment by asking them to visualise their experiences using drawings.

The use of visual representations of experience as a method in higher education is rare, therefore, there was no established method for conducting this part of the research. An exploratory approach was taken whereby students were given a task in which they were relatively free to visually represent assessment in any way they wished. The method placed no restrictions on the type of assessment, experience, or mode of representation. This was done to ascertain whether there was any efficacy to the method in this context.

Because of the exploratory nature of this study, a Grounded Theory approach was taken in the analysis of the drawings. Doing so ensured that preconceptions from other approaches did not interfere in the analysis, such as taking a psychoanalytical perspective. A two stage method for analysing the drawings was devised and this is discussed further in Chapter 8. The first stage enabled drawings to be categorised according to the overall meaning they appeared to convey. Each drawing was viewed and laid out on a table. Drawings which appeared to have similar meanings were laid together. After a number of iterations, distinct groupings appeared and the drawings were categorised according to these groupings. As with the stories, this process ensured that categories emerged from the drawings' content, rather than attempting to fit the drawings' meaning into predefined categories.

The second stage involved importing the drawings into NVivo and using a similar process to the analysis of the stories. In this case, the elements coded were the individual elements that the drawing was made up from. These coded elements were then grouped according to their categories.

The highly qualitative nature of drawings raised particular issues for the validity of their interpretation and these issues will be discussed further in Chapter 8. To ensure the interpretative perspective was valid, the drawings were exhibited and feedback was received on them.

Participants

Participants in this study were undergraduate and postgraduate students in art and design. Initially the students were from Gray's School of Art, but as the research progressed, PhD students from Salford and Sunderland Universities were also invited to participate as a research training network had been established through the universities and PhD students attended reciprocal events at each university. This enabled students from a wider range of backgrounds and experiences to participate.

Opportunistic sampling was also used. Visual representations were gathered from PhD students who attended a Supervisors Network meeting run by the NAFAE (National Association for Fine Art Education) at Nottingham Trent University. To increase the numbers of participants, a questionnaire was distributed which investigated the storytelling model (see Chapter 7). An email requesting participation was sent to the PhD Design List (PHD-DESIGN@JISCMAIL.AC.UK) as well as to postgraduate students at Teachers College, University of Columbia. Students attending a Research Summer School at Gray's School of Art were also invited to participate.

All involvement in the research was voluntary and could be anonymous if the student wished.

Validity and reliability of research methods

Reliability

One contentious area when gathering and analysing data concerns the reliability of data. Reliability has been described as:

> "...the extent to which a measurement procedure yields the same answer however and whenever it is carried out..." (Kirk & Miller, 1986, p19)

The main difficulty for largely qualitative focussed research is that methodological terms are often rooted in the positivist and scientific paradigm. The lack of hard facts and figures in qualitative data can make issues of reliability more difficult to justify: there is no hypothesis and null hypothesis here to disprove or reject using inferential statistics, no measuring of causal relationships between variables. Qualitative research can find itself at odds with positivist approaches as they tend to view the world as comprised of objective and measurable facts. Qualitative research takes a naturalistic approach, seeking to understand a phenomena, or experience, in a particular context and usually takes an emergent approach. Its focus is not on manipulating variables, objective truth, or causal relationships and the tools of its trade can be very different, with even the researcher being viewed as one of its instruments (Patton, 1990). If we view our social reality as being in a constant state of change, then issues concerning reliability are less applicable.

The data being gathered here are largely stories and these stories are liable to change according to recent and past experience and the context of telling the story. Whilst some gist of the story may remain, it could be told from a differing viewpoint or reframed for a particular audience. In quantitative terms, the data would lose its reliability: it would not be the same story, therefore it would not be measured as being the same data.

Validity

Validity has been described as whether:

> "… the evidence which the research offers can bear the weight of the interpretation that is put on it." (Sapsford & Jupp, 1996, p1)

Basically, is the method and analysis actually representing the phenomenon it is purporting to describe? There are arguments regarding whether this concept has a place in qualitative analysis (Golafshani, 2003) in the same way reliability issues in the qualitative discipline are queried.

This research takes a Constructivist view and accepts that there are multiple perspectives on reality which are socially constructed. In taking this approach, Golafshani (2003, p604) points out:

> "Constructivism values multiple realities that people have in their minds. Therefore, to acquire valid and reliable multiple and diverse realities, multiple methods of searching or gathering data are in order."

This is the approach taken in this thesis. Stories of assessment are gathered on the web and through a questionnaire, experiences are visually represented through drawings, words used to describe assessment and learning are gathered and analysed statistically. These different approaches all served to triangulate aspects of the qualitative data being gathered and ensure the validity of the research. Additionally, some of the data was re-presented to participants for their feedback. Their perspective on the data concurred with the analysis presented in this thesis.

Reframing reliability and validity

Many argue against the use of the term reliability and validity and call for qualitative data to be interpreted in terms of the 'trustworthiness' of the research (Lincoln & Guba, 1985). Golafshani (2003), on reviewing the debate, also calls for reliability and validity issues to be redefined in terms of qualitative research and concludes that these redefinitions can include trustworthiness, rigour and quality, although others have called for these terms to be re-used to maintain rigour in qualitative research (Morse et al., 2002).

The quality of the data and the appropriateness of the methods used are the key issues here. This is important as the conclusions and interpretations are based on the data and methods and their veracity depends on this. We have already discussed the individual methods used and how they have been used to gather the data. An accurate record of the research can go some way to assuring reliability and validity as it is open to the scrutiny of others. Therefore, this thesis will also serve to demonstrate the rigour and 'trustworthiness' of the research.

Many approaches seek to alleviate reliability issues by triangulating the data – gathering multiple sources and checking for consistency. This could have led to an interesting dilemma for this research. As we have previously mentioned, the nature of stories is that we can tell a story in many differing ways according to who our audience will be, how we feel at that particular time, what we want to get across in that story, and so on. For example, consider the 'spin' that differing political parties put on a particular issue. Therefore, the story a student tells today about their assessment experience, may not necessarily be the same story they tell in another context. Does this mean that stories are not a reliable or valid data collection method? Not necessarily; certainly, the stories may change, but an aim of the research is to enable reflection and change from reading and commenting on other students' stories, so a student may incorporate what they have learned into their existing story structure. This, and other events, may lead the student to reinterpret that experience and thus tell the story from a differing point of view. We are aiming to understand students' experiences as they perceive them at the point of telling them; this constitutes the robustness of our data. Can the method support a student in telling their story as they wish to put it across? This thesis will demonstrate the effectiveness of the method.

In this situation, issues concerning reliability are of lesser importance than in research gathering data which seek an absolute or universal truth. The data has more in common with the subjective than the objective and we are not seeking to take an experimental approach to the data. The validity of the research is often dependent on its reliability. In this case, we have lessened the importance of the reliability of the data due to its nature. This could leave the research open to criticisms concerning its validity, however by taking a multiple methods approach where the data could be triangulated, these criticisms are minimised.

Triangulation and multiple methods

Triangulation of data using storytelling as a method is difficult, due to the aforementioned nature of stories. However, using multiple methods of data collection can help support the evidence. As we will discuss later in this thesis, the tone of the stories was often negative and the affective component to assessment frequently raised. Other data sources confirmed this finding. For example, the

discussions in the focus group, the words about assessment and learning which were gathered and the visual representations. Other participants' interpretation of the data also confirmed this.

All these data sources served to capture the student experiences, in particular the emotional aspects of assessment, and resulted in triangulation of the data. Since there were high degrees of similarity in these components of the data collected the research findings presented in this thesis have a higher degree of rigour and trustworthiness.

Mixed methods

It is also worth noting here, that the research did not just employ multiple methods, but also used a mixed methods approach. Although the approach taken was predominantly qualitative, quantitative methods were also used. The questionnaires elicited a degree of quantitative data which was analysed using descriptive statistics. Some of the qualitative data was subjected to quantitative data analysis using inferential statistics. Words were gathered which described both assessment and learning and these words were categorised by a number of participants according to whether they were positive or negative in nature. The resulting data was analysed using a chi square inferential test which considers the statistical differences between groups of data by examining the observed and expected frequencies (Coolican, 1990).

There is some debate about the use of mixed methods as each method brings to the research elements of the difficulties of its paradigm (Johnson & Onwuegbuzie, 2004). On the other hand, the strengths of both approaches can be used to cancel out any weaknesses (Punch, 2005). In the case of this research, mixed methods assisted in the triangulation of data, and the exploration of the data from the researcher's view – two components taken from Punch's (2005) eleven ways that qualitative and quantitative approaches can be combined. This research was investigated using methods (qualitative or quantitative) appropriate to the investigation of the research question and objectives and thus took a pragmatic approach as proposed by Johnson & Onwuegbuzie (2004).

Story-based approach

The research sought to explore how the stories that students tell can reveal to us an understanding of the student experience. Storytelling was put forward as an important method and as such, a number of storytelling methods and story-related approaches were employed.

Storytelling was used as both a data collection method and as a reflective tool, and as a method to understand students' experiences of assessment. We have already discussed more traditional approaches to understanding the student learning experiences and the limitations these may impose. Storytelling was used to see whether it could provide additional information on the student learning experience which may not be accessible using other methods. The stories students told were used as reflective tools in their own right. Students need to reflect on their experiences, make sense of it and prepare to tell, then actually tell their stories to others. These stories are then read, and reflected on by other students who can then respond to them.

Scenario-based design (Rosson & Carroll, 2002) was used to inform the design of the system. Scenarios enable reflection on the design and enable multiple views and possibilities to be considered. Carroll (1999, p2) states that:

> "Scenarios are stories. They are stories about people and their activities."

Like a story, a scenario can have a setting, an actor, goals for the actor and a plot. Constructing these elements necessitates reflecting on the design and purpose of the system and multiple perspectives can be considered. A scenario focuses on the user, why they are using the system and how they may interact with the system to achieve their goals. Scenario-based design enabled the user to remain the prime focus, rather than an impersonal list of requirement specifications (Carroll, 1999).

Storyboarding was used as a rapid prototyping method (Rogers et al., 1994). Originally used to ensure the narrative and action of an animation or film was

coherent, it is a visual thinking tool which enables the interface to be developed, with particular emphasis on the interactive elements of the interface. Storyboarding ensures that the scenarios developed can be achieved.

Ethical issues

On first glance, this research does not appear to be fraught with the ethical issues of some disciplines, for example, requiring deception in a psychology experiment. Nevertheless, the nature of research often brings the unexpected to the fore and this research was no exception. The overwhelmingly negative reaction to assessment was surprising. Not surprising in terms of it being negative, but surprising in the extent of the negative reactions and in particular the strong imagery used in the visual representations of assessment – these will be discussed further in Chapter 8.

Although not a psychology discipline thesis, the British Psychological Society's Code of Ethics and Conduct (BPS, 2006) served as guidelines to inform the research, especially with regard to interactions with participants and confidentially concerning their stories. The rise of Internet-based research has led to additional ethical issues (Frankel & Siang, 1999) and these issues were considered throughout this research.

Language

The style of writing this thesis should now be self evident. I have chosen a style to include the reader in the discussions and to encourage them to feel part of the research. We have already discussed styles of language in education at the beginning of the chapter and it is intended that this style will suit a Constructivist approach and inspire the reader to think more deeply about the issues involved and also to question the research and its findings.

Whilst this is a scholarly thesis, I am not proposing definitive answers to the research questions, I am not looking for objective truth: I am seeking to use this thesis to explore storytelling as a method of understanding students' experiences of assessment and as a reflective tool. In doing so, I also wish to take a reflexive approach in my position as researcher and to enable my voice to be heard amongst

the text. I too am a student who faces assessment, assessment of these very words, and I feel my experience as a student conducting this research has an important place alongside the stories of my fellow students.

3.4 Summary

We have discussed the Constructivist approach to education and have explained its role in guiding the approach to this research. We have seen that a fundamental tenet of this approach is its value of the individual's experience and how they construct their representations of reality through their interactions with the world and their shared negotiations with others. We have shown how the Constructivist approach seeks to support these interactions and not to provide a 'one view' of the world or create an authoritative stance.

In the light of this approach, we have taken a largely qualitative approach to the research where the experiences of students, through the stories they tell, will encompass much of the data considered. We have described the methods used to investigate the research question and objectives and have discussed the difficulties with positivist approaches to enquiry in a largely qualitative paradigm. By exploring issues concerning reliability and validity within the qualitative paradigm, we have gone some way to alleviating potential criticism.

We have discussed how the research takes a Grounded Theory approach and how this approach best fits in with the overall Constructivist approach we have taken, though we have also urged caution as this approach can be open to criticism.

We have shown how we will immerse the research in storytelling methods, since storytelling is at the heart of the thesis, it seems only right to explore how storytelling methods can be used to support it. We have also shown how we will minimise potential ethical difficulties arising from this research by following professional ethical guidelines.

Finally, we looked at the language used in the writing of this thesis and discussed how this style is part of the overall Constructivist approach and how it also becomes

the 'voice' of the research in telling not only the story of the research, but also the story of the researcher.

Chapter 4 – 'StoriesAbout... Assessment' prototype design

'All stories teach us something, and promise us something, whether they're true or invented, legend or fact'
Stewart O'Nan

4.1 Introduction

This Chapter will describe how the web site which forms the focus for much of this research was designed. The model of storytelling in higher education on which this site was based will be described, as well as the reasons for choosing and adapting this particular model.

The story-based methods used in the design of this site will be introduced, together with a discussion of how they helped with the overall design of the site and evaluation of the design.

The rationale for the design of the interface will be presented and we will explore the completed prototype by taking a tour of its key features.

4.2 The storytelling model

The model underlying the prototype was based on McDrury & Alterio's (2003) five stage process of storytelling, previously discussed in Chapter 2. This model was chosen as it is specifically aimed at reflective learning in higher education and had previously been used by students in a practice-based profession (health care) where the concept of the critically reflective practitioner is also key. This model also maps onto Moon's five stages of learning (Moon, 2002) and stresses the importance of the experiential nature of learning. There is little work being conducted in this area and McDrury & Alterio's example appears to be the only developed model of storytelling as a reflective tool in higher education.

There are other models which take a narrative approach, such as an ASK system approach (Schank & Cleary, 1995a) which uses the metaphor of having a conversation with an expert. This approach was investigated but not used as an ASK system relies on the user asking questions of a body of existing knowledge. This approach could be construed as an Instructivist approach where the expert is the teacher who holds the knowledge which must be transmitted to the learner. The approach taken in this research was the opposite of an ASK system. This system has no existing stories (apart from an example story) and the body of knowledge is built up through students telling stories and responding to other students' stories through structured responses supporting reflection. This approach is Constructivist as it is the learners who provide a body of dynamically generated knowledge. The system is designed to support the telling of stories and the dialogue produced by reading them, therefore, the design of this tool was more of a 'TELL system' which enabled the telling of, and reflection on, stories (see Figure 4.1).
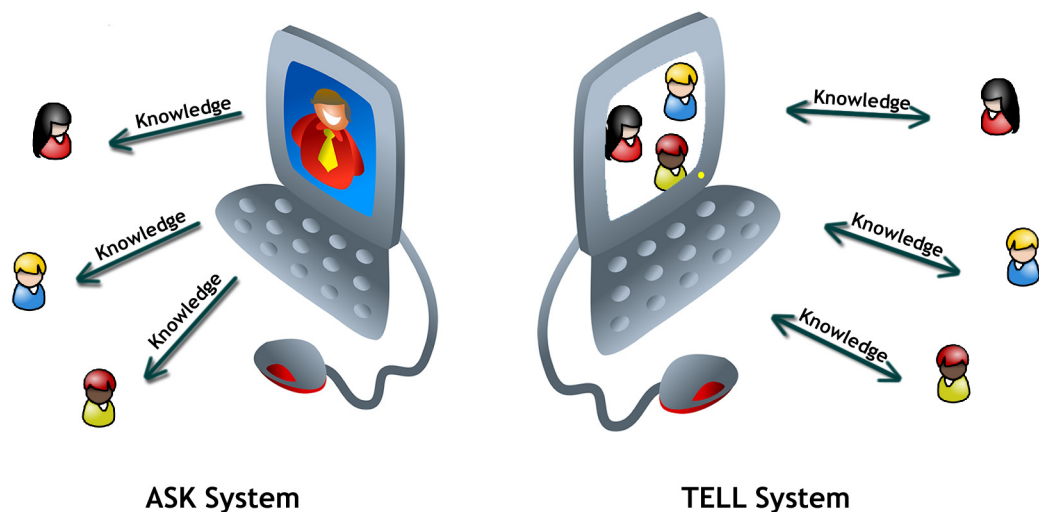

ASK System

TELL System

Figure 4.1.

ASK system versus TELL system

Standard discussion forums can provide a repository for the telling of stories, yet they lack structure, other than threading, and provide little in the way of frameworks or models for the discussion or specific support for the reflective process. As we have already discussed, simply providing a forum for discussion, e.g. blogging, discussion boards, etc., is not sufficient for reflective thinking to emerge. What is needed is a framework to guide reflective thinking.

McDrury & Alterio's (2003) model was originally designed for a face-to-face setting, so the challenge was to represent and support the key processes on-line without losing too much of the essence of the model. The five stages of the model will now be presented together with some of the difficulties faced.

1. Story finding

This is a difficult process to represent on-line, as it is a highly personal process an individual goes through to find a story they may wish to tell. The prototype did not take students through any process to help them find a story, it merely provided a forum for the story to be told. The incentive to tell a story included being given an opportunity to tell a story, to share it with other students and have other students provide their insights into those experiences. The key component of this stage was to ensure that a student visiting the site would want to tell a story.

2. Story telling

The story telling process needed to be clearly laid out on the interface and minimise cognitive overload (Rogers et al., 1994). As an important aspect of telling a story is that it will be 'listened' to, the system has to present these stories in a clear manner. The key component of this stage was to facilitate the story telling and story reading process.

3. Story expanding

This process enables questions to be asked about the initial story and important aspects expanded. Without synchronous dialogue, the immediacy of asking a question and receiving a reply is lost. An ASK system style approach could be appropriate here or perhaps a Sounding Board type tool (Schank & Cleary, 1995a) but the structured approach of McDrury & Alterio's (2003) model kept the thought process more focussed, thus encouraging reflection.

The key component arising from this stage was to ensure that some form of looking at the bigger picture and exploring issues was supported.

4. Story processing

This stage shares similarities with the story expanding stage as they are both looking more critically at aspects of the story. The multiple perspectives and opportunities for sharing similar stories enable further processing of the original story.

These two stages are all about making meaning and working with that meaning and comprise the heart of the model on which the processes of change and action are based. The two key components which arose from this stage seemed to be the need to support multiple perspectives and the exchange of similar stories.

5. Story reconstructing

This stage of the model again involved working with the details of the story. This stage looks at transformation, in particular, looking at how change could be incorporated into practice. The key component here is to ensure that students are given the opportunity to show what they have learnt from the story and what changes they may instigate as a result of reading the story.

4.3 The on-line storytelling model

The storytelling model was transferred to the on-line setting as we are using the concept of computers as cognitive tools in this thesis (Jonassen & Reeves, 1996). To recap, computers can be used as cognitive tools to promote reflective thinking which can lead to meaningful learning taking place. In doing so, these tools encourage the student to actively engage in the construction of ideas and meaning. These ideas and meaning are not stored on the system, but are a product of the students' interaction with the system.

To ensure there was a clear on-line framework to support story telling and responses, the following components from the original model were identified as representative of each of the stages:

- telling an initial story
- looking at multiple perspectives

- looking at different possibilities and situations
- telling similar stories
- considering what has been learnt

This enabled an initial story to be told and for four key types of responses to be needed. Figure 4.2 shows these responses.
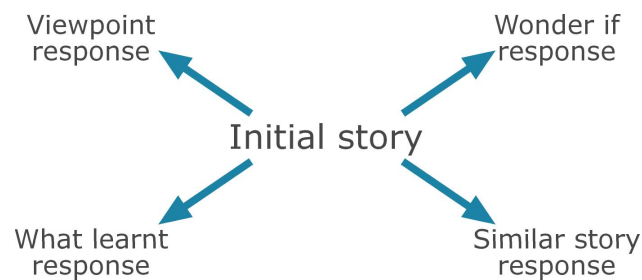

Figure 4.2.
On-line storytelling model

Viewpoint response – explores different viewpoints in the story. Considering multiple perspectives enables one to understand other people's world views and to learn from seeing a different point of view.

Wonder if response – considers different possibilities, it is like reading the story then thinking 'I wonder if…', for example, '…you could have done X instead of Y'; this enables different outcomes to be explored which can then be considered the next time a similar situation is encountered.

Similar response – allows students to tell of a similar experience which creates a bond and empathy with the student. Responding to stories with a similar story is the most common way we respond. Remember the last time you heard someone tell a story, you were very likely to respond by saying, 'Oh yes, that happened to me. Now, let me tell you what happened…' or something along those lines.

What learnt response – encourages students to think about what they have learnt from the initial story or from the responses to it. By actively considering what they

have learnt, they can apply this knowledge in future situations and may change their approach.

The relationship of McDrury & Alterio's adapted on-line model to their original model and Moon is shown in Table 4.1.

Table 4.1.

Relationship of 'StoriesAbout... Assessment' to McDrury & Alterio and Moon

Moon	McDrury & Alterio	'StoriesAbout... Assessment'
Noticing	Story finding	} Initial story
Making sense	Story telling	
Making meaning	Story expanding	'Viewpoint' story
Working with meaning	Story processing	} 'Wonder if' story 'Similar' story
Transformative learning	Story reconstructing	'What learnt' story

McDrury & Alterio's model is much richer than has been represented on-line. The simplification of their model arose from transferring it from a face-to-face setting to an on-line setting. Face-to-face interactions can be conducted in a more complex, conversational and natural style. Discussions naturally follow tacit conversational rules and principles of turn taking and co-operation, for example, using Grice's Conversational Maxims of quantity, quality, relevance and manner (Taylor & Taylor, 1990). Such naturalistic exchanges are difficult to replicate on-line and it is the design of the on-line medium that influences how on-line exchanges occur. In this case, a simplified approach was taken to investigate how effective the streamlined model would be. Levels of complexity could be added at a later stage.

4.4 Story-based approach

As the underlying tenet of this thesis is the efficacy of storytelling as a method, where possible, the design and research has used story-based methods.

Storyboarding

As the on-line storytelling model had five stages, all requiring personal narratives to be supported and viewed on-screen, paper-based storyboarding was used during the design process as a means of rapidly producing a number of designs. The presentation and grouping of these narratives proved to be one of the most difficult design challenges. Each of the five stages is linked and there may be multiple responses in any of the stages, so a potentially infinite/unknown amount of text has to be accessed (see Figure 4.3).
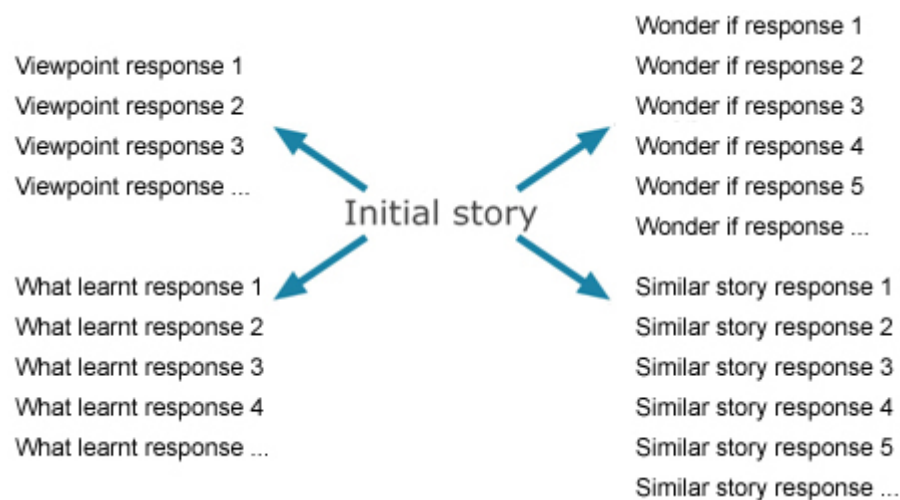
Figure 4.3.
Infinite number of responses

Some of the layouts for these designs had a conceptual nature to them, for example, responses 'growing' out of the initial story and linked together with 'roots' or 'branches'. These designs led to the interface feeling cluttered and the simplest most straightforward design was used for the prototype. An example of one of these previous layout designs can be seen in Appendix 4.1.

There was also an issue regarding whether students would be able to respond to the responses, but when this was tried out in diagram form (see Figure 4.4) it turned into a possible exponential explosion of proto-stories which would have made the interface unfeasibly unwieldy.
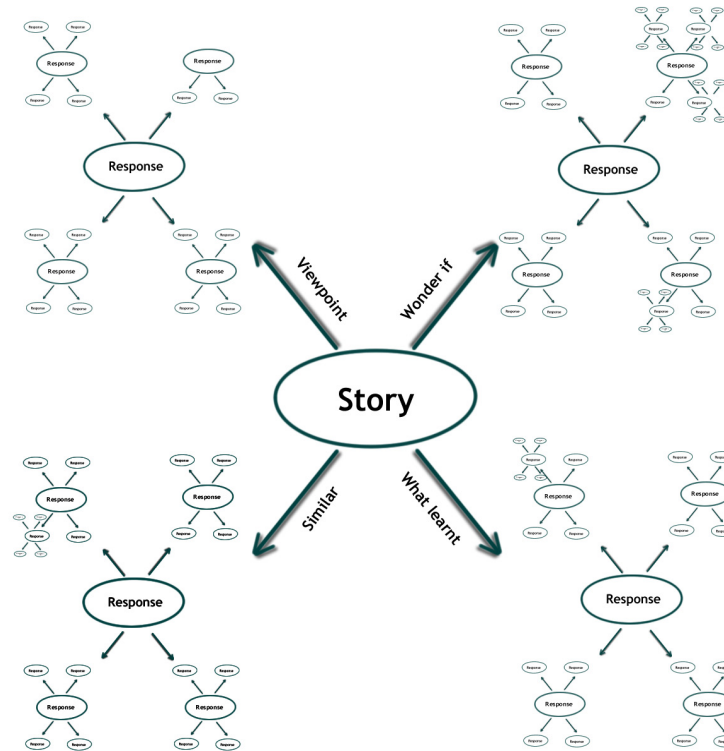
Figure 4.4.

Explosion of proto-stories

The students' potential interaction with the chosen design was then examined using a Cognitive Walkthrough (Lewis & Rieman, 1994). This revealed few difficulties so the design was kept. The Cognitive Walkthrough can be seen in Appendix 4.2.

Scenario-based approach

A scenario-based approach was used as its user-centred approach has much in common with the student-centred approach taken throughout this research. Scenarios are effectively stories about how people use and interact with a system. Carroll (1999) defines four key characteristics of a scenario: a setting, an agent or actor, goals or objectives and a plot. Using such an approach takes us away from devising abstract lists of requirements specifications which focus on the technology and leads to focussing on the user and asking questions such as: who they are, why are they using the system, what happens when they interact with the system, and so on. Scenarios enable us to look at the system from multiple perspectives and to engage in a reflective dialogue with our designs (Schön, 1983).

When designing a system it is easy to get wrapped up in interface issues such as where buttons and links will be positioned and consequently lose sight of the bigger picture, that is, the purpose of the system and its users. Writing stories, or scenarios, to illustrate how a student may use the system and what they may get out of the process, enabled the design process to concentrate on the student, their motivations for using the system and what they may gain.

Scenarios, of course, may not completely accurately depict real users and how they will actually respond to and interact with the design. Nevertheless, they are a tool which enables multiple perspectives and a reflective approach to be taken.

We will now consider one of the scenarios which was written to gain insight into how the students might use the site:

John – Undergraduate student

John has just started his studies and is doing a group project requiring self and peer assessment. He doesn't really know how to go about assessing himself – 'isn't that the job of the tutors?' He did not have many opportunities for self and peer assessment at school and is quite shy. He feels he has to say he likes what his friends have done or else they will be annoyed with him.

As quite a lot of the assessment marks go towards his degree, he wants to try and crack this problem, so he has a look at the stories on the web site. He finds some stories people have written about this problem and how they dealt with it – one of the stories has a link to web pages that might help. He is relieved to see that other students have had similar problems, it's not just him, and that their stories are similar to his.

This story enabled the user, the student, to be focussed on, revealing the reason why they may visit the site and what they may get out of it. This particular scenario focussed on John being relieved that he was not the only one who felt the way he did. As we will see in Chapter 5, students were curious about other students' experiences and interested in comparing experiences.

Naming 'StoriesAbout… Assessment'

The name of the tool was specifically chosen to highlight its storytelling aspect and to provide clarity about what the purpose of the site was. Hence, 'StoriesAbout…' was chosen as the overall name, to provide clarity and simplicity, with the specific dimension of this research resulting in 'StoriesAbout… Assessment'. This enabled other 'StoriesAbout..' versions on differing topic areas to be included at a later stage. This also provided a succinct and easily remembered name for the site's subsequent URL – www.storiesabout.com.

4.5 'StoriesAbout… Assessment' tour

We will now take a tour of the prototype 'StoriesAbout… Assessment'. Figure 4.5 shows the home page to 'StoriesAbout… Assessment' which gives an overview of what the site is about. In the top right hand corner is an 'Assessment' button.
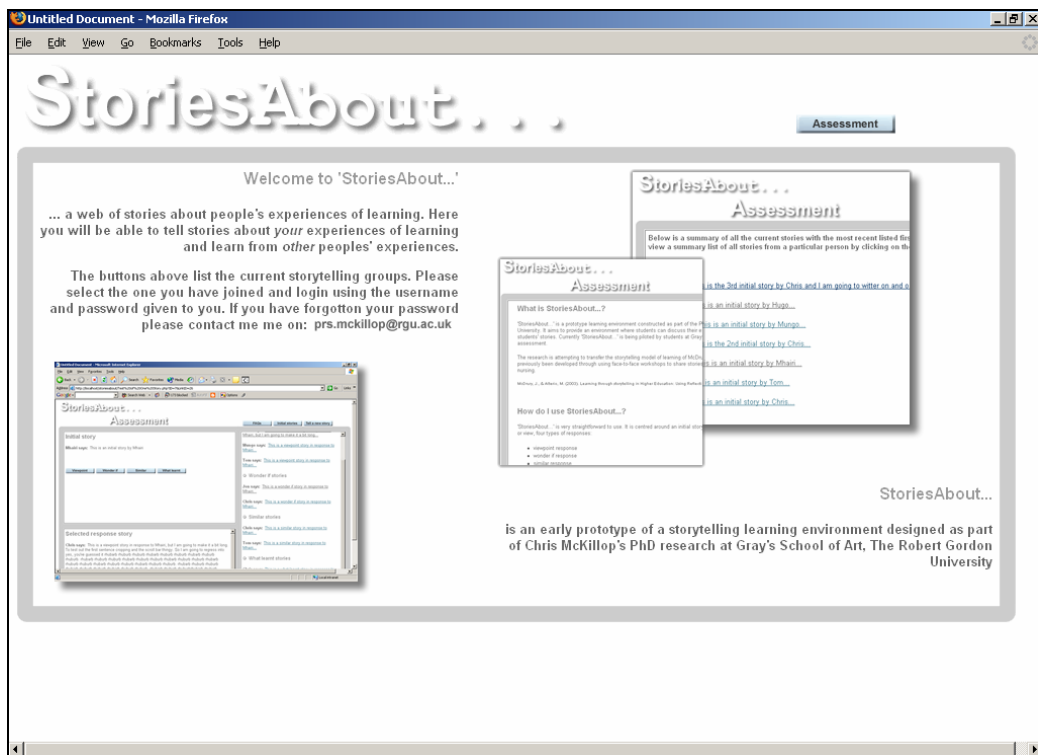

Figure 4.5.

Home page

Clicking on the 'Assessment' button brings up the log in screen shown in Figure 4.6.
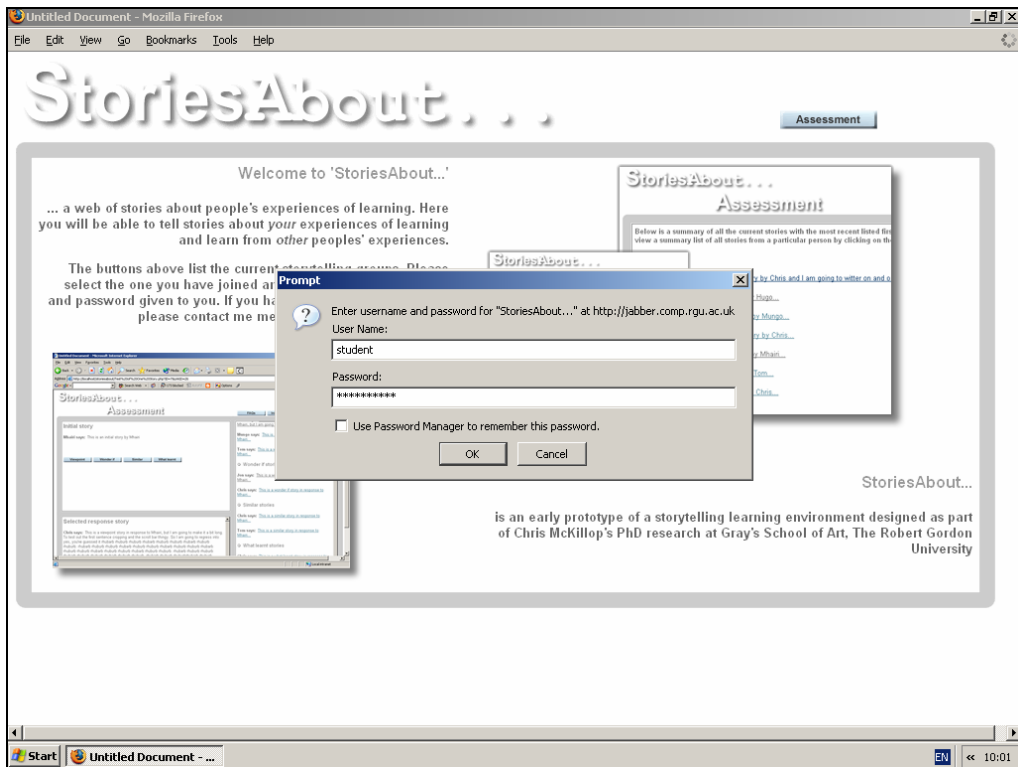
Figure 4.6.

Log in screen

After logging in, a list of all stories is shown with the most recently told stories first (Figure 4.7). The student's name with the first line of the story is shown and both are links. Clicking on the student's name will give a list of stories that particular student has told, and clicking on the first line of the story will go to the full story as shown in Figure 4.8.
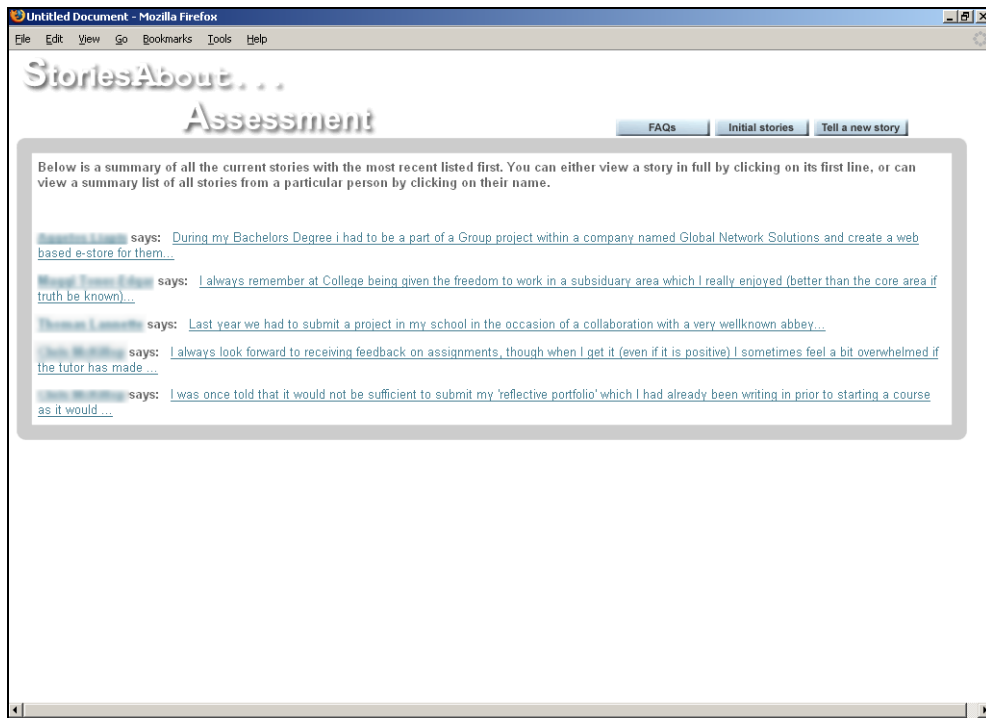
Figure 4.7.

Summary of story list

Figure 4.8 shows the full story in the top left hand pane. Any responses to this story are summarised in the right hand pane according to their response type (viewpoint, wonder if, similar, what learnt).
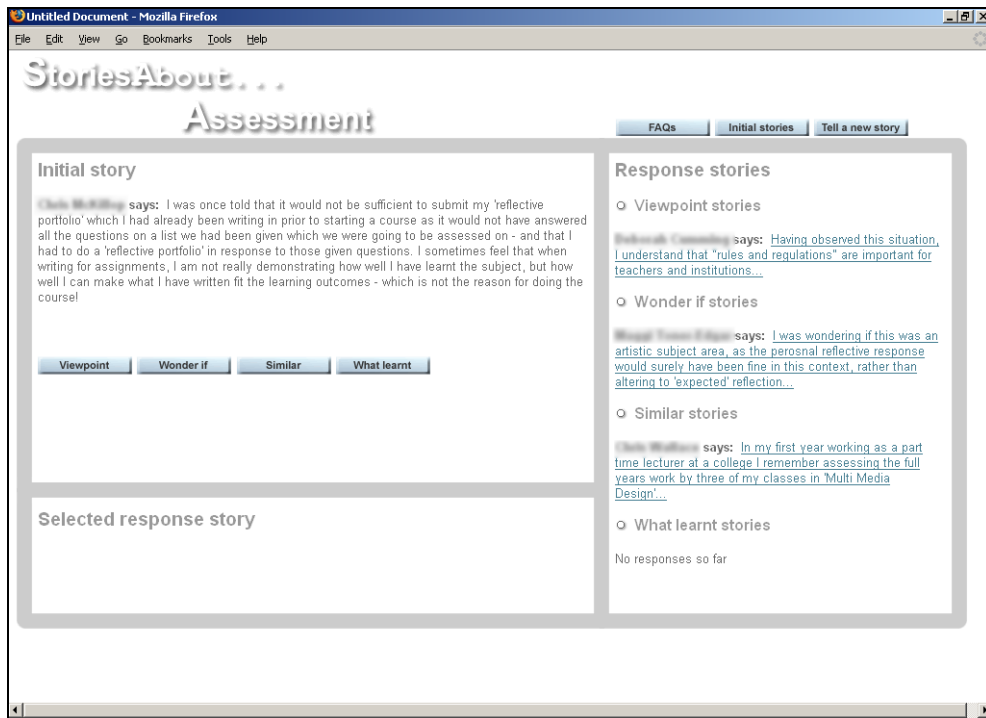
Figure 4.8.

Full story

Clicking on a selected response story, for example, the similar story, displays the story in the bottom left hand pane, as shown in Figure 4.9.
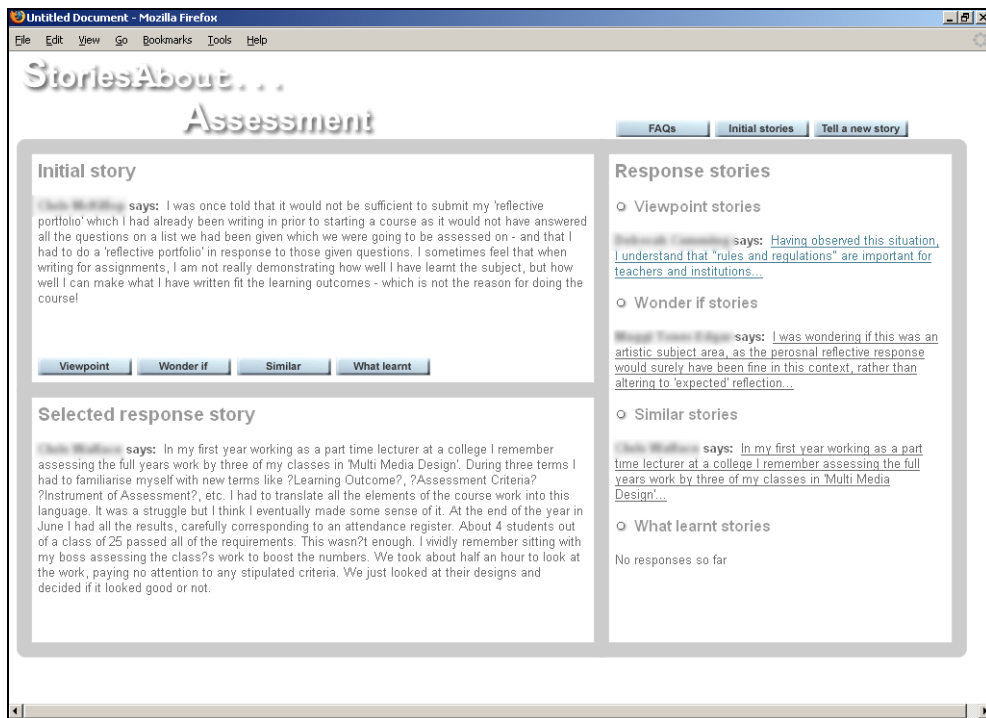
Figure 4.9.

Response story in full

Rolling over the buttons under the initial story gives a description of the four types of response stories that can be told (Figure 4.10).
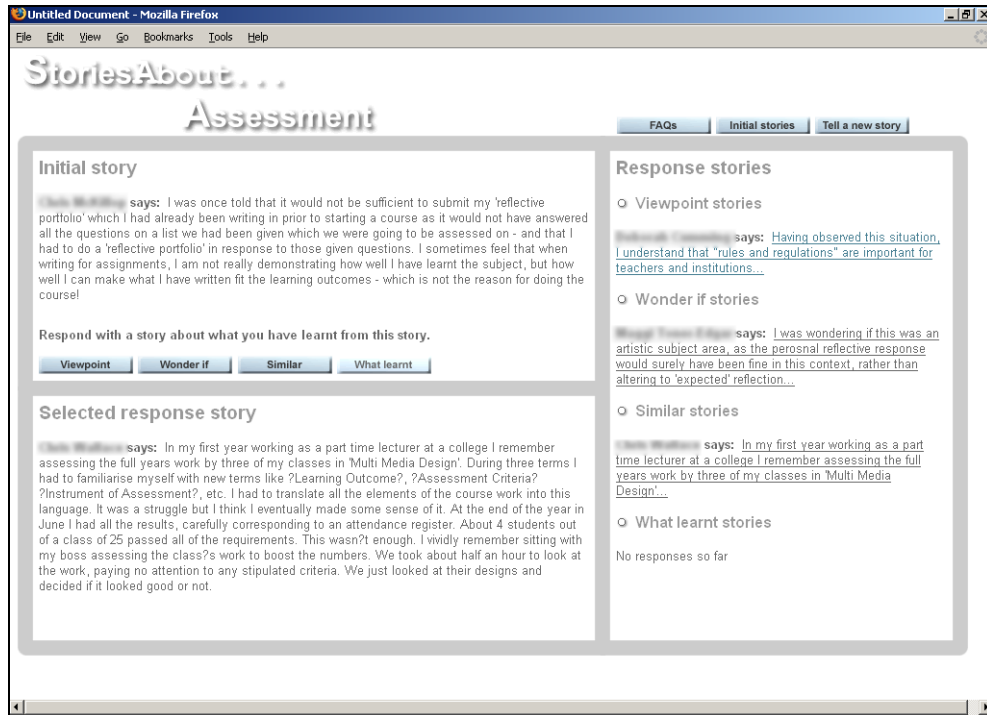
Figure 4.10.

Response buttons

Clicking on one of these buttons brings up a form where the response can be submitted. This page also explains what the particular response is. For example, in Figure 4.11, a what learnt response is described as:

'**What learnt response story:** Is a story about what you have learnt from this story. You may wish to respond by saying not just what you have learnt, but how you will incorporate this into your practice.'
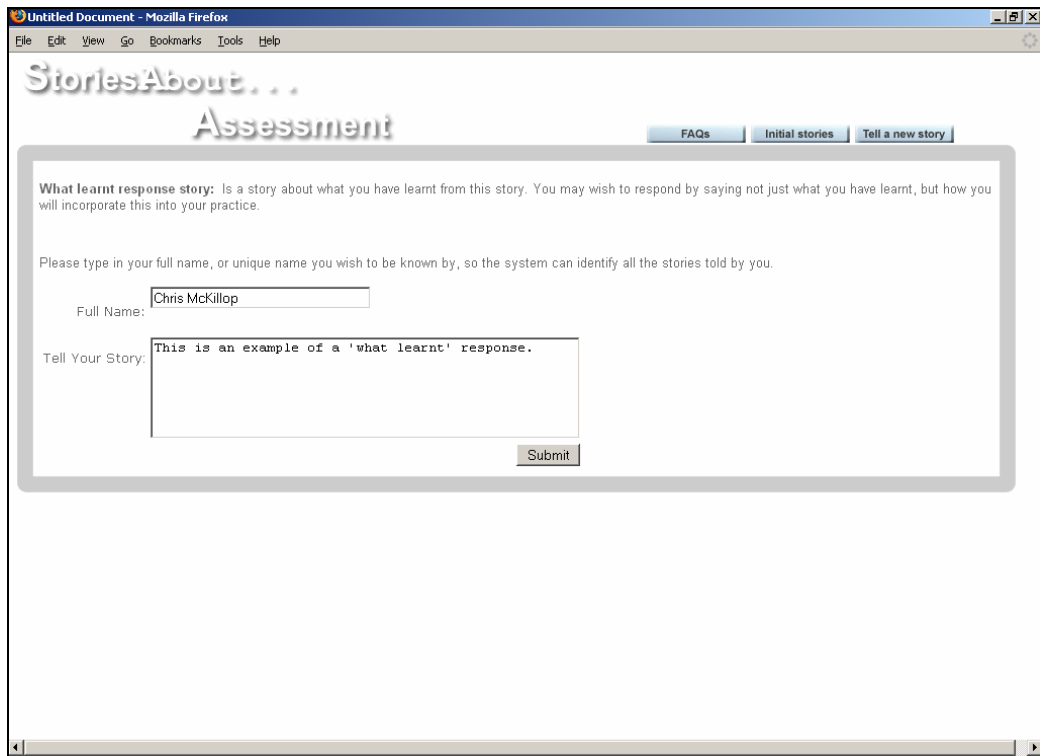
Figure 4.11.

Writing a response story

Once submitted, the response is displayed, as shown in the bottom of the right hand pane in Figure 4.12.
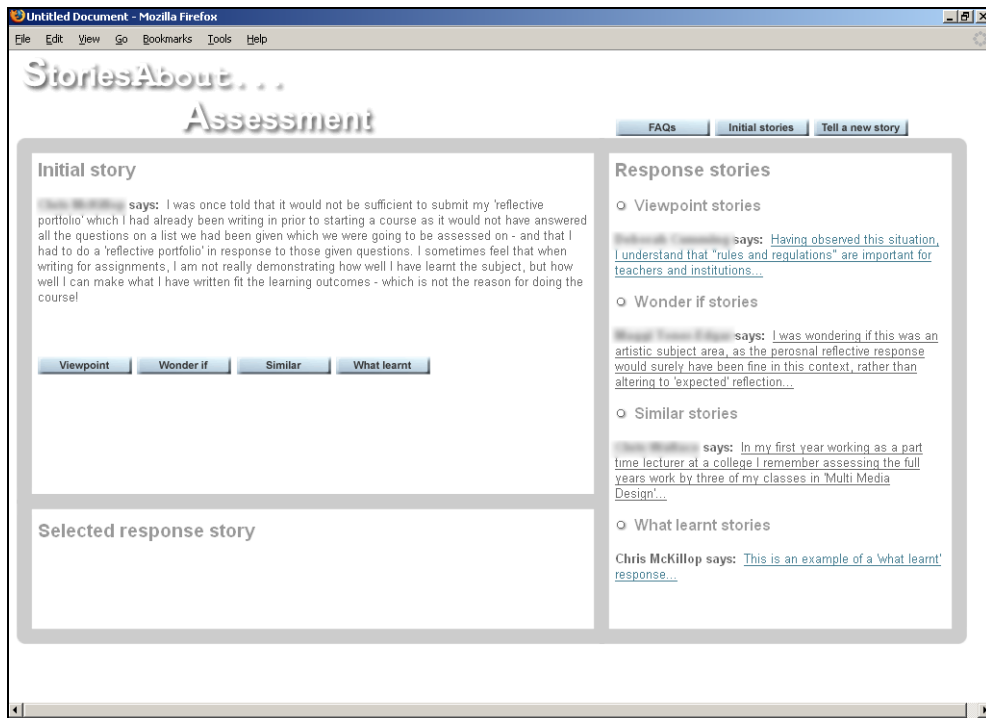
Figure 4.12.

Submitted response story displayed

Students can go back and view the list of all the initial stories at any point by clicking on the 'Initial stories' button which is always visible. To tell a new story, the student can click on the 'Tell a new story' button which brings up the following page (Figure 4.13).
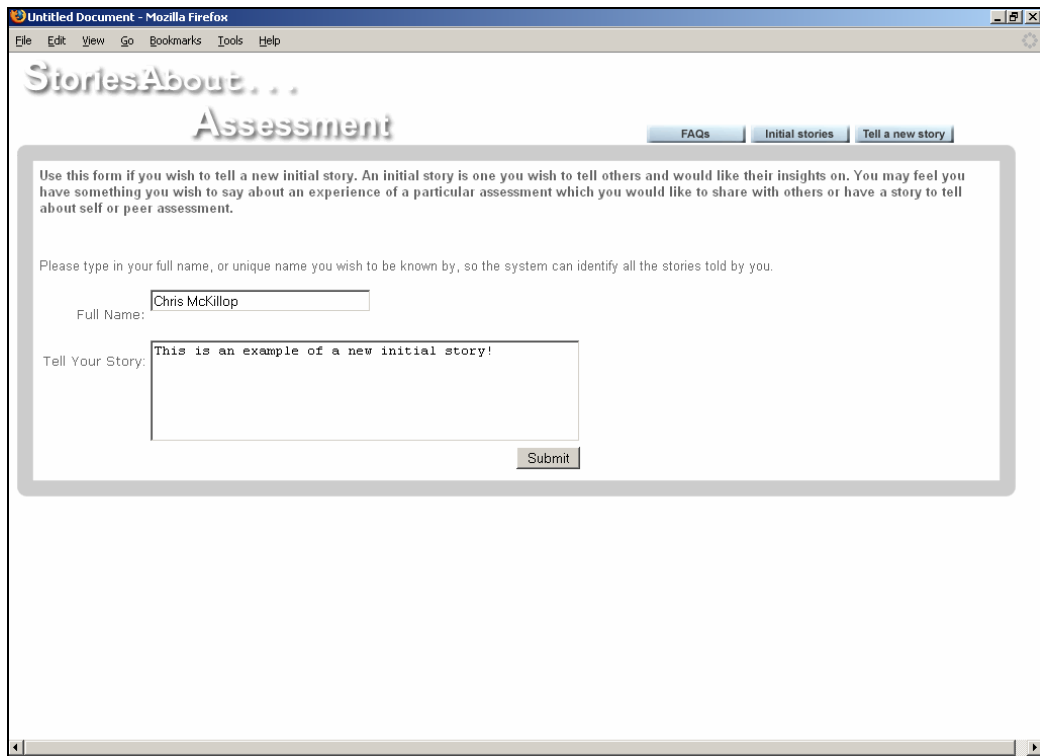
Figure 4.13.

Telling an initial story

After the story is submitted, the student is taken to the page listing the summary of initial stories. The submitted story is at the top of this list (Figure 4.14).

Figure 4.14.

Submitted initial story

An 'FAQ' button takes the student to a list of 'Frequently Asked Questions (Figure 4.15) about the site.

Figure 4.15.

FAQ list

4.6 Technical issues

There were some technical difficulties encountered in attempting to get the site up and running. The original intention was to have the site situated on an RGU based server and linked, by means of a button, to the GraysNet managed learning environment which students at Gray's School of Art were using. As a result of the GraysNet server failing, the site remained on an RGU server, hosted by 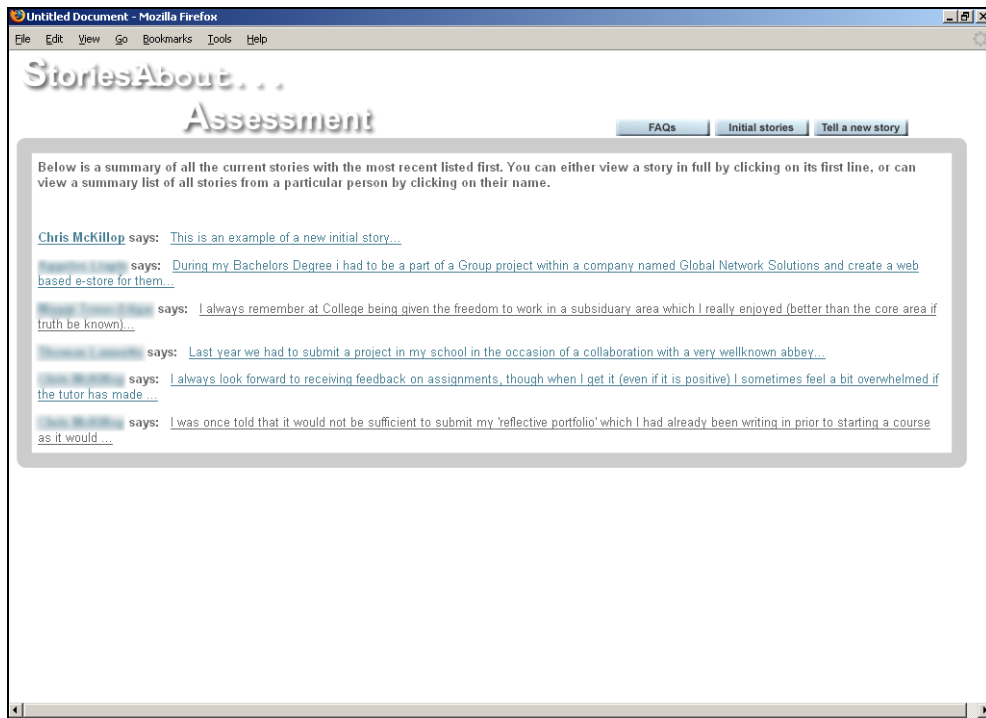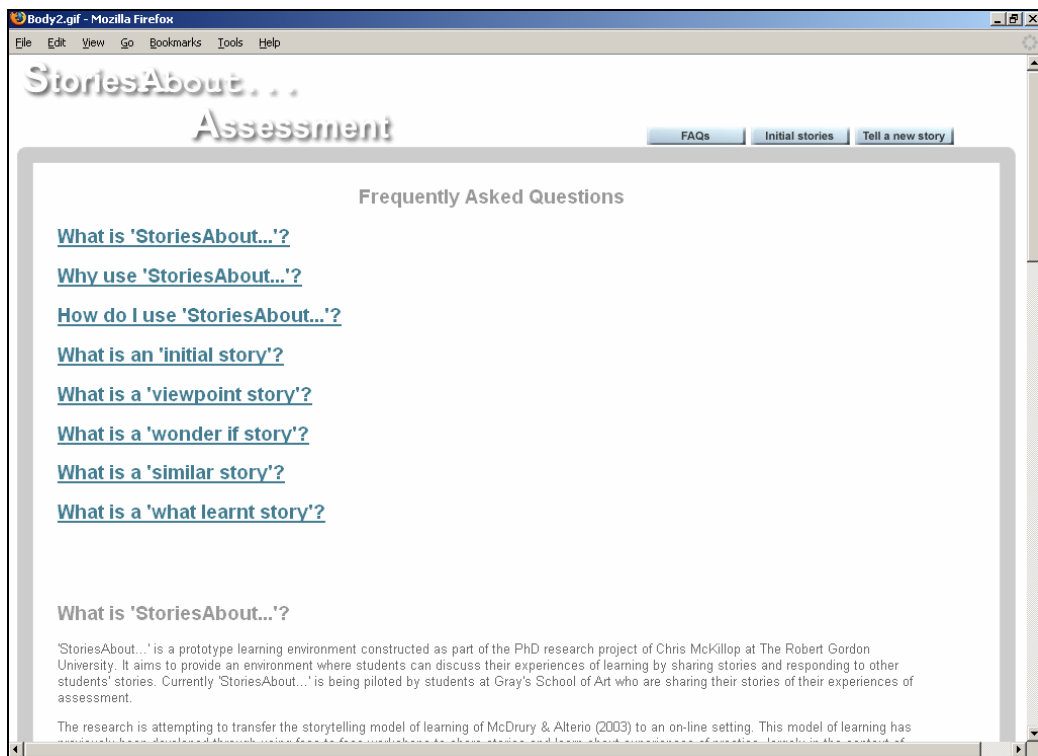the School of Computing, as a stand alone site not linked to any other site. The initial prototype stayed there for the remainder of the initial studies. Changes to the University's Intranet system (iNet) during the course of this research precluded its connection to the Intranet.

Further technical problems resulted in the site's situation changing. Unexpected RGU proxy changes resulted in newly submitted stories being unseen due to caching. At this stage, and to prevent any further technical problems outside of direct control, the site was moved to an external hosting service and personally maintained. No further technical problems were encountered.

Whilst this alleviated potential technical difficulties, it did mean that the site was further distanced from its connection with the University and from day to day on-line activities students were involved with.

'StoriesAbout… Assessment' colophon

The 'StoriesAbout… Assessment' site was designed and developed using Dreamweaver, Fireworks, PHP and MySQL.

4.7 Summary

This chapter has outlined the rationale for using McDrury & Alterio's (2003) model of storytelling as the basis for the reflective tool, 'StoriesAbout… Assessment', and has shown how the essence of the model has been attempted to be retained in transferring it to the on-line setting.

The development of the tool has been described, including the design decisions taken and evaluation techniques used. Decisions were taken to produce a tool which had a simple design where additional levels of complexity could be added later.

This chapter has ended with a guided tour of the main features of the tool to provide a feel for how the student might interact with it.

Chapter 5 – Students' experiences I

'The trouble with telling a good story is that it invariably reminds the other fellow of a dull one.'
Sid Caesar

5.1 Introduction

This chapter describes students' experiences with the first prototype of the 'StoriesAbout...Assessment' site. There were two parts to the study which took place at this stage. The first was an informal observation of undergraduate students using the site. The second was a study where postgraduates were invited to use the site. The postgraduates' experiences of using the site were investigated through a focus group and subsequent questionnaire.

We will consider the data arising from the study in the following way. We will firstly consider the stories that both the undergraduates and postgraduates told by discussing the key issues arising from the stories. In particular, we will focus on the emotional and negative aspects of these stories. We will then look at the discussions arising from the focus group where students discussed how they felt about telling their stories on-line and their motivations for reading other students' stories. We also get a glimpse here of students' real perceptions of assessment when they reveal their fears about this subject.

We then discuss the analysis of a questionnaire which was designed following the responses from the focus group. The questionnaire sought to provide additional information to understand how students felt about reading and telling stories on-line; provide information to assist with an effective redesign of the site; and to provide further insight into students' views of assessment.

We will end this chapter by discussing a number of themes that emerged as a result of this initial study which would have an impact on the rest of the research.

5.2 Student groups

The first prototype of 'StoriesAbout... Assessment' was used by two groups of students. The first was a group of 10 undergraduate Digital Media students who were informally observed using it during a lab class, and the second group were 20 postgraduate students comprising Masters and PhD students who were asked to use it during their studies then asked to complete a follow up questionnaire and attend a focus group. The postgraduate students were given a presentation on the research and an overview of the site, together with a handout (Appendix 5.1) and a follow up email which encouraged students to visit the site. All students during this part of the study were based at Gray's School of Art. Two separate sites were set up: one for the undergraduate Digital Media students, and another for the postgraduate MA and PhD students. The sites were kept separate and each group had their own username and password to log in. To keep this simple and to avoid the technical difficulties with the university's database of username and passwords, log in details such as: username – 'student', password – 'assessment' were given. Logging into a group ensured that the stories remained private and no one else could access the site.

Informal observation

An observation of a small group of students (n=10) in a lab class was chosen for the first part of this study as it enabled immediate feedback to be obtained regarding students' interactions with the system. The observation was intended to pick up any interaction issues not evident from the Cognitive Walkthrough, which would preclude the study from proceeding pending a redesign.

Undergraduate Digital Media students attended the lab class as part of their studies and were given a verbal introduction to 'StoriesAbout... Assessment', together with a handout and asked to visit the site at the start of their lab class. The handout (Appendix 5.2) contained the URL and log in details, an overview of the system, how to use it and its aims. Students were happy to visit the site as part of their lab class.

Students initially had trouble accessing the site as they were using their RGU log in details, despite being given the site log in details below the URL on the handout.

The log in details were pointed out to them and there were no further problems. Students stated that the site was straightforward and easy to use. No student expressed any problems with interacting with the site and a number of stories were told. Some students started telling stories straight away and some said they would think about it and go back to the site in a few days.

A follow up visit to the lab class raised no further issues and students were encouraged to continue using the system.

This informal observation session, together with the previously mentioned Cognitive Walkthrough, provided sufficient information that the usability of the system was sufficient to proceed with further groups of students using it.

5.3 Stories

A total of 10 stories were received during this initial phase of the research: 4 from undergraduates and 6 from postgraduates. Seven of the stories were about specific assessment situations and the rest consisted of comments on the assessment process. Six initial stories were received, 2 similar stories, 1 viewpoint response and 1 wonder if response. No what learnt responses were received. Throughout this thesis the stories, or extracts from them, will be presented as they were written, with grammatical or spelling changes only being made to facilitate their reading if necessary.

The analysis of the stories followed the Grounded Theory approach as described in Chapter 3, however, the coding was conducted by hand using coloured pens and paper as the researcher did not have access to the NVivo software at this stage of the research. Each story was gone through and key elements of the story highlighted using a coloured pen then labelled with its code. The resulting codes comprised key categories covering issues regarding the emotional content of the stories, learning and control, feedback, and the nature of assessment. These areas will now be discussed.

Emotional content

The overwhelming emotional content of the stories was negative in nature. Students expressed a great deal of frustration, confusion and even anger about their situations. This was often associated with a lack of control over the assessment process, which is discussed further below. Frustration was coupled with a sense that nothing would change so students just had to get on with the assignments as best they could. Some of these negative associations with assessment had lasting effects, in one case, some 20 years later.

The negative emotional aspects and lasting damage can be summed up by part of one student's story:

> "…My comprehension of this is still blurred even twenty years later, but the impact the unpredicted low grade had on my psyche still remains. So I am a great believer in clarity and transparency of objectives and criteria. But I am also a great believer in learning from experience."

At least this student was able to learn from that experience.

The one positive story concerned a student who left an assignment to the last minute. He met up with his fellow students, got drunk, and they believed they produced some of their best work as a result, although he did not mention how well they did in the assessment process, though perhaps that story should be reclassified as a negative example.

Learning and control

There were a number of factors outside of the students' control which impacted on their assessment and learning experiences. The difficulty with the lack of clarity or the prescriptive nature of the assessment criteria was often a problem. Students felt they had to make their own judgements as to how to approach a particular assessment as a result of this. This led to a tension between students wanting to take a deep approach to their learning, but being forced to take a surface approach because of the circumstances they found themselves in.

For example, the following story demonstrates how a student's expectation of the assignment leading to a deeper understanding was thwarted by a prescriptive assessment:

> "…My experience of the assessment which X talks about was, to begin with, full of expectations on how the assignment would help me gain a deeper understanding of the area. However, through the prescriptive nature of the assessment I felt that there was little room for self development. In the end I did what X did and followed the instructions to ensure a pass, rather than gain a deeper understanding and "learn" more."

Other aspects which were beyond the control of students which impacted on their assessment experiences, were: the lack of knowledge of a tutor, the lack of communication and contact with a tutor, a conflict between their course and another, lack of feedback and guidance throughout a course, being given an assessment task at the last minute which turned out not to be needed, being given work not relevant to their course, bad organisation of a course, lack of time. These stories reinforce the view that assessment is something that is done to students, something which they have little or no control over. They also illustrate the negative impact that this can have on their learning.

However, students did tell stories in which they were attempting to take control of their learning. Even in the stories where lack of control was an issue, students still managed to find a way through this in an attempt to find an outcome that would result in a positive impact on their learning experience. One student told a story in which he had learnt to check his own work after an unchecked URL unexpectedly took them to a porn site during a presentation.

Feedback

Feedback from assessments was a key issue in many stories. Whilst feedback was wanted, and highly rated by students, there were often difficulties with the actual feedback. Feedback on one course was felt to be rushed or there was not enough feedback being given. Students felt they were being unfairly criticised for not getting tasks correct, yet they had not been given sufficient feedback so they could

not correctly undertake that task. Whilst they recognised that they had to be independent learners, they needed some direction.

There was also a suggestion that whilst feedback was welcomed, it could be overwhelming receiving it as the tutor could have made many suggestions and it was difficult knowing which were the most relevant and which ones to follow up. Having the time to follow up these suggestions was also an issue.

The nature of assessment

The prescriptive nature of assessment and lack of clarity of criteria appeared to be problematic, partly arising from the lack of control issues previously discussed. From the stories provided, it seems that the nature of assessment is having less than desirable effects on the student's learning experience.

Postgraduate students with experience as tutors raised interesting issues regarding the nature of assessment. One told a story where he spent some time understanding the assessment process – the learning outcomes, criteria, etc – and the students were marked accordingly. This resulted in only a few students passing. The students' work was then re-marked according whether the tutors considered their designs were good and the criteria was ignored.

One response story touched on the nature of assessment in art and design and queried whether a more personal reflective nature to an assessment would have been more acceptable in an art and design context.

Postgraduate and undergraduates

This was a small group of students so a valid comparison between their stories is not really possible. However, one aspect was evident. The undergraduates' stories and responses were focussed on a recent experience which was causing them problems. Their stories were largely a descriptive account of the situation which they were complaining about. On the other hand, postgraduate stories covered wider ground.

As mentioned previously, some postgraduate students used their experience as tutors to give insight into other students' stories.

Stories and responses contained more reflective components, that is, students did not merely describe the situation, they provided an interpretation and insight into that story. They showed an understanding of how a particular situation had arisen and what they had learnt from it.

Other issues

There was a mix of stories of recent experience and older experiences. It was interesting that one story recounted an assessment experience which was 20 years old and still influential.

5.4 Focus group

Eight postgraduate students participated in a focus group. This was conducted after students had had an opportunity to visit the site and tell stories, but before the questionnaire had been sent out. The main purpose of this focus group was to gain some insight into how students felt about telling their experiences on-line and to identify key issues which may be facilitating or hindering the process. The focus group was semi-structured; key areas to discuss were written down and used as prompts throughout the session, though the students' discussions were allowed to take a natural course.

The focus group was recorded and transcribed, although the analogue recording was poor and prevented a full transcription. The transcription was analysed in a similar way to the stories, by going through the text line by line, highlighting key issues with a coloured pen and labelling them to code them. The main categories arising from these codes will now be discussed.

Assessment

It was felt by students that assessment is something you generally want to forget about afterwards and not something you wish to discuss. Although they felt there was some merit in discussing assessment experiences, it was suggested that this might be beneficial after a recent experience of assessment.

Assessment can be time consuming: more time can be spent preparing for assessments rather than spending time enjoying learning the subject. Assessment was being thought of in terms of being formally assessed (summatively) at school or university. There was little description of students using assessment on a day to day basis to assess their own work. Assessment was generally something which other people did to them or their work.

Anonymity and privacy

Because of the personal nature of assessment, students were worried about who would see their story and what they would think of it. There was a sense that their story about their assessment experiences was itself going to be 'assessed'. There were contexts where students would be happy with discussing an experience, for example, privately over coffee or in the bar, but making this public when it was a very private and personal experience seemed problematic.

Students felt that it would be advantageous to be anonymous, that way they could be freer to express their stories. They expressed a vulnerability associated with telling their stories publicly. Students were not required to give their names and could use whatever identifier they wished. The personal and private aspects of these experiences were stressed. If the assessment had not gone well then that was something difficult to make public, also if it had gone better than expected, then that was also felt to be hard to make public. The positive and negative dimensions to experiences are discussed more fully in the next section.

One student was even concerned about what would happen to the words he had written, for example, would they appear elsewhere as a quote with his name attached.

Assessment experiences appear to be highly personal experiences that students are reluctant to share in a public form, unless they are fully aware of, and possibly in control of, the context where they tell their stories. This could relate to the lack of control students have overall in their assessment experiences, perhaps leading to them not wanting to reveal their experiences for fear of a similar outcome. This is supposition as there is not enough data to identify an actual association, but talking about assessment experiences has been shown to have inhibitory factors.

Positive and negative stories

It was felt that negative experiences are the ones which stay with you longest and, as such, the stories told are more likely to be about negative experiences.

From a research point of view, looking at the negative stories was considered a good approach as the negative can often reveal the heart of the problem and provide pathways to the solution. We also learn from our mistakes so our negative experiences stay with us. There was also a comment about how people deal individually with the critique of assessment: some may feel 'punished' whilst others may be motivated by it. This would affect their perceptions of the story and whether they felt able to tell it.

Eliciting positive stories was also thought to be difficult as students may feel that they are 'blowing their own trumpet' and as a result may wish to play down a positive experience. However, asking for a positive story was regarded as positive in itself as it would encourage students to think about experiences that they could be proud of. Also, people often want to speak about their experiences from a more positive perspective. One student commented on a research method that only looked at the positive side and how this could help people become less timid and ashamed of being proud of their actions.

Students considered that asking for stories about learning (as opposed to specifically assessment) would elicit more positive stories, though they did not consider that students would tell assessment stories as part of their learning stories.   Whilst

assessment is considered to be at the heart of learning, based on the data gathered by this initial study, it may be seen differently by students.

On-line

The lack of the normal interactivity of a discussion made telling the stories difficult. Although stories can be responded to, this is an asynchronous system so the immediacy of a conversation is not present. Stories are usually told in more informal situations, so it is not a surprise that telling a personal story on a web site can feel slightly strange. The normal course of a conversation sparking off a story was lacking, the process here is more contrived, more formal. Some students were not put off by being asked to tell a story on-line: it was the subject, assessment, that had put them off.

A point was raised during the discussion about a number of students who told stories directly to me. These students were encouraged to put these stories on-line, but none of them were ever put on-line, despite being very interesting stories. Students felt that this may have been because the student had already told me the story and they had no need to recount the story again. Perhaps the cathartic element of storytelling was prominent.

Two students wanted to tell their stories during an 'Exposition' of PhD students' work. A computer was set up for people to view the research and tell stories if they wished to. These students liked the special nature of the event and felt that they were a part of the event by writing their stories during it. It did not feel like it was part of their normal day to day work. One of the students was disappointed when he could not tell his story as the machine had accidentally been switched off, even though he could have told his story in his office on his own computer.

A student raised an interesting connection between this research and blogging. Bloggers can reveal very personal details about their lives on their sites, so people can be comfortable with telling personal stories on-line and receiving comments

from them. He suggested that there were probably already blogs about students' bad experiences at school/university and who the bad teachers were[3].

One student commented that the interface was clear and uncluttered and that this was important when making any attempt at writing on-line.

Telling stories

As we have already discussed, the lack of person to person contact and normal conversational process made the telling of stories more difficult. Students felt that something to spark off telling stories would be beneficial. Topics or categories to focus thoughts were considered as one option, as was an initial story to start people thinking. This was felt to provide a motivation for telling a story.

Choosing the most remarkable story, one worth commenting on, was the motivation for one student. He concentrated hard on finding the most extreme or negative example as he felt stories were usually told only when there was something worth remarking on.

Knowing who you are telling your story to is important, as is what is going to be done with them. This could alleviate some of the issues regarding anonymity and privacy. As the students knew me, some were attempting to write a story for me.

When writing about an experience, students felt 'distanced' from it, as if the story was removed from the event. Whilst this appears to be a possibly detrimental effect, the act of distancing oneself from an event/experience is a part of the reflective process, so this could be a positive effect from asking people to tell their stories in this manner. In fact, the students who had told stories commented that writing their story had clarified how they had felt about that experience. One student commented that the process enabled them to detach themselves from the experience and reread what they had written. This process made them realise what was wrong about the experience they were telling a story about. It was, to an extent, a reflective and self-affirming process.

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[3] http://www.ratemyprofessors.com/

Reading stories

One of the strongest reasons for reading another student's story was natural curiosity, or 'nosiness'. Students read stories of people they knew and were interested to find out more about their experiences. One student was interested in extreme or controversial stories.

Words

Students were asked for words which would describe their assessment experiences and these were collated together with words which were used throughout the session to describe students' experiences of assessment.

One student felt the word 'assessment' sounded boring. It was felt to be part of bureaucratic language: an audit which fills you with anxiety. Someone sitting there making pluses and minuses. There was a distance to assessment, something remote which was giving you a cold, hard gaze. It was like a surveillance camera, as if the police were assessing you. Something cold and hard. Students felt exited about what was coming, yet sick to their stomach and scared. Assessment was felt like someone pulling you apart. You are being judged on your performance, based on someone else's criteria. There was a sense of relief following assessment, a tiredness.

These descriptions have two aspects to them. The first being how assessment makes you feel, which is essentially negative in nature and produces negative physical effects. The second being how assessment itself is being described. It is described as a very impersonal process which is far removed from the individual. The individual is the object of the assessment and assessment itself is a cold and hard object which is staring at you.

The evocative nature of these descriptions is clear and the manner in which assessment is described was followed up in the questionnaire which gathered words about assessment and learning.

5.5 Questionnaire

The URL for an on-line questionnaire (see Appendix 5.3) was emailed to all 20 postgraduate students who had been invited to use the system. A total of 10 responses were received, 6 male and 4 female. Students' ages ranged from 22 to 47. Most students (9) were very or quite confident about using computers, only 1 stated that they were not very confident. Half (5) of the respondents had told a story on the site.

The emphasis on the questionnaire was to ensure the site was easy to use and to find out what it was like for students to share their experiences on-line. Information was also gathered about additional features that could be added to the site and the questionnaire was used to follow up issues arising from the focus group, such as the language used to describe assessment and learning.

Using the site

Students (6) found the site very or quite easy to use. The only problem reported was that the machine hosting the site during an exhibition had been turned off and the student had wanted to tell a story as part of that exhibition. Only one student reported they had difficulties in actually writing a story: they were unsure who the audience for the stories were.

On-line student experience

How students felt about telling their experiences of assessment on-line to other people
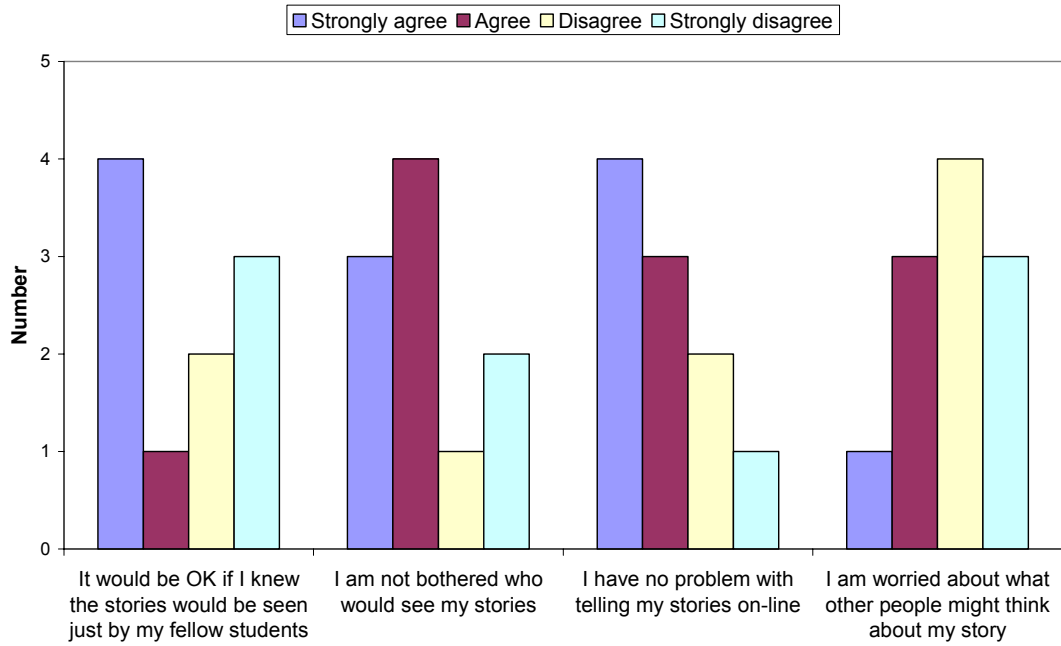
Figure 5.1.

Telling stories on-line

Although most students (n=7) did not seem to be bothered by who would see their stories, they were equally divided by the statement that it would be OK if their stories were only seen by their fellow students. They were fine about telling their stories on-line and most (n=7) did not seem to be worried about what other people might think about their story.

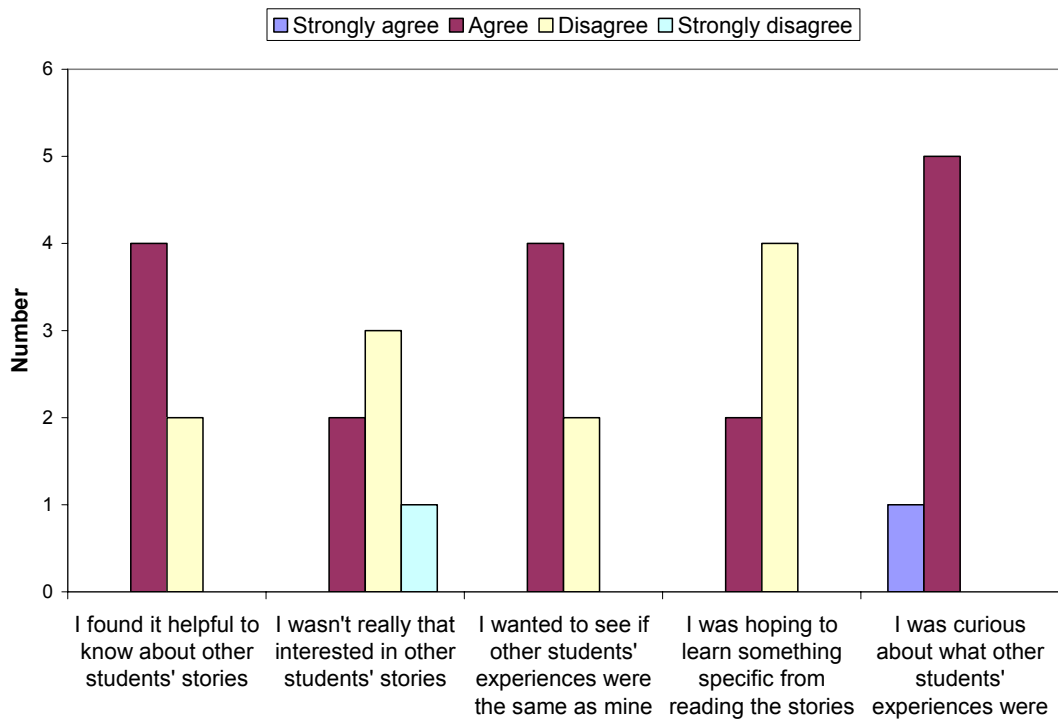**How students felt about reading other students' stories**

Figure 5.2.
Reading other students' stories

Students (n=6) were very curious about other students' experiences, though they were not necessarily hoping to learn something specific from reading the stories. Students (n=4) found it helpful to know about other students stories and 4 students agreed that they wanted to see if their experiences were the same as other students. Three of the students who found it helpful to know about other students' stories also wanted to compare their experiences with other students.

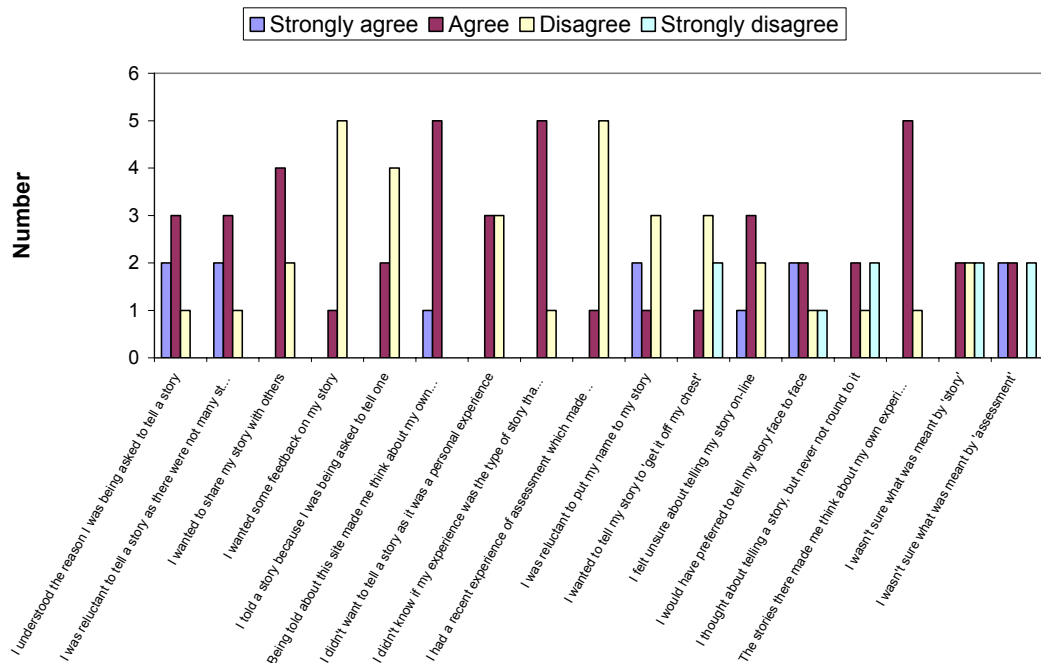## Telling stories about your experiences of the assessment process

Figure 5.3.

Telling a story

One of the interesting aspects of this question was that the stories had made the students think about their own experiences of assessment, and even being told about the site had made them think about this. One of the aims of this research is to engage students in reflection and discussion about their experiences of the assessment process. It would appear that the stories and existence of the site had sparked reflection, though the quality and outcome of that reflection was not gathered here.

Students (n=4) wanted to share their stories with others, though they did not necessarily want any feedback on their story (n=5). This is slightly disappointing as it was hoped that students would want to engage in a dialogue about their experiences. This finding is backed up by the lack of responses.

There were some interesting issues regarding what was being expected of them. A number of students (n=5) did not know whether their experience was the 'type' of story that was wanted on the site. For a few, up to 2, there was some confusion regarding what was meant by 'story' and 'assessment'. Five students did respond

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that they understood why they were being asked to tell a story. One student commented that they would have liked to know more about the purpose of storytelling and how it might benefit those using it, although the FAQs section did go some way to addressing this. One student was not sure what was meant by assessment, whether it was assessment in general or something more specific. Another commented that they did not think sharing their experiences of assessment would change approaches to assessment. One student was interested in the site in terms of their own research regarding experiential learning.

There was a reluctance to tell a story due to the lack of stories already there (n=5). There was a slight preference for telling stories face-to-face, 4 students as opposed to 2, and 4 students were unsure about telling their story on-line. Three students were wary about putting their name to a story, but 4 students stated they did not have a problem with this.

Two students thought about telling a story but never got round to it. A small number of students (n=2) told a story because they were being asked to, though 4 did not think this. It was hoped that students would naturally want to share their experiences and not provide stories simply in a mechanistic way, because they were being asked to. There was a mixed reaction to a reluctance to tell a story because it was a personal experience, with 3 students not wanting to because of this but another 3 were fine about this. It was thought that recent experiences of assessment might make students want to tell a story, however, only 1 student agreed with this while 5 did not consider that it was recent experiences that made them want to tell a story.

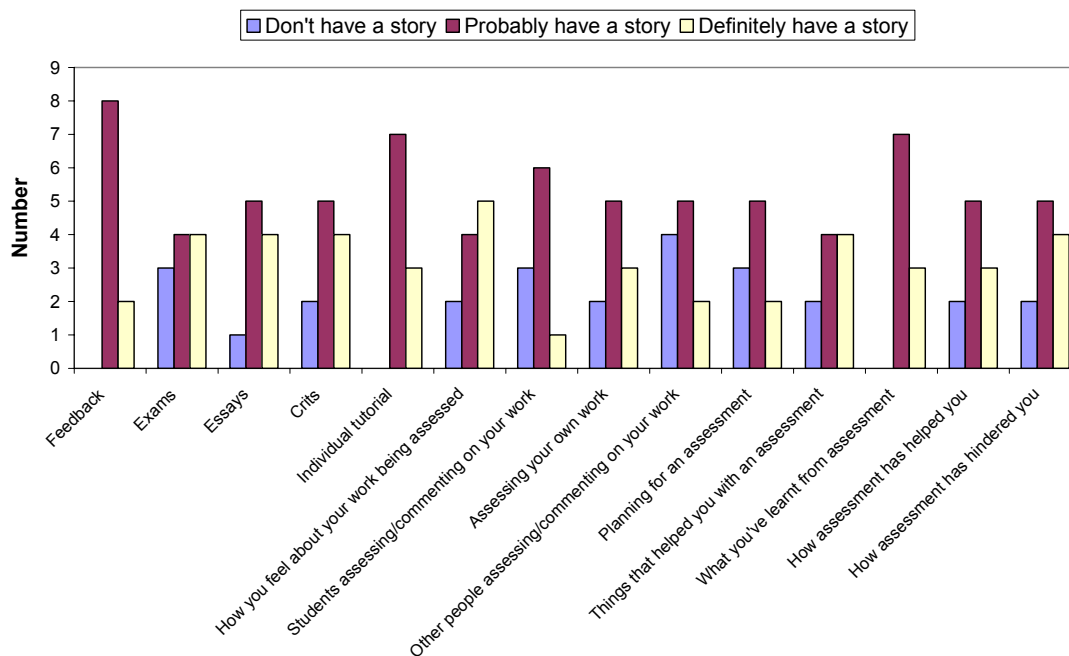**Areas of assessment students would like to tell a story about**

Figure 5.4.
Areas of assessments students would like to tell a story about

Students felt that they would probably, or definitely, have a story to tell on all of the areas of assessment given to them. Feedback, individual tutorials and what they had learnt from feedback were the most popular choices, though the others closely followed. If we look at the choices for the 'definitely have a story' category, we can see that telling a story about how students felt about having their work assessed was the most popular choice, though the subsequent choices were closely rated.

Other people assessing or commenting on your work was the category students felt they were least likely to have a story on. Exams, planning for assessment and other students commenting or assessing their work were the second least likely areas students felt they would tell a story about.

Students also commented that they would like to tell a story about the following areas of assessment: the teaching role, assessment stories outside of educational institutions for comparison, and the subjective approach of assessment.

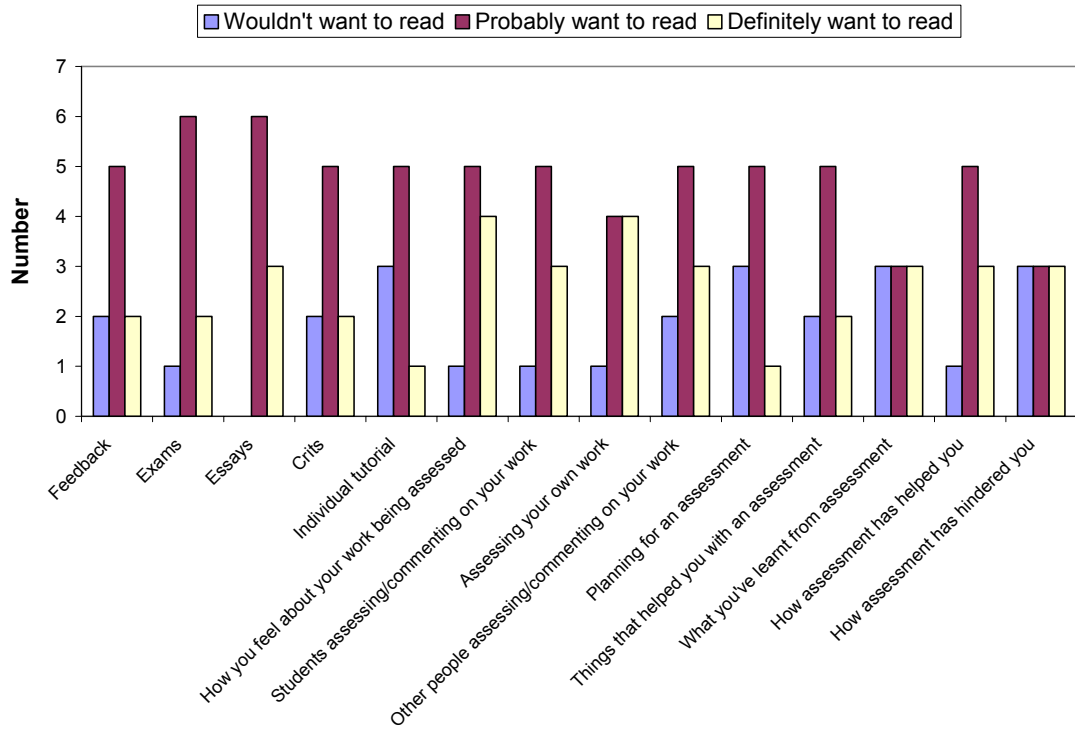# Areas of assessment students would like to read a story about

Figure 5.5.
Areas of assessments students would like to read a story on

Students wanted to read stories in all of the areas of assessment. Essays and how they felt about having their work assessed were the two areas most chosen. Exams, students commenting on or assessing their work, assessing their own work and how assessment helped them were the second most chosen areas. The two main areas that students felt they definitely wanted to read a story about were assessing their own work and how they felt about having their work assessed. Essays, students assessing or commenting on their work, other people assessing or commenting on their work, what they have learnt from assessment, how assessment has helped them and how assessment has hindered them were the second most highly rated areas that students would definitely like to read a story about.

Individual tutorials, planning for assessment, what they have learned from assessment and how assessment has hindered them were the areas students were least likely to want to read a story about.

Students also commented that they would like to read a story about the following areas of assessment: critique of artworks, the link between scholarship practice and professional practice, benchmarking, objective and criteria based assessment, sensational stories and students' stories of their assessment of them (student here was also a tutor).

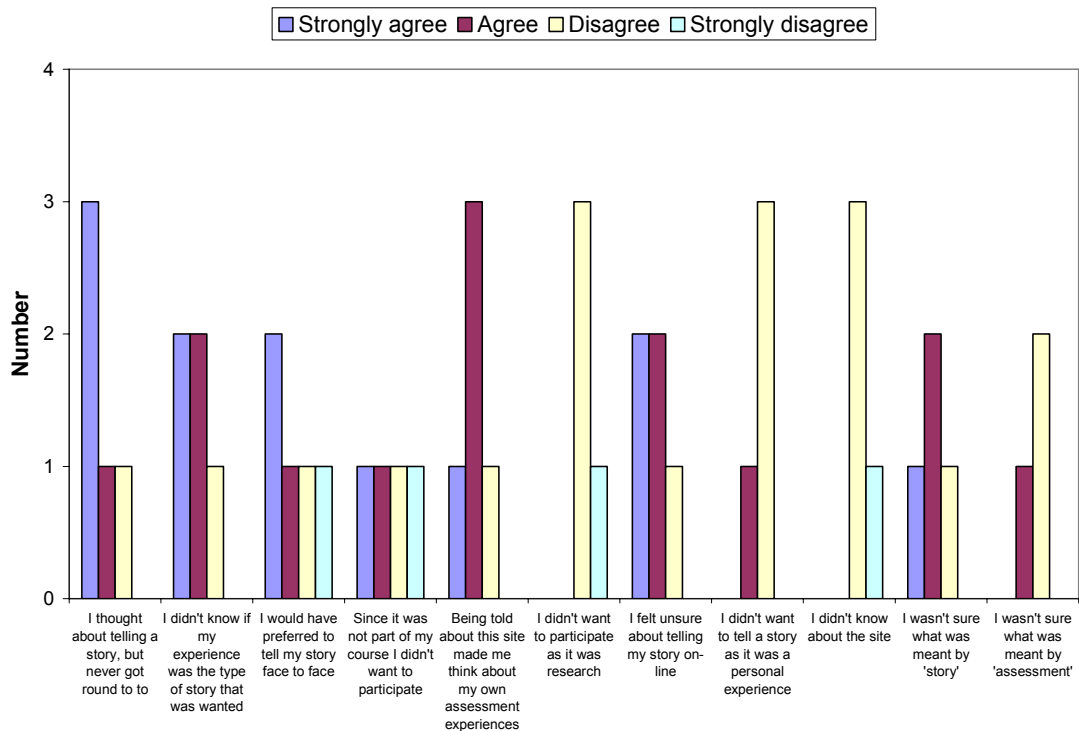## Students' reasons for not visiting the site

Figure 5.6.

Reasons for not visiting site

Students were asked to rate a number of statements about why they may not have visited the site. It was reassuring that no students stated they did not want to participate because it was a research project and that they knew about the site. This question confirmed that there was some confusion over the terms story and

assessment, particularly story. The uncertainty of telling a story on-line was again raised.
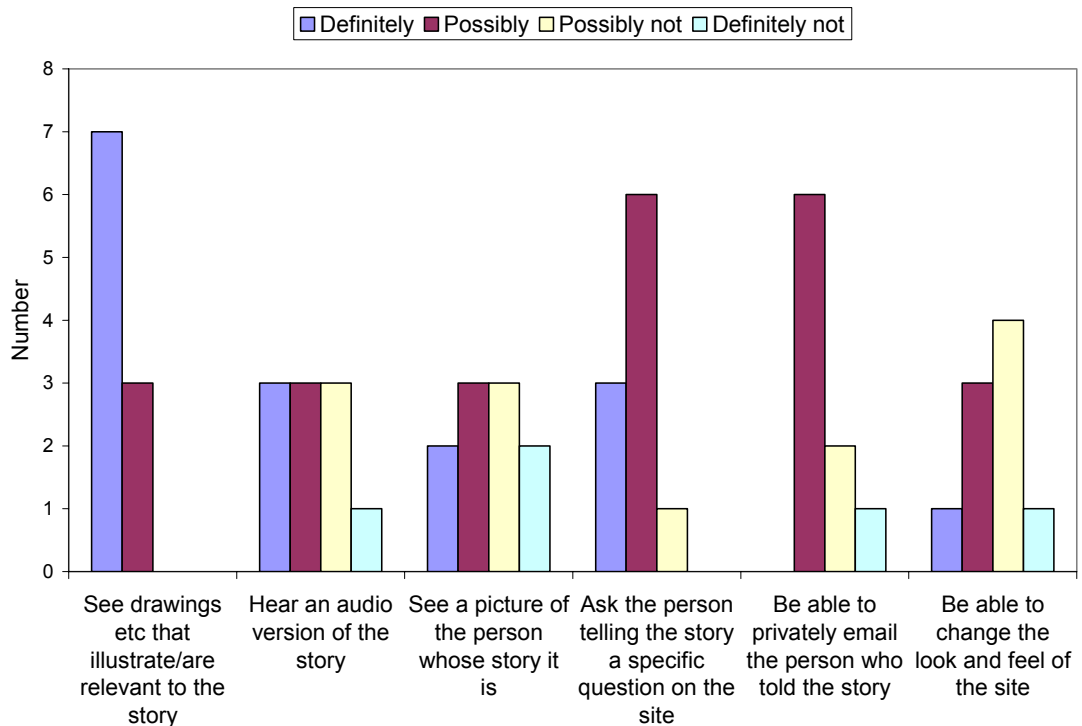

Additional features

Figure 5.7.

Feature list

All of the students (n=10) were interested in seeing drawings etc. that would illustrate or were relevant to the story. They were equally divided over whether they wanted to see a picture of the person and a slight majority (n=6 as opposed to n=4) were interested in hearing an audio version of the story. Being able to communicate with the person telling the story was desirable. Nine students wanted to ask the story teller questions on the site, and 6 wanted to be able to privately email the person. They were not that keen to be able to change the look and feel of the site.

Words to describe assessment and learning

Students were asked to give five words which described their experiences of *assessment* and five words which described their experiences of *learning*. These

questions were asked in response to discussions arising from the focus group which focussed on words used to describe assessment and the feeling that stories about learning, as opposed to assessment, would be more positive in nature.

The following words were given to describe **assessment**:-

Affecting	Enlightening	Self-consciousness
Ambiguous	Good	Sleep
Anxiety	Inadequate	Stressful
Bad	Informative	Stressful
Barely concealed sarcasm	Judgment	Stressful
Context	Naïve	Subjective
Criteria biased	Negative	Thorough
Criticised	Nerve wracking	Unfair
Degrading	Night	Unprofessional
Demoralising	Organized	Unsatisfactory
Demoralising	Policy	Useful
Determination	Positive	Value
Difficult	Purpose	Varied
Enabling	Relief	

There were a total of 41 words provided to describe assessment, two of which were given more than once (see Table 5.1).

Table 5.1.

Assessment words used more than once

Word	f
Stressful	3
Demoralising	2

The following words were given to describe **learning**:-

Applicable	Enlightening	Rapid
Beneficial	Enlightening	Read
Boring	Establishment	Repetitive
Challenging	Exciting	Rewarding
Challenging	Facilitate	Rewarding
Challenging	Funny	Self-driven
Collaborative	Future	Sharing
Continual	Growth	Snapshot
Continuous	Happiness	Strengthening
Creative	Inspiring	Struggle
Cycle	Life changing	Surprise
Destabilising	Lose track of time	Surprising
Difficult	Mistake	Understand
Difficult	Necessary	Understand
Empowering	Organized	Valuable
Enabling	Patchy	
Energising	Practice	

A total of 49 words were given to describe learning, seven of these were used more than once (see Table 5.2).

Table 5.2.

Learning words used more than once

Word	f
Challenging	3
Continual/continuous	2
Difficult	2
Enlightening	2
Rewarding	2
Surprise/surprising	2
Understand	2

The words were categorised as to whether they were inherently positive, negative, or neutral/hard to classify in the context of assessment/learning. Although this was a simple and subjective categorisation by the researcher, it provided a quick way to

look at the different ways in which students viewed their assessment experiences as opposed to their learning experiences. The negative aspect of their assessment experience was highlighted throughout the initial stages of this research, and this preliminary look at words to describe assessment and learning led to an expanded study, discussed in Chapter 7.
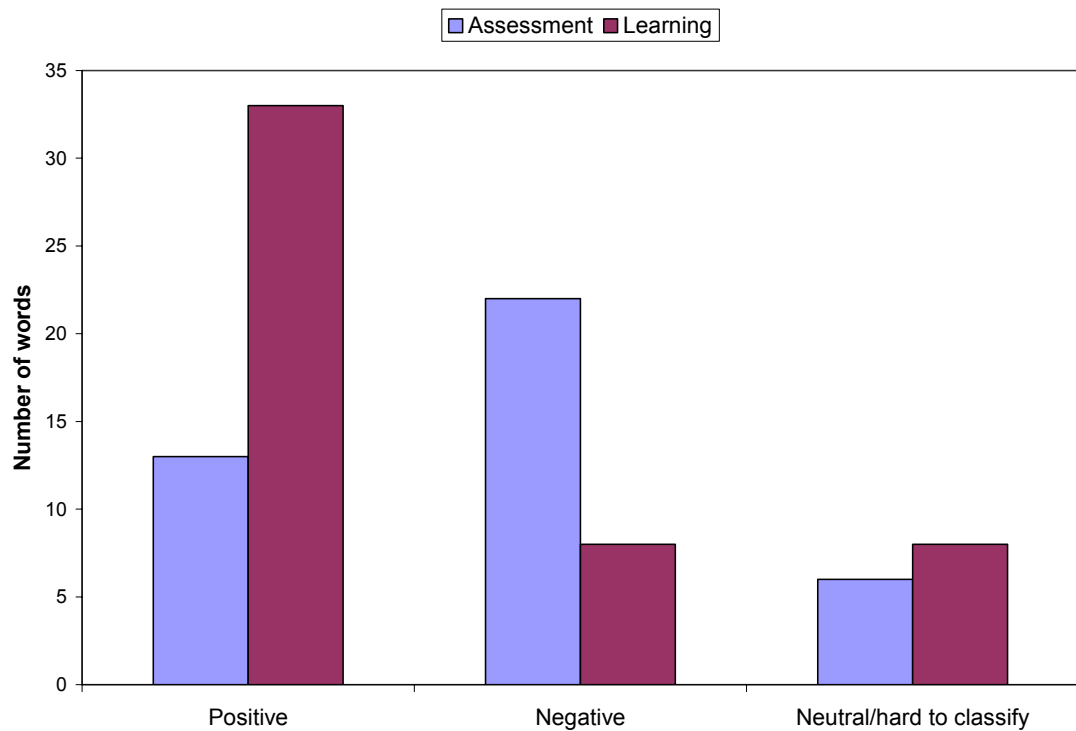

Figure 5.8.

Number of positive and negative words

As can be seen in Figure 5.8, more of the assessment words were negative (n=22) than positive (n=13), and more of the learning words were positive (n=33) than negative (n=8). There was a far greater difference between the number of positive responses as opposed to negatives for learning, implying that learning is an overwhelmingly positive experience. Although assessment comes across as a largely negative experience, there was a smaller difference between the negative and positive responses. That is, assessment has produced a more mixed emotional response, whereas learning has produced a more consistently positive response. Looking at Figure 5.8 from a different perspective illustrates this better (see Figure 5.9).
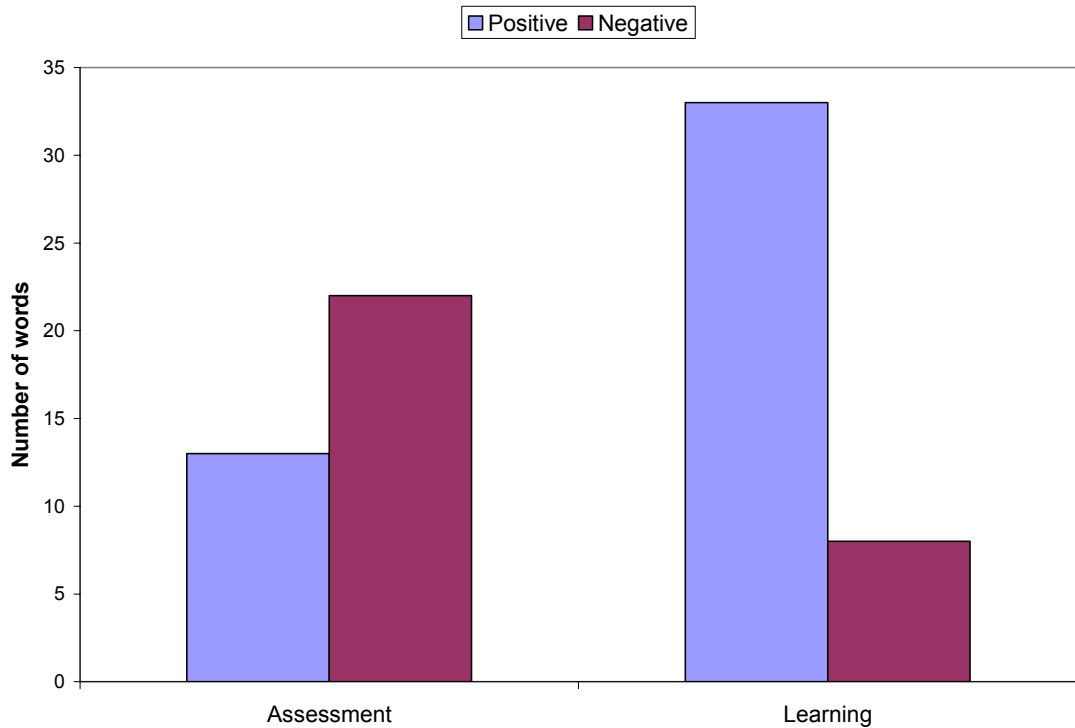
Figure 5.9.

Assessment and learning words

Stories

Two stories were submitted via the questionnaire:

> "I have a story on behalf of someone else which was very upsetting. A student who was exceptionally smart and knowledgeable on their subject, failed to disclose dyslexia. This resulted in the student being awarded a near miss, on an A-Level exam. This taught me a lot about our ideas of the perfect student and how easily misled we are by mispelt words, poor grammar and word counts, etc. It made me think about our perceptions of intelligence!"

and:

> "Having been involved in the formal educational assessment process in art & design in the UK and the US - from either side (both as assessed and as assessor) my opinion is that the context and prerequisites of assessment and some form of narrative feedback from the assessor are critical. More critical than the somewhat arbitrary point on the constructed bell curve between 'loser' and 'exceptional' - relative to the current student cohort -that it normally boils down to."

These two stories illustrate the range of experiences that people have regarding assessment. The first story is an insightful story about how the experience of a fellow student had led the student writing the story to query what it is to be intelligent. The second story is more a critique of assessment from the point of view of someone who has experienced both sides of assessment.

Examples of assessment

Students' examples largely concerned aspects of feedback and how they used it. They were focussed on the outcome of assessment more than the process of, or preparation for, it.

Feedback and improvement

Feedback was being used to improve work and practice, to help understand the subject area more fully and to 'anchor' learning. Supervisors' comments were used to guide progress, though judging what aspects to use could be difficult. One student compared their 'outcomes' with other students and considered this to be a form of feedback.

Confidence

An issue was raised in one example concerning confidence: that while students can be confident about their work, they may not be as confident about discussing it and the assessment process can help with this. Issues regarding confidence arose in the stories collected and this is discussed further in Chapter 7.

Subjectivity

The difficulty of assessing art and relying on the subjective interpretation of an assessor was commented on.

Communication

Asking tutors for guidance and asking questions was considered important by one student.

It must be noted that the small number of respondents make the above results difficult to generalise. However, they give an indication of possible trends within the

data. For the purposes of an initial study, these results were sufficient to give indicators as to how to proceed. The following section discusses these emerging themes.

5.6 Emerging themes

Telling stories

There were fewer stories told than anticipated. This was surprising considering the discussions concerning aspects of assessment which were taking place around me as I conducted this research. Some of those discussions were sparked off by this research, but many were simply the result of normal encounters that students have with assessment. Students were encouraged to convey these experiences on the web site, but this was often not followed through.

The lack of themes or existing stories seemed to be a problematic area. Students were unsure what to say and having more examples to spark off ideas was suggested. The lack of a direct conversational style was also commented on and although students could respond and immediately see their responses, the lack of initial stories made this process more difficult as there was less to respond to.

We usually choose the 'when', 'where' and 'why' of telling stories. We are used to the context in which we share our experiences and having some control over this, and although blogging is becoming more widespread, many people may not feel comfortable with discussing their personal experiences on-line. Lawrence & Thomas (1999) suggest that there is an inherent reluctance from many people to tell stories and that processes for enabling stories to be told need to overcome this natural tendency. Students need to feel empowered and supported in the telling of their stories. They need clear reasons for telling their stories and an audience who will listen and 'appreciate' the value of what they are sharing and who will provide appropriate and useful responses. With any new on-line learning environment there are both technical and social issues to address (Masterton & Watt, 2000), for example, achieving a 'critical mass' of users is essential for it to function

successfully. To be effective, students need to put some effort into using 'StoriesAbout... Assessment' in order to get the benefit out of it. It is not an 'oracle' providing all the answers to specific questions, but a 'bard' recounting stories (Masterton & Watt, 2000), where the making of meaning is up to the student.

Assessment appears to be a word which has many negative associations and images for students. It is seen as a formal and bureaucratic word. Students' stories may have been curtailed by this and this could be alleviated by providing more examples from a range of assessment experiences, including formal and informal.

Seed stories

Only one initial story was provided as an example. The story did not appear to provide enough scope to inspire students to tell their own stories. It may transpire that the seed stories are a more important aspect of on-line learning environments to mediate storytelling than this study had previously considered. Lawrence & Thomas (1999) have suggested that seed stories can have a strong effect on the type of stories that are told and stories which could be difficult to tell, such as stories where the teller has made a mistake, could be used as seed stories to encourage people to tell their stories who previously might have been reluctant for fear of losing face. 'StoriesAbout... Assessment' relies on student contribution, and when there are few stories, students may not be as willing to be in the spotlight.

A range of stories may provide the student with ideas about what stories they could tell and also how they might use the site to support their learning.

Emotional content

The stories largely covered students' negative experiences of assessment. These stories were felt to be the ones which stayed with you for the longest and have the most impact on you. Despite the negative aspects of their experiences, students were attempting to take positive approaches to their learning experiences, but often these attempts were unsuccessful due to factors beyond their control. The lack of control

students had over their experiences seems to be the main reason for their experiences being negative.

Using storytelling can be a way to address the lack of control that students feel over assessment by giving some control back to students, even if that control may be illusory. Langer (1989) suggests that giving people control over situations can result in positive and motivational feelings, whether that control is real or merely perceived. Through this, storytelling can give back a feeling of control to communities, helping them overcome the feelings of being disadvantaged mentioned earlier.

Given that the stories are largely about negative experiences of assessment, it seems likely that the primary reason for telling these stories is cathartic. Assessment is something that we have little control over as students, and situations in which we lack control can lead to strong feelings. McDrury & Alterio (2003) suggest that cathartic stories can inhibit reflective learning as they produce less dialogue. This could be an explanation for the lack of responses.

5.7 Summary

This chapter has discussed the first use of the 'StoriesAbout… Assessment' site. We have identified that the basic design of the site in terms of usability is not causing major problems for the students. We have considered how easy it has been to tell stories and found that a lack of themes and seed stories may have contributed to fewer stories being told. One of the key issues raised has been the negative and emotional content of the stories which led to further discussion and exploration during a focus group and in a questionnaire. Students' experiences of assessment are negative and this may have been a predictable response, however, the stories are illuminating the reasons behind this, in particular, the lack of control over their learning experiences. In addition, a disassociation between learning and assessment has been suggested through their experiences, which has been further confirmed through the negative words used to describe assessment in comparison to the more

positive words used to describe learning. Although a limited initial study, it has still raised a number of issues which will be taken forward in the following chapters.

Chapter 6 – Redesign and second prototype

'An autobiography is the story of how a man thinks he lived.'
Herbert Samuel

6.1 Introduction

Following the initial study, a number of key areas were identified which led to a redesign of the web site. The main change was the addition of a number of themes and seed stories to enable students to think about the types of story they may wish to tell. The chapter will describe the redesign of the site and the reasons for doing so. We will end the chapter by taking a guided tour of the newly designed site.

6.2 Key changes

Themes

A number of themes were added to guide and focus students' thoughts regarding the types of stories they might want to tell. Students had viewed assessment as a formal process, so themes covering more informal aspects of assessment, such as how they felt when other people assessed their work, were included.

These themes came from key areas of assessment being discussed in the literature and from issues raised by the research so far. The themes were chosen to cover the key areas of formal assessment which students encounter in their studies; to cover more informal aspects of assessment; to look at what students have learnt from assessment and what has helped or hindered them; and to include stories specifically related to the assessment of creative aspects of work in art and design.

The themes were presented on the web site as a list, as can be seen in Figure 6.1.

Themes:
⊞ **Feedback (6)**

⊞ **Coursework & exams (7)**

⊞ **Crits & tutorials/supervision (3)**

⊞ **Other people assessing your work (2)**

⊞ **Self & peer-assessment (6)**

⊞ **Things that have helped or hindered assessment (2)**

⊞ **Learning from assessment (5)**

⊞ **Assessing the creative nature of work in art & design (1)**

⊞ **Other (stories that don't fall into the given categories) (1)**

Figure 6.1.

Assessment themes

The number to the right of the theme indicates the number of stories which have been told in that theme. Clicking on the ⊞ button expands the theme to show the first line or so of each of the stories, plus the name of the storyteller (Figure 6.2).

Themes:
⊞**Feedback (6)**

⊞**Coursework & exams (7)**

⊟**Crits & tutorials/supervision (3)**

XXXXX says: My experience of assessment is quite daunting. All the tutors attention is apparently on you for the next 15 minutes, and thats ...

XX says: Young Mr Grace walks into a room where students have their work set out in neat presentations, he looks around and sees ...

XXXXX says: I found my last group tutorial frustrating. Hardly anyone said anything. We're here to learn, so unless there's full involvement, ...

⊞**Other people assessing your work (2)**

⊞**Self & peer-assessment (6)**

⊞**Things that have helped or hindered assessment (2)**

⊞Learning from assessment (5)

⊞Assessing the creative nature of work in art & design (1)

⊞Other (stories that don't fall into the given categories) (1)

Figure 6.2.

Assessment themes expanded

Clicking on the ⊟ button will hide the summary list of stories for the expanded theme. This technique was used to avoid the interface becoming cluttered and is a format that is widely used.

When telling an initial story, students were able to select the theme that they felt their story best fitted into by checking the corresponding radio button, as shown in Figure 6.3.

Theme:

- ○ Feedback
- ○ Coursework & exams
- ◉ Crits & tutorials/supervision
- ○ Other people assessing your work
- ○ Self & peer-assessment
- ○ Things that have helped or hindered assessment
- ○ Learning from assessment
- ○ Assessing the creative nature of work in art & design
- ○ Other (stories that don't fall into the given categories)

Figure 6.3.

Radio buttons to select theme for initial story

Seed stories

Each of the themes has an example seed story to illustrate the type of story which can be told under the category. One of the themes, feedback, also has a number of example responses to illustrate how the student could respond to a story. All seed stories are clearly marked as example stories. A range of stories, including positive and negative examples, was included to give students an indication of the types of stories which could be told. The focus group had revealed a possible reluctance to

'blow ones own trumpet' regarding positive assessment. It was hoped that by providing positive stories as examples, this may encourage students to consider the positive side to assessment and to encourage them to be proud of their achievements. This is also in accord with evidence from Lawrence & Thomas (1999) who suggest providing a story-base which can empower users and make them feel comfortable in telling their stories.

For example, the feedback theme story was quite positive:

> **Lily C says:** The last lot of feedback I got helped me to understand what I didn't know on the Contextual and Critical Studies module, and the areas I had a good grasp of. I was able to build on that knowledge and was able to apply it for the next assignment on another module. Good feedback motivates me, as long as it is constructive and this feedback was. As a result I did really well on the next assignment, so getting good feedback on one module helped me on another one. [Example story].

This seed story also contained some example responses to give an indication to students as to how they might want to respond to stories. In Chapter 5 we identified how students had felt unsure about what to say. The following are some examples of possible replies to the above initial story:

○ Viewpoint stories

> **Anette says:** I wish the feedback I received helped me, but it didn't. I received a comment on my essay saying I should be more analytical, but if I knew how to do that it would have been more analytical. I really think the tutor's feedback should at least give me an example of how to do this or even just some pointers in the right direction. I got a good mark and I suppose I am expected to be happy because I have passed. No, I want to improve, get better marks, but I need the feedback to help me with this. [Example story reply].

○ Wonder if stories

> **Chris McKillop says:** I wonder if we had the time to sit down and discuss feedback with tutors and others and actually understand what they are telling us. We could go

back and use that feedback to improve on our work and then see what they thought about those improvements. [Example story reply].

○ **What learnt stories**

Morag M says: Mmm.. maybe next time I get feedback I don't understand or don't think is helpful, I'll go and see the tutor and try and discuss it with them. [Example story reply].

Uploading files

A function to enable the uploading of files was added. This was included to allow students the possibility to upload images to illustrate their stories, perhaps with work which had been assessed. Students had stated during the initial study, described in Chapter 5, that they would like to be able to view drawings.

It was not known whether students would use the facility, and if they did, what sorts of images/files they would upload. Therefore, a range of file types were allowed to be uploaded – Word file, jpeg, png, gif, etc.

Appearance

The initial prototype was designed to investigate the usability and concept of the research and consequently less effort went into its visual appearance. The redesign attempted to make it more visually interesting and to conform to current web genres. A simple design was chosen to enable the reading and telling of the stories. As it was initially quite difficult to accommodate all the text for the initial story and responses on the interface, a simpler design was felt more appropriate. A bold and more complex design could have detracted from the concept of the site and made the stories difficult to read. Further development could enable a number of themed appearances to be chosen by the student and could incorporate more challenging designs.

Figure 6.4.

Screen shot of new design

Navigation

The menu options were placed horizontally across the top of the screen below the site's title (see Figure 6.4): a common placement that users would expect. Each of the options incorporated three circles mirroring the three dots following the 'StoriesAbout...' logo (Figure 6.5). These circles were used throughout the design to give a cohesive look and feel to the design.

Figure 6.5.

'StoriesAbout…' logo

Layout

The same basic layout was kept for the redesign as it was considered clear and easy to read by students. It had been difficult to come up with this initial layout, so as it had not raised criticisms during the initial study, the layout was retained.

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Colour

A minimal colour theme was adopted in a muted green/blue. This colour scheme was used throughout the site to give it coherence and consistency across all pages.

Logging in and anonymity

Students had initially been required to log in to each group. During the informal observation, students had attempted to use their University log in details despite being provided with a handout with the site's log in details. Other students had emailed me asking to be given the log in details again. Following the redesign of the site, the requirement to log in was taken out. This was done for two reasons; first, to avoid the log in confusion; and second, to allow greater access to the site.

Open access

Initially, the aim was to keep each group as a small group of individuals who knew each other and who may be more comfortable sharing stories with each other. However, from anecdotally hearing PhD students' oral stories, it appeared that since small groups were often co-located, these stories were often transmitted informally in everyday conversations, so an impetus for telling them on-line was missing: they had already told the story and the target audience had already heard it.

The natural curiosity to know other students' stories was evident during the initial study. The study following the redesign aimed to capitalise on this by allowing all students in art and design to share their stories. It was felt that a wider group with diverse experiences may encourage more students to visit and tell their stories.

Although this had the downside that the storytellers were less likely to be known and therefore it would be less likely to contact them for follow up studies.

6.3 Redesigned 'StoriesAbout… Assessment' tour

The home page can be seen in Figure 6.6. Each of the storytelling circles can be accessed from the list in the right hand pane. There are now no restrictions regarding who can log in.
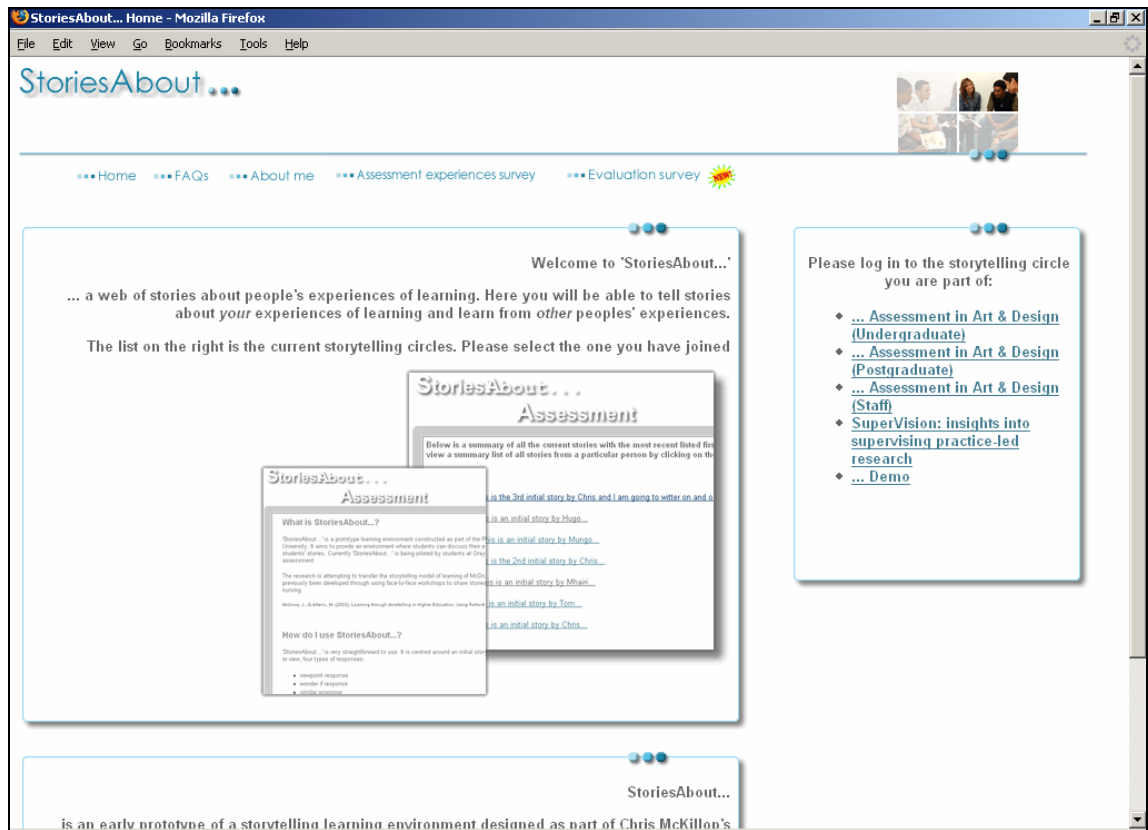

Figure 6.6.

New home page

Clicking on one of the groups, for example, '…Assessment in Art & Design (Postgraduate)' takes you to the following page showing the themes (Figure 6.7).
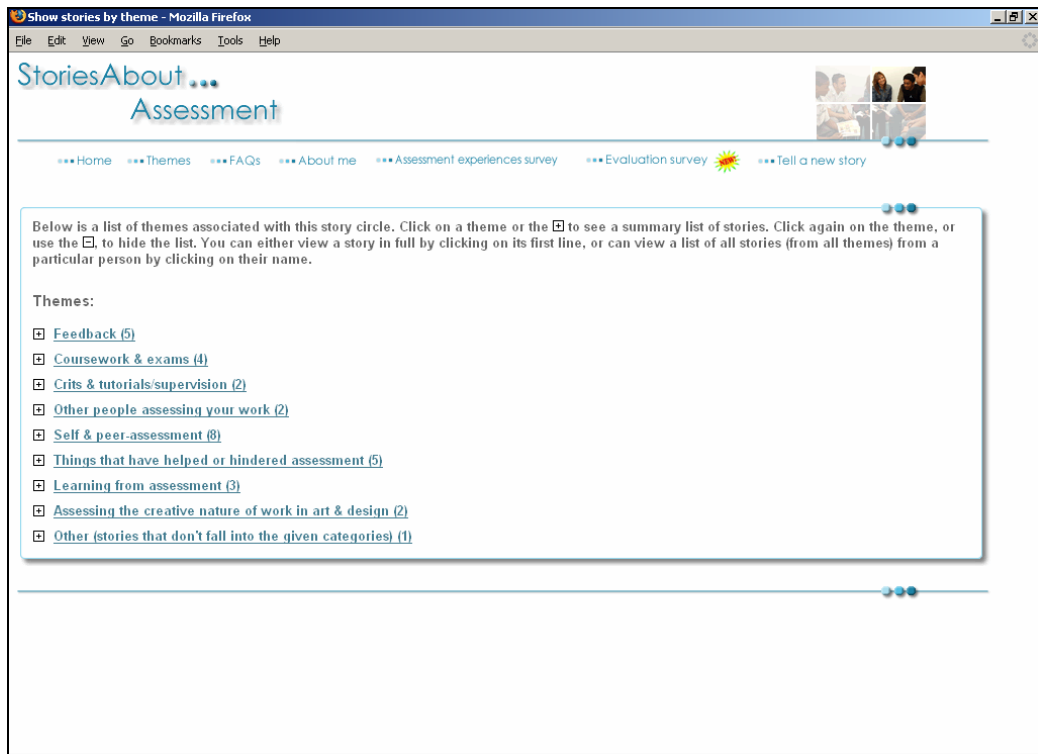
Figure 6.7.

List of themes

Clicking on one of the themes, for example, 'Assessing the creative nature of work in art & design', expands it below to show a summary of all the stories under that theme (Figure 6.8).
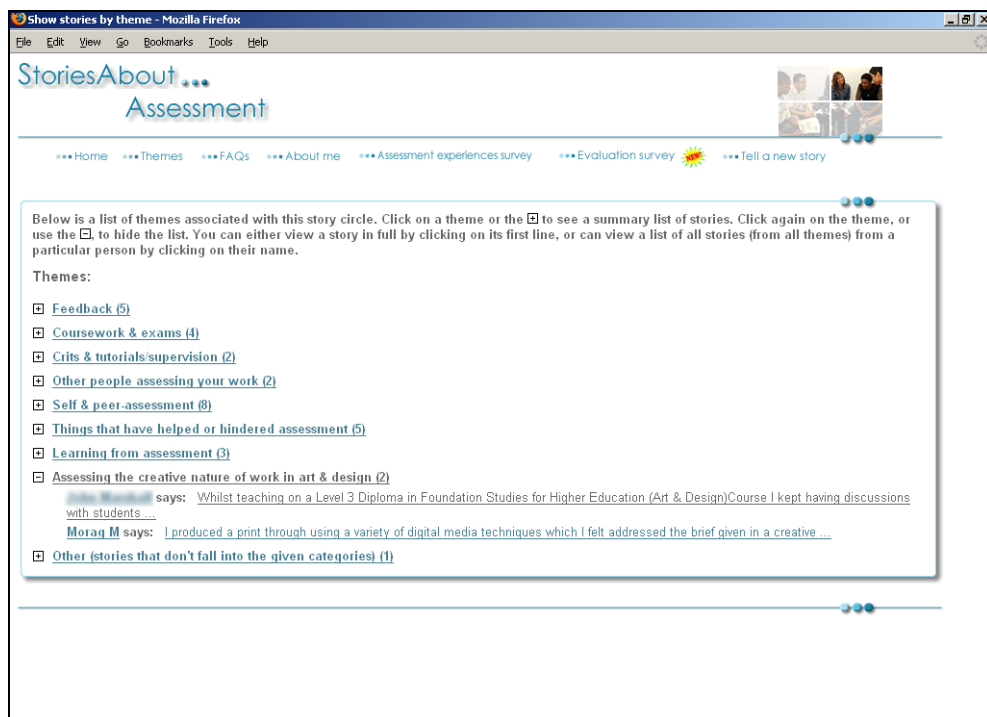

Figure 6.8.

Expanding a theme

If we click on the first story in this list, the story is displayed in full in the following screen (Figure 6.9). As can be seen, the basic layout has been kept the same.

Figure 6.9.

Displaying an initial story

The response stories, summarised in the right hand pane, can be clicked on and viewed in the same way as the previous version of 'StoriesAbout… Assessment'. The thumbnail image next to the initial story can be clicked on to view it full size (see Figure 6.10).
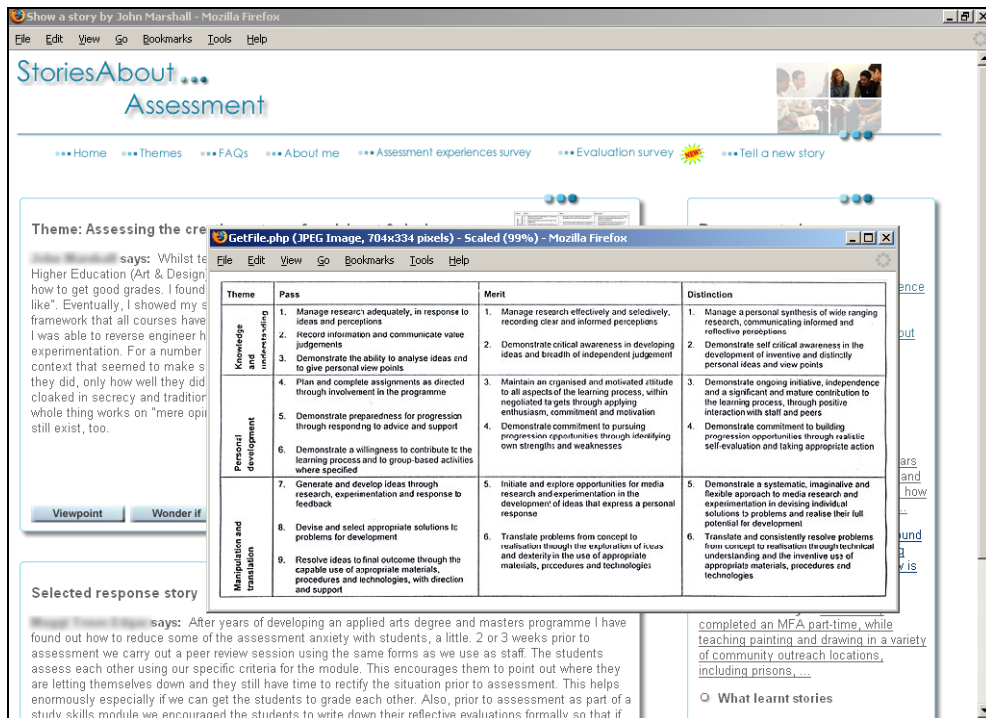
Figure 6.10.

Viewing an image

Telling a response story is done in the same way as the first version. FAQs are accessed in the same way and have been modified in accordance with the new design. Room for expansion in the menu bar was incorporated into the design. This enabled links to questionnaires to be incorporated as needed, plus an 'About me' section was added.

Telling a new story was similar to the first version, with two additions: a Word file or picture could be added via the 'Browse' function; and students had to choose which theme their story corresponded with before submitting a story (Figure 6.11).

Figure 6.11.

Telling an initial story

If students failed to select a theme, they were prompted by a dialogue box (Figure 6.12). This helped to focus students' thoughts on what theme their story was closest to and ensured that all stories were submitted under a theme to help categorisation.
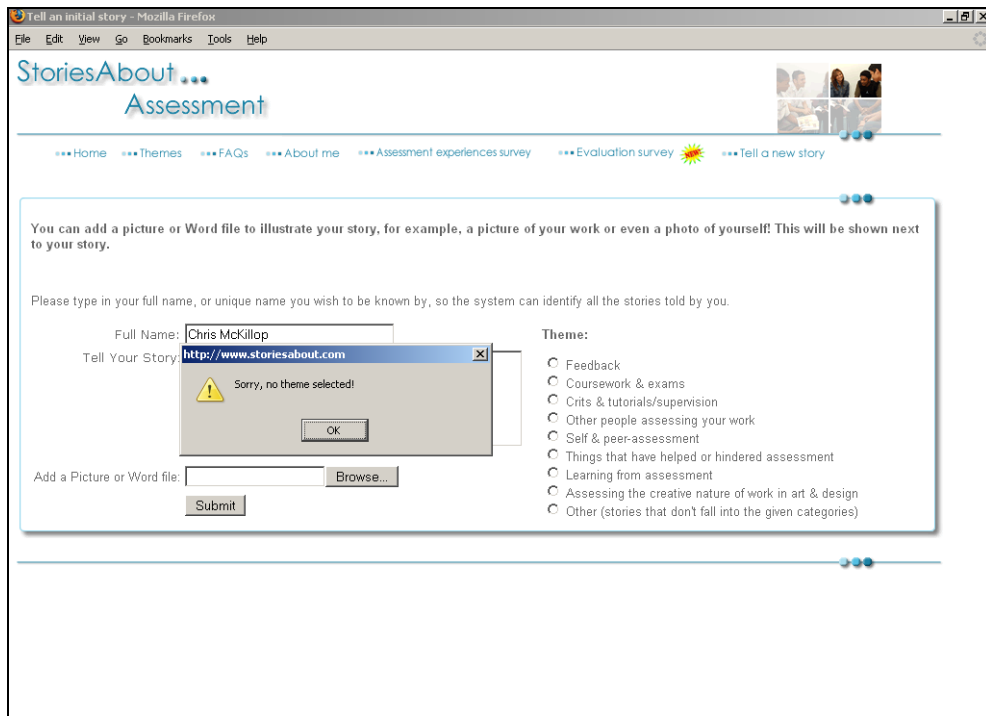
Figure 6.12.

Failure to select a theme

6.4 Summary

Following feedback from the initial study, the site was redesigned to increase student involvement: themes and seed stories were added and the general visual appearance was improved. The need to log in was removed and the site was made accessible for all students in art and design. This enabled a more diverse range of experiences to be shared and it was hoped that this would spark the natural curiosity that students expressed over wanting to know about other students' experiences.

Chapter 7 – Students' experiences II

'The unread story is not a story; it is little black marks on wood pulp.
The reader, reading it, makes it live: a live thing, a story.'
Ursula K. Le Guin

7.1 Introduction

This chapter will recount the main phase of the research. Two main studies were undertaken at this time. Firstly, the new version of the 'StoriesAbout... Assessment' site was trialled following the invitation of art and design students to participate. Secondly, an 'Assessment Experiences' questionnaire-type survey was constructed which had three broad aims. The first aim was to gather responses to an example story based on the storytelling model. This was done to investigate the efficacy of the model due to limited interaction on the web site. The second aim was to gather additional data following analysis of the questionnaire during the initial phase; namely, words describing assessment and learning, and examples of how assessment is used. The third aim was to gather more stories. An overview of these methods and the processes used can be seen in Figure 7.1.
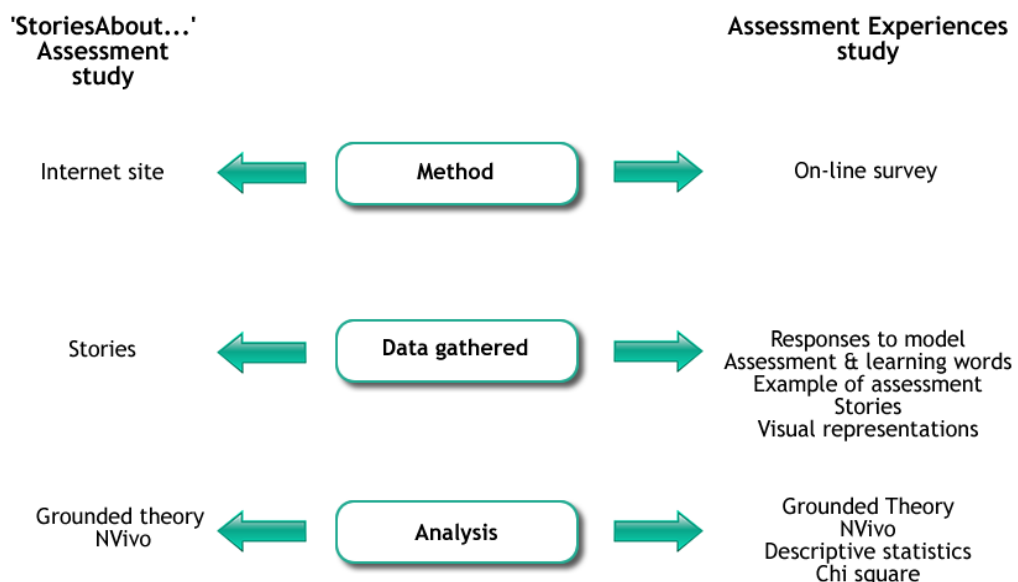

Figure 7.1.

Methods

In this chapter we will look firstly at the components of the questionnaire and explain how each of its sections relates to the descriptions of the data. We will look at the examples of how students have used assessment. We will then discuss the story data from 3 key perspectives. Perspective 1 will consider what the stories reveal about students' experiences of assessment in art and design and this will be discussed in relation to a number of categories arising from the analysis of the data. Perspective 2 will investigate the efficacy of the storytelling model by examining the responses received to an example story – one of the sections of the questionnaire. This perspective will look at the categories arising from the analysis of the data and will look more closely at each stage of the model (the story response types), and the kind of responses that they were eliciting. Perspective 3 will look at the responses to the example story from the viewpoint of postgraduates, undergraduates and staff. We will also briefly discuss one surprising aspect of the research, that fictional stories were being told, and will outline how this approach could be useful.

We will then move away from the story-based data to consider the words about assessment and learning which were gathered. We will look at the similarities and differences of these words and describe the results of a card sort task which demonstrated a significant difference in the emotional content of words being used to describe assessment and learning.

We end this chapter with a brief evaluation of the 'StoriesAbout… Assessment' site where students were invited, via an on-line survey, to provide comments about what they thought about using the site.

Although this is a long chapter, this was felt necessary to be able to include the issues the students were conveying and to enable their voices to be heard

7.2 Assessment experiences survey

The questionnaire-type instrument (Appendix 7.1) was constructed as a means of gathering additional data to the students' stories and data previously collected. We will look at each of its questions and explain the reason why these questions were

included and what aspects of the research were being supported by the analysis of the data. A paper-based version and on-line version were devised. The only difference was that the on-line version, following submission of data, invited the student to upload or send a visual representation of assessment. This will be discussed later in Chapter 8. Participants included all students who had previously taken part in the research. This was widened and an email was sent inviting participation to all undergraduates at Gray's School of Art, the PhD Design mailing list and postgraduate students at Teachers College, University of Columbia.

Background information

Participants were asked whether they were an undergraduate, postgraduate or member of staff. This was to enable possible differences in the data to be drawn between different student groups. A staff category was included for staff members who had experiences from being a student who wished to be included and instructions were provided accordingly.

All participants were asked whether they considered themselves to be in an art and design discipline and if not, to write down the discipline they were part of. This was included as art and design is a wide field and many people working in other areas, such as HCI or engineering may consider themselves an artist or designer.

Additional data

They were then asked for up to five words to describe their experiences of assessment and also for up to five words to describe their experiences of learning. These words were added to the words already gathered during the initial phase of the research (described in Chapter 5) to enable a fuller analysis to be conducted. This is described later in this chapter. An example of how they used assessment to help them learn was also asked for. This provided additional examples to the data previously gathered.

Storytelling model investigation

The next part of the questionnaire gave an example student story and asked for responses according to the four response types of the storytelling model: viewpoint, wonder if, similar and what learnt. The purpose of gathering these responses was to enable a more in-depth investigation of the model. At that point in the research, insufficient responses had been gathered on the web site to consider the model's effectiveness. Presenting students with an example story and asking for responses was decided on as it would enable a number of responses to the same story to be gathered, thus enabling an analysis of each of the dimensions of the model to be made.

Visual representations of assessment

The on-line version of the questionnaire had one additional section which asked students to visually represent assessment. This was added to the on-line version to see whether students would upload drawings. This is discussed more in Chapter 8.

7.3 Examples of using assessment

These examples of how students used assessment covered similar areas to the examples gathered during the earlier phase of this research, described in Chapter 5, in particular, issues regarding feedback and improvement.

Feedback and improvement

Most of the examples in this area concentrated on how feedback was used to improve future work and practice. As well as helping with improvement and progress, feedback could help show that you were on the right track. Feedback helped to identify areas of strengths and weaknesses and to highlight gaps in knowledge. These areas could then be worked on. For example:

> "The most helpful thing about assessments is the feed back which you can use to better the way you work and learn to make changes."

> "Assessment helps me learn by attempting to predict the holes people would find in my work and trying to fill/address them."

Feedback was nearly always listened to, reflected on and used in future work. One student stated:

> "I take comments/feedback from the tutors and try to apply things they have suggested, into other projects."

Although most students were open to criticism and advice, one student was reluctant to take on board feedback:

> "Not consciously. Resistant to advice. Thinking about points made."

A link between providing good feedback and confidence was highlighted by the following student:

> "I found the assessments very helpful in establishing areas of weakness in my work which I can therefore take steps to improve. Also it is very encouraging to receive good feedback too as it bolster your self confidence."

Learning and cognition

There were a few examples which focussed on how assessment specifically helped learning, in particular, how it helped focus thoughts and link ideas,

> "Assessment focuses attention on the subject in hand and forces and integration of ideas and materials. My own learning is best when I have a focused goal and assessment forces me to devote my undivided attention to the work in hand."

> "through creating links and connections in order to extend possible interactive reflections"

The role of assessment in encouraging reflection was raised. Coursework was seen as helping learning, but anything learnt for an exam was forgotten about afterwards.

Communication

Students, particularly postgraduates, felt that a dialogue between staff and student was helpful. Discussions enabled them to present and defend their ideas and help them talk through any difficulties.

One undergraduate highlighted the lack of communication between staff and students and queried whether this was because it was an art department. They felt they needed more advice and support to enable them to draw their own conclusions.

Other issues raised

A number of other issues were raised about the way students used assessments. Students used their peers to help them prepare for assessments. The lack of assessment during the PhD process was making it difficult for one student. Another student was choosing projects of interest to make assessments more enjoyable, while another chose to cram before an assessment. One student found that their assessments were now more successful as they no longer used a pen for drawing. In one case, assessment helped a student work to deadlines, and in another, the student wanted more assessments to help them manage their learning better.

7.4 Perspective 1: Students' stories

A total of 69 stories were received during this phase of the research. Half the stories were directly told on the web site and half were told on the questionnaire. Table 7.1 shows the distribution of stories received on the web site and through the questionnaire.

Table 7.1.

Distribution of stories via web and questionnaire

	Web site	Questionnaire
Undergraduates	5	22
Postgraduates	29	10
Staff	1	2

In total, in the undergraduate category there were 27 responses, 39 in the postgraduate and 3 in the staff. Staff were not directly invited to provide stories from the staff perspective, although a staff specific site was set up.

Figure 7.2 shows the distribution of stories and responses. Postgraduates provided a wider range of responses, though this is most likely to be due to this group being more directly involved in the research than the undergraduates were. This contrasts with the study, discussed in the next section, where students were given an example story and asked to respond to it using the four types of responses. In that study, students provided many responses in each of the four response categories.
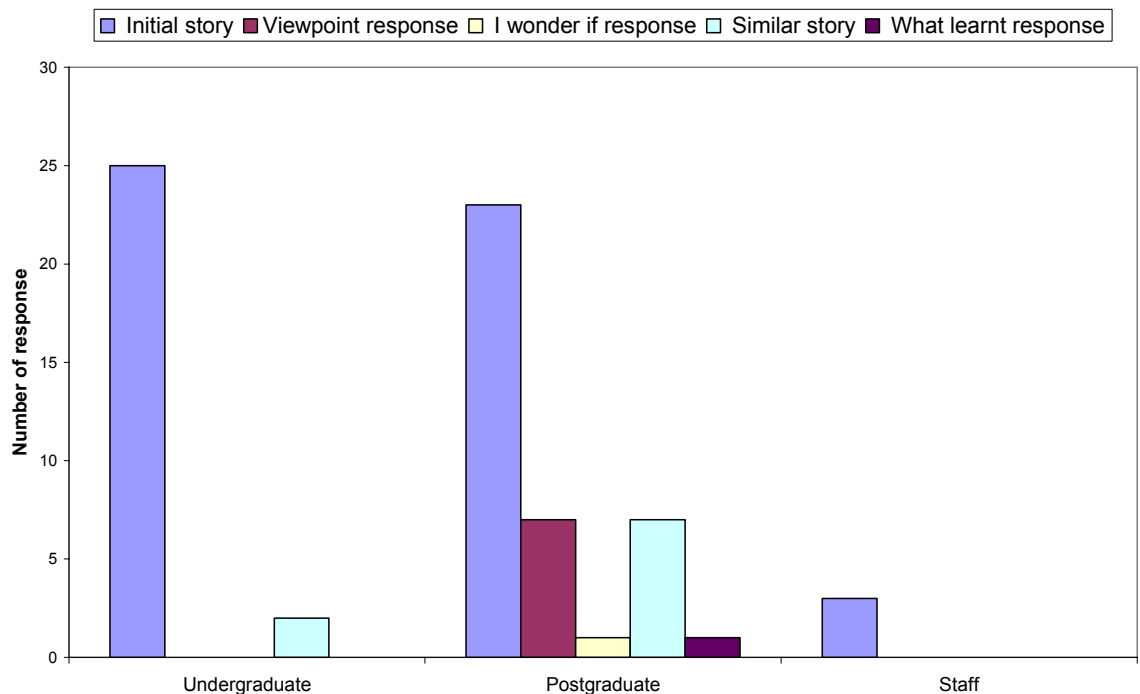

Figure 7.2.
Story type

We will now look more closely at the stories and responses told in each of these themes.

The stories were analysed by importing them into NVivo and using a Grounded Theory approach to code elements of each story. (A description of this process has been presented in Chapter 3.) This was carried out in order to fully understand all

aspects of the story which they student was attempting to convey. The codes represent attributes in the story, for example, in the following excerpt from a story, the highlighted sentence produced the code 'anxiety' as it is one of the attributes being conveyed.

> "You work all semester towards the 'big' assessment, trying to improve on what the tutors told you previously, and feeling the pressure and anxiety as to whether or not your current work is 'good enough' or what 'they' are looking for. The tutors response can be unpredictable and there is a feeling of peer pressure when you see the quality of the work being produced by your peers. This is the competitive element...which can be a challenging environment, but also a fun aspect when you're successful."

Each story was coded in this manner until all the attributes were represented by codes. The codes were then grouped according to the categories they represented, and these are shown in Figure 7.3. As can be seen, the category with the most codings was emotions with 38 coded passages, of which, 29 were coded as negative and 9 as positive.
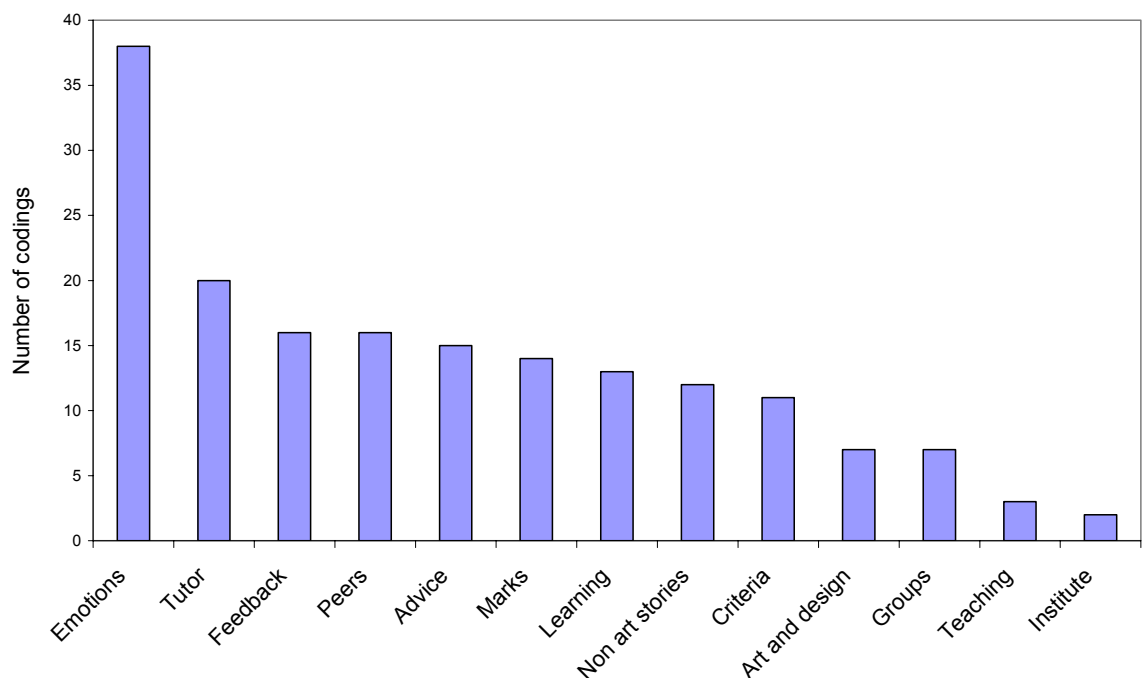

Figure 7.3.
Coded categories

Figure 7.4 shows a comparison between student groups of the average number of codings per category, with the emotion category broken down into negative and positive emotions. We will now look at the issues raised in each category and discuss any differences between the undergraduate and postgraduate responses.
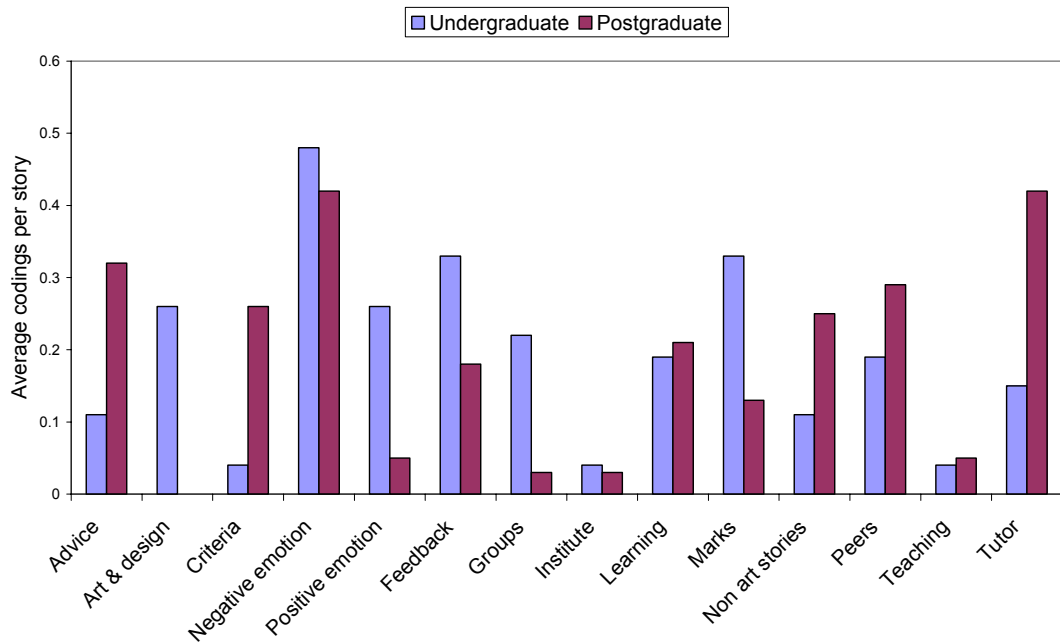

Figure 7.4.
Coded categories by student group

Advice

Postgraduates were the most likely to tell stories where the moral of the story was a piece of advice. The advice they suggested was either practical or supportive, with the majority of advice being practical. Some of the advice related to ways in which they had found using computers helpful in their research, such as using mind mapping and reference software to help organise their research and ensuring that these tools were used regularly. One student highlighted the need to back up work on a computer, when telling a similar story:

> "A similar situation only 3 months into my PhD research meant I lost valuable research. This taught me a valuable lesson to back everything up and not expect the computer to hold everything. This is where a memory stick is valuable to update work."

Other stories mentioned how useful the practice of keeping a diary had been for one postgraduate and the need to have a backup plan in case an assignment went wrong.

One postgraduate story highlighted the need to keep working in order to try and make sense out of an assignment:

"I would have to say that the best rule of thumb about any project is to simply do something, sometimes anything. Especially when you are uncertain what the assignment might actually be. Very often, in postgraduate work, assignments can be highly abstract and appear to lack and concrete definition. Even if you go ahead and simply interpret what you think needs to be done, you are at the very least trying to bring order out of chaos."

Supportive responses were received to the initial stories. One postgraduate student responded to the following story:

"My first practical project as a design student had to be made out of wood. The instruction we had recieved was extremely limited so I spent a fair amount of time in the library trying to fill in the gaps. Unfortunately I did not anticipate the most severe of these gaps and ended up learning the hard way. I chose the hardest wood I have ever seen, and tried to use hand tools to make the joint that I had found in a book. After many late nights, i managed to finish just before the deadline, only to be told that my design worked against the grain. Everything about my work was used as an example of what not to do. To add to my humiliation, one of the lecturers broke it because of the grain. I had to re-design and start over, but this time I asked the boys who'd done well to give me feedback in exchange for my feedback on their theory work. I learned to bury my pride and accept that we can all learn from each other. I still think it is a pity that the lecturers were so negative in critting that project when they had assumed knowledge that I had not recieved at school. This blatent discrimination and humiliation nearly caused me to give up."

Their wonder if response was:

"I wonder if this experience made you even more determined to succeed. They should not have been that harsh on you, but you were able to find a way through this situation by asking others for help and learning from them. Well done on not giving up!"

Another student responded to my own initial story about my fears of what people might think about the site. My story was:

> **"Chris McKillop says:** Well, I'm just about to invite lots of people to use this site and now I'm worried about what they will think of it - how they will 'assess' it, what if they (you!) don't like it. Oh, well, I'll just have to see what happens, but I feel rather nervous."

A viewpoint response to this was:

> "hi   cris,   i   saw   your   site   from   a   blog   in   spanish (http://posgradosdediseno.blogspot.com/)i hope your site works, because your idea seems good, but I don't know if the participation will be high because they are very specific stories that do not worry too much to the society -(in general), and the art professionals or designers do not have time for stories of this type but i hope to find critics voices to the assessment of the design and their methodology in this site so i save this link into my favourites links so i´ll come back your site soon to read and write more stories. best from northwest of spain."

To have had such a supportive and insightful response to my story was very welcome, particularly as the person had seen a link to it from an international blog which was not mine. My own reaction made me wonder how others would think about receiving responses to their stories.

Some of the undergraduate stories contained a positive way of thinking about their experiences. One of the stories was from a student who had a nerve wracking experience with her assessment at the end of her first year. She had completed her assignments, but:

> "…My effort was reflected in the marks i got. I do the best, not most, best I can for each project because its so easy to see if you dont. You might not think its great looking back on it but if youre leaning and enthusiastic about what youre doing it'll show."

Even though she had rushed her assignments, her story shows how she had tried to have a positive take on her experiences.

Another student simply stated:

> "if you are positive then it will show through even if you havent done enough for yourself."

One student's story was also advice about how to tackle assessment:

> "no pain no game work hard will let you pass everything dont think you can get the degrees without any striving if you have problems, talk with your tutor ask for help if you don't sure anything, just ask , classmates will glad to help some time the assessment will hurt you but it do helpful"

Art and design

This category only contained coded passages from undergraduate stories. This may have been due to the main focus of the postgraduate stories on particular issues; for example, on going back to the stories, the issues were more applicable to areas such as marking, tutors or the emotional aspect to the situation and, as a result, are best discussed in those categories.

Two of the undergraduate stories related their experiences at Higher Art level. One stated:

> "I worked constantly for a year on my higher art, i spent hours after school working in preparation just to have my worked slated. I received a "C" for my higher art and was absolutely devastated and that one mark completely ruined the fact that i had actually done quite well in the rest of my exams."

While the other story was more positive:

> "I found that when sitting my advanced higher art that regularly looking over all my previous work which was going towards the assessment with my teacher really helpful. She reviewed it giving us all constructive criticism"

The influence of previous experiences of assessment, even those at school level should never be underestimated. Some of the stories told during this research were

about the lasting effects of bad experiences and some stories of this nature were also told orally to the researcher, but were not put on-line.

The positive aspects of studying art and design were highlighted in stories. In one story, a student expressed their love of painting and how they were glad they had stuck with their decision to study painting. Another student, who had previously done badly during a non-art and design degree, told a story of their experience of completing a degree at an art school:

> "Then as a mature student I realised a long-held dream to go to art school - no memory tests there, but studio crits and peer feedback, final shows and dissertations. In this context I thrived and my proudest moment was when I got first class honours. The difference in the two awards is a reflection on the different assessment systems, not on ability."

Criteria

The clarity of assessment criteria was raised by both undergraduates and postgraduates, in particular, the lack of clarity and the impact this had on students' experiences. One Masters' student thought that the written work was going to have a higher status when being assessed; however, this turned out not to be the case. She said about this:

> "…So the emphasis was on written work. However, when the external examiner came he looked at the work in the studio without having read what we had written. If I had realised this I would have presented my information differently. The studio work included some work that was not successful because decisions were made to go in a different direction and one of the department research staff had suggested that we do this. However, the student who got the best mark presented completed work as if an end of year show, rather than an "in-progress" show, so I think there was some confusion here about what was required. Another uncertainty for me was that I had used video, ceramics and photography to transmit my ideas. The ceramics and displayed still photography was immediatly visible on the wall. Because of the facilities in the studio the video was not visible at all to the external examiner - so the work was judged on only a proportion of what had been done. These are not major grumbles but a question of clarity and communication which could be improved."

Another student considered this problem from his viewpoint as both postgraduate student and previous experience of being a staff member. He showed the marking criteria to his students and discussed how to develop their own work within the criteria:

> "For a number of students this seemed to put the work I was asking them to do into a wider context that seemed to make sense and allowed them to see that I actually had no expectations about what they did, only how well they did it. I feel that too much of what an educational institution actually is is cloaked in secrecy and traditional assumption and this sort of transparency can dispel the feeling that the whole thing works on "mere opinion" and Voodoo. Unless, of course it does. Unfortunately, those courses still exist, too."

Another postgraduate student with teaching experience had also provided her students with an exercise in understanding criteria:

> "I have found over the last 15 years whilst teaching full-time in education that peer review is the single best method for prevention of failure in any module. All that happens is some two to three weeks before the assessment, I encourage students to do a mock crit on each other using the exact same criteria as we would use as staff - scoring each other accordingly. When there is a glaring gap or an obvious deficiency the students themselves can see it and they point it out to their friends to prevent their failure. Consequently, the success rate on the course is exceptional and the stress of the assessment situation is reduced. They know in advance that they at least have fulfilled the expectations to pass, if not what to improve in order to acheive a first."

Overall, students found that having greater access to the marking criteria, and a greater transparency and understanding of the criteria, would have made their experiences better.

Emotions

Both undergraduates' and postgraduates' stories contained many references to emotional states, largely negative. For example, the following phrases were some which were used to describe negative experiences:

"I was so angry…"

"…feeling the pressure and anxiety…"

"The frustration was intense…"

"My experience of assessment is quite daunting…"

"I get seriously nervous…"

"To add to my humiliation…"

"this was very hurtful and not constructive…"

"I was a bit scared…"

The following table (Table 7.2) shows the frequency of some words used to describe their negative experiences.

Table 7.2.

Frequency of words to describe negative experience

Word	Frequency of word	UG	PG
Angry	4	4	0
Frustration, frustrating	4	1	3
Fail, failing	3	2	1
Negative	3	0	3
Nervous	3	2	1
Stress, stressful	3	1	2
Anxiety	2	1	1
Humiliation	2	0	2
Hurt, hurtful	2	2	0
Pressure	2	2	0
Daunting	1	1	0
Devastated	1	1	0
Scared	1	1	0

Undergraduates and postgraduates' stories contained around the same number of negatively coded passages. Undergraduates' stories contained more of the phrases and words listed above. However, the words were more likely to be used by postgraduates when they were telling stories about their undergraduate experiences. Below is a story from one undergraduate who was frustrated by their experiences:

"Sometimes Uni can be frustrating, in particular the assessment system - I often wonder at how certain people have managed to pass with very little or no effort put in to their projects while others have worked hard and only receive possibly one grade higher. I think that sometimes students forget that grades in Uni will not always be relevant in 'the outside world' and not putting the effort in now will only affect your career possibilities on the outside - if you know that you are putting in the hard graft by assessing your day-to-day abilities in your projects then you should be ok once you reach the end of your studies - you need to have confidence in your work, and that will only happen through being satisfied with yourself and your skills and how you apply yourself."

The following story, used earlier to show a response to it, is from a postgraduate recounting their experiences at undergraduate level. The story shows how they managed to overcome a very difficult situation with peer support and hard work, though their last sentence sums up how they felt:

"My first practical project as a design student had to be made out of wood. The instruction we had recieved was extremely limited so I spent a fair amount of time in the library trying to fill in the gaps. Unfortunately I did not anticipate the most severe of these gaps and ended up learning the hard way. I chose the hardest wood I have ever seen, and tried to use hand tools to make the joint that I had found in a book. After many late nights, i managed to finish just before the deadline, only to be told that my design worked against the grain. Everything about my work was used as an example of what not to do. To add to my humiliation, one of the lecturers broke it because of the grain. I had to re-design and start over, but this time I asked the boys who'd done well to give me feedback in exchange for my feedback on their theory work. I learned to bury my pride and accept that we can all learn from each other. I still think it is a pity that the lecturers were so negative in critting that project when they had assumed knowledge that I had not recieved at school. This blatent discrimination and humiliation nearly caused me to give up."

Other negative stories included: anger over a degree which called for rote memorisation of facts, anxiety over whether your work is good enough, frustration of not being able to think in an exam, and the following story in which the student has doubts over their decision to do an art degree:

"The most challenging exam I ever sat was higher english. Artistic exams are easy to score high in, yet leave no feeling of achievement: Producing useless pictures and objects that are on their way to helping nobody. Dose anyone else feel the same way? Have I chosen the wrong coarse?"

The following student had a very public and embarrassing criticism of their work while an undergraduate:

"Fourth year of undergraduate art and design course.....peer assessment ....bad experience ....assessed on a series of ceramic pots.... these were described by assessors in front of colleagues /classmates as being similar to woolly jumpers that a grandmother would give their grandsons for christmas. needless to say this feedback was hard to take."

There were some positive aspects to stories to counter these negative experiences. Undergraduates were more likely to highlight the positive aspects to assessment, though there was often a negative slant to the story as well. Although the following student had a previous negative experience during their first degree, their experience at art school had proved to be highly rewarding:

"My first degree was in French and your degree award in those days was assessed by final examinations only - eight three-hour memory tests. It was 1968 and university students were in revolt against many of the structures and strictures of the old regime. I was so angry that four years of undergraduate study (including a year abroad) were to be reduced to the same type of meaningless memory test that we'd had to endure all through school - from GCEs to A levels - that I walked out on my professor's two exams, leaving my papers blank except for my examination number. It was a futile protest. I managed a 2:2 with the remaining six results, but regretted not having the degree I felt reflected my abilities. Then as a mature student I realised a long-held dream to go to art school - no memory tests there, but studio crits and peer feedback, final shows and dissertations. In this context I thrived and my proudest moment was when I got first class honours. The difference in the two awards is a reflection on the different assessment systems, not on ability."

The following student's story starts on a negative slant, but ends up being positive:

"My assessments in first year i was told by both my tutor and my first year co-ordinator that i should be applying for 3d design because it is my strongest subject.

> And that i would be extremely lucky to get into painting but if i hadnt stuck by the subject i always wanted to do i doubt i would still be studying at Grays. I love being in painting and am so glad i stuck by my instincts."

Once again, the pressure and anxiety of assessment is highlighted, yet this undergraduate also acknowledges the positive aspect to assessment:

> "You work all semester towards the 'big' assessment, trying to improve on what the tutors told you previously, and feeling the pressure and anxiety as to whether or not your current work is 'good enough' or what 'they' are looking for. The tutors response can be unpredictable and there is a feeling of peer pressure when you see the quality of the work being produced by your peers. This is the competitive element...which can be a challenging environment, but also a fun aspect when you're successful."

Other positive angles to students' stories included stating that they were enjoying their course, feeling part of a group by having regular meetings with peers, and being confident in your work.

It was very gratifying that students were indeed able to state these positive aspects in spite of negative experiences. Students were able to express the positive side to their learning in many ways through their stories:

> "I really appreciate it..."
> "I love being in painting..."
> "if you are positive then it will show through..."
> "I look forward to assessment..."
> "...there was a genuine feeling of understanding..."
> "... In this context I thrived and my proudest moment was when I got first class honours...

Feedback

Undergraduates and postgraduates' stories emphasised the importance of feedback. For example, this postgraduate made good use of an opportunity to receive feedback:

> "Hearing that it was possible to have direct feedback from my masters assessment read to me by the head of school, I went straight to the school office. It is not

everyday that you get the chance to have this kind of feedback so easily available. He read me the external examiners report, his report and the head of departments report. It was an interesting way of finalising 14 months of work and focusing my work for the future."

The dangers of lack of feedback or inadequate feedback were raised by both groups. This undergraduate felt that they had needed better feedback and calls for tutors to be more aware of the type of feedback they are giving:

"Failing my first attempt at second year. I had been quite ill and unable to attend much of the year. It was clear i didn't know what i was doing and i agreed with their decision to make me repeat believing i would gain all my missed knowledge second time around. In the feedback session, i understood for the first time what i had done wrong yet i wasn't really advised at all on how to approach the next year. Simply the advise i received was attend more and produce more. It seemed logical enough at first until i found myself in uni with time on my hands but not knowing where to begin with all the producing i was meant to be doing..."

Another undergraduate student appreciated the feedback she was given:

"I really appreciate it when a tutor comes along and clearly is ready to give time to discuss my ideas and work, particularly if I have questions I really want answers to. I just think it is great how they are able to start from where I am and think about all kinds of ways of developing the ideas. Boring perhaps, but 90% of the time I think what they have to say is useful, we just need to listen. They have been at this creative game so much longer than us. The actual mark is just a guide as where I am in relation to where I could be."

Other stories about feedback included: feedback being contradicted, a disappointment with feedback as it shows the tutor had not read it fully, and the usefulness of asking for feedback from tutors and peers.

Groups

Undergraduates raised more issues in their stories concerning group work than postgraduates. The unfairness of group marking and the difficulties this led to within peer groups was highlighted, for example:

> "We took part in a group project recently for an outside company, in which we had to produce four A3 boards and then a presentation. With it being a group project the overall mark for the group determined the result for each individual. There was seven of us in our group, which is quite a lot, but one of the group never showed up for any of the meetings and had no input whatsoever into the project. They then turned up on the day of the presentations and ended up doing the introduction- basically reading the brief- in the end we got full marks for our project which was a huge success. This meant that the group member that did nothing to contribute got the same marks."

This story led to the following similar story being told in response:

> "This is similar to what we did as well and many on the group did not contribute enough in such a long project. It was a good end result but in my opinion a slight waste of my effort."

The tensions raised by group marking are evident in this story:

> "After a three-week group project, we had to assess each other's performance. Regardless of each individual's final output, we generally marked each other extremely high, with the exception of one friend who did not turn up to meet us very often and did not put in much work. We marked her quite low as we felt annoyed that she had not pulled her weight, and now she gives us dirty looks in the corridor!"

One postgraduate response to an example story suggested the need for a facilitator in group situations to alleviate difficulties.

Institute

Two stories were told which covered wider institutional aspects of learning. The first, from an undergraduate concerned a protest over methods of assessment:

> "...I was so angry that four years of undergraduate study (including a year abroad) were to be reduced to the same type of meaningless memory test that we'd had to endure all through school - from GCEs to A levels - that I walked out on my professor's two exams, leaving my papers blank except for my examination number.

It was a futile protest. I managed a 2:2 with the remaining six results, but regretted not having the degree I felt reflected my abilities..."

The second, from a postgraduate reflected on the institutional angle to learning from their perspective as student and staff:

"...I feel that too much of what an educational institution actually is is cloaked in secrecy and traditional assumption and this sort of transparency can dispel the feeling that the whole thing works on "mere opinion" and Voodoo. Unless, of course it does. Unfortunately, those courses still exist, too."

Learning

Undergraduates' stories drew attention to a number of different aspects of learning. There was an enthusiastic tone to some of the stories with one student looking forward to assessment. Two felt that being positive and enthusiastic about learning would help the work. One said:

"if you are positive then it will show through even if you havent done enough for yourself. i think its great to show your work to someone you dont know very well, and see what they can draw from it. umm. getting there.. i dont really know its just a part of life right now theres a different way for everybody to work they just have to find it."

One student worried about being a perfectionist as it took them a long time to complete their work and, therefore, they had time management issues.

The postgraduate stories also contained a variety of perspectives on learning. One student felt positive about his learning experience and raised an interesting point about learning and personal interests:

"...My experience through the Master's degree was generally positive. I enjoyed the input from all of the course staff, and I appreciated having access to the performance criteria, but ultimately I was more successful in my theoretical writing and practical projects when I put all the formal input to the back of my mind and pressed on with areas of personal interest."

One student felt that even though they knew their learning experience better than anyone, they still did not have the skills to adequately judge their own work. Other stories included students reflecting on their work using an instinctual approach, reflecting on mistakes, and realising that it is important to learn from others. The following story from a postgraduate portrays her struggle with learning:

> "Many exams we took as undergrads called for the memorisation of thousands of facts which we would regurgitate in exam conditions and then (in time-honoured tradition) dutifully forget afterwards. Interestingly, pretty much my introduction to stringing sentences together to construct cogent arguments (as coursework or as exam) was when I came to the UK for the first time for an exchange year back in '95-6 and suddenly switched over to Humanities. I didn't hit the ground running, probably - in fact, I think some of my tutors felt I was a special case. Particularly the Literary Studies tutor (a postgrad) - he would ask me my interpretation of some aspect of Tradition and the Individual Talent or The Sandman, I'd give my answer in good faith, and then… pervasive, deafening silence. He'd stare through me like Robert Blake in Lost Highway with glassy tutor-eyes, wondering what, if anything, he could do with my out-to-tea comment… I might as well have handed him a mobile and asked him to call me right there and then. Oh dear, undergrads having to interpret… I did pass all my courses in the end you'll be delighted to hear but it was quite a struggle striving through the stress. Happily, the cat in the picture always supported me emotionally."

Marks

Undergraduates' stories highlighted the role of marks and grades in their learning processes. One student felt that their assessments were well structured and helped motivate their learning. On the other hand, the following student's story raised a problem with marking artistic work which had led them to query their choice of study:

> "The most challenging exam I ever sat was higher english. Artistic exams are easy to score high in, yet leave no feeling of achievement: Producing useless pictures and objects that are on their way to helping nobody. Dose anyone else feel the same way? Have I chosen the wrong coarse?"

The disappointment of receiving a poor mark after having worked hard was raised. Also, there was a feeling of disappointment following receipt of a good mark when the overall learning experience was poor:

> "Despite being in most Day's I have had very little contact with any of the painting tutors. I don't think that they care after all they have taught us nothing. Despite this I still got a good mark. whats the point of this as I don't think that they will listen."

The unfairness of students in a group receiving the same grade when they had not turned up for meetings was raised. The relevance of grades in the 'outside world' was also queried in one story.

Postgraduates largely focussed on their experiences as undergraduates. Stories raised the surprise and disappointment at receiving a lower mark than expected. They also highlighted the difficulty of self assessment. For example:

> "The most interesting assessment is that I get to give myself a final grade in a graduate class at TC. Even though I know my learning experience the best, however, I am not sure if I can be or I know how to be a fair judge. It can be very easy--just give myself an A. but then my conscience and my perfectionism kicks in and say, "Do I deserve an A?""

Non-art and design stories

Undergraduates and postgraduates told stories about previous experiences in non-art and design subject areas. Most of these stories were about exams, for example:

> "Once as a second-year undergraduate in Chile, I revised non-stop for three days and nights for an end-of-term Literature exam. In the exam hall, I stared down at the paper sluggishly. It was Eraserhead all over again. I clearly remember hearing this big, bad bumblebee buzzing around inside my brain. The frustration was intense because I knew the answers to the questions but just couldn't put pen to paper. I had needed 50% in the exam to guarantee a pass for the entire course but scraped together a pathetic 20%. My concerned tutor later came to me and asked what had happened. I told her the details (possibly minus the bumblebee bit, I don't recall) and she said, "But why didn't you tell me?! We could have rescheduled! What are we

going to do?" I resat the exam. This is a true story; the cat in the picture comforted me."

"It's 25 years since I took my finals, but I still clearly remember waiting outside the exam room with the other students. These were all students who'd done well in the past, they'd got into a good university and they'd stuck at it for three years. They were highly unlikely to fail. Yet, one after another, they described how they'd been to the college's health centre in the past week and been prescribed drugs to keep them going, to allow them to study late, or to keep them from falling into depression. It was one of those scary moments, when you realise how drugged up a lot of the population is a lot of the time, just to cope with the demands of life."

"Many exams we took as undergrads called for the memorisation of thousands of facts which we would regurgitate in exam conditions and then (in time-honoured tradition) dutifully forget afterwards..."

The second story highlights how assessment experiences can linger in our memories for a long time.

Peers

Postgraduate stories mainly highlighted the importance and value of peer review and peer support.

One student commented on peer assessment:

"...It seems from some of the responses to assessment already on this site, that peer assessment is of considerable value. Could it be that this is due in part to the existing relational structure between peers and is this where formal assessment with its impersonal structure and procedures leaves students dissatisfyed?..."

A postgraduate student with staff experience suggested a way she uses to help students' understanding of assessment criteria using peers:

"I have found over the last 15 years whilst teaching full-time in education that peer review is the single best method for prevention of failure in any module. All that happens is some two to three weeks before the assessment, I encourage students to do a mock crit on each other using the exact same criteria as we would use as

staff - scoring each other accordingly. When there is a glaring gap or an obvious deficiency the students themselves can see it and they point it out to their friends to prevent their failure. Consequently, the success rate on the course is exceptional and the stress of the assessment situation is reduced. They know in advance that they at least have fulfilled the expectations to pass, if not what to improve in order to acheive a first."

The following stories show how beneficial peer support has been to postgraduate students:

"We recently held a departmental PhD forum at University, there is now a group of about 6 research students in our department, so we have formed a small network. This forum was an informal introduction to everybody's research. Everyone gave a 20 minute presentation of their work and our director of Studies had organised a few key speakers. The presentations helped us to open up as a group, and peer discussion and questions helped to keep the event flowing. At the end of the session we all felt well informed and supported by each other. I can say that there was a genuine feeling of understanding promoted between us all and the links we formed on that day will continue to feed our research. A few of us are part time students and events like this helps us to feel less isolated and more like a group."

"I'm doing a PhD in Communication Design, and my peers are incredibly open and critically aware people. When questions are raised, we openly discuss them and help the student who's work is being critiqued, to tease apart some of the ideas that might be tangled up, or give clarity to concepts that need further thought. There's a level of respect for others and yourself and the culture we've built up amongst our group of students allows us to be very free in saying that sometimes we're lost and don't understand things. I found that the crit sessions and feedback from my peers, the most valuable input for my research."

Undergraduate students' stories also showed the importance of peer support, but highlighted a stressful aspect to peer assessment:

"We had to do a peer assesment today at the presentations! it made me a bit nervous, didn't really know what to write down. I was a bit scared to be totally honest in case the other members of my group saw what i was writing about them!!"

"...The tutors response can be unpredictable and there is a feeling of peer pressure when you see the quality of the work being produced by your peers. This is the

competitive element...which can be a challenging environment, but also a fun aspect when you're successful."

Teaching

This aspect to the stories highlighted the need for areas of teaching to be changed. One undergraduate story raised the need for the marking of group projects to take into consideration individual student attendance, for fairness.

Postgraduates raised issues concerning the need for greater tutor input and the problems with courses with too wide a remit:

> "I find it frustrating when a course tries to encompass too wide a group of participants. If you're not in the mainstream subject group, you end up spending a lot of time on lectures, preparations and assessments that are of limited value for your project. The time could be better spent either on a completely generic 'crash-course' or a more subject specific one."

Tutors

One of the main differences between undergraduate and postgraduate stories was that a number of postgraduate students were, or had been, staff members. Consequently, their stories often contained insight from both perspectives. Some of these perspectives have already become apparent in some of the previous sections. A couple of these perspectives are shown in the following extracts from stories:

> "I've recently completed an MFA part-time, while teaching painting and drawing in a variety of community outreach locations, including prisons, community centres and youth projects. As such its been interesting to see the assessment procedure from both sides of the fence..."

> "I think it is easy to forget that assessment goes both ways. No matter which side of the pedagogical line we are on we are all learning (or at least we should be)..."

Problems with tutors were key difficulties being expressed in both undergraduate and postgraduate stories. They included a feeling that there are a number of poor tutors who caused a poor learning experience for students:

"I hate critiques, don't you? Staff seem to be so negative and just seem to be pulling our work apart. When I ask the why question, it seems that the poorer teachers are just saying, 'because I am the Lone Ranger and you are just Tonto!' It is bad enough having to stand up and talk and justify you work without then being shot down in flames all the time. It makes me feel alternatively that I am crap or the teachers are ignorant."

"My experience is that many teachers seem ignorant because they consider that their viewpoint is sacred simply because they are the teacher. In fact it may be that it is not ignorance but arrogance. So many teachers at all levels of education are so self opinionated that they cannot be objective about the form of their own critical judgements. It is a form of self righteousness and a weakness in many teachers that can be verified by often witnessing aspects of their private lives where many teachers simply cant switch and go around talking down to people. This is not simply a prejudice of mine but something many people have reported to me. I think in some cases it gets worse with some teachers the longer they teach.I think this is why some students percieve themselves as being unfairly criticised too much."

One postgraduate student found having too many tutors was a problem:

"...On the latter point having 2 course leaders, 2 visiting researcher artists and departmental staff all advising us and asking about our work has advantages but also can lead to some confusion about expectations and best courses of action!"

Undergraduates also had experiences with poor tutors. One replied to a story with a similar story about a bad experience:

"I too had a tutor who ripped up my photo which I loved, (in a less digital age). this was very hurtful and not constructive. Perhaps your tutor should have said these things earlier in a constructive manner without resorting to stomping on your ideas. To me this is not the best teaching method and devalues the purpose of constructive critique. Using words carefully and more constructively as he did in the office could have been achieved before!."

An undergraduate felt that more support should have been given to them when they most needed it:

"…. i know we are no longer at school and i do not wish to be guided but i do wish to be better informed. I think its important that when it is obvious a student is floundering in their work, that the tutors offer help and advice rather than merely observing their sinking path."

Themes

Figure 7.5 shows the number of stories told by undergraduates and postgraduates in each of the assessment themes.
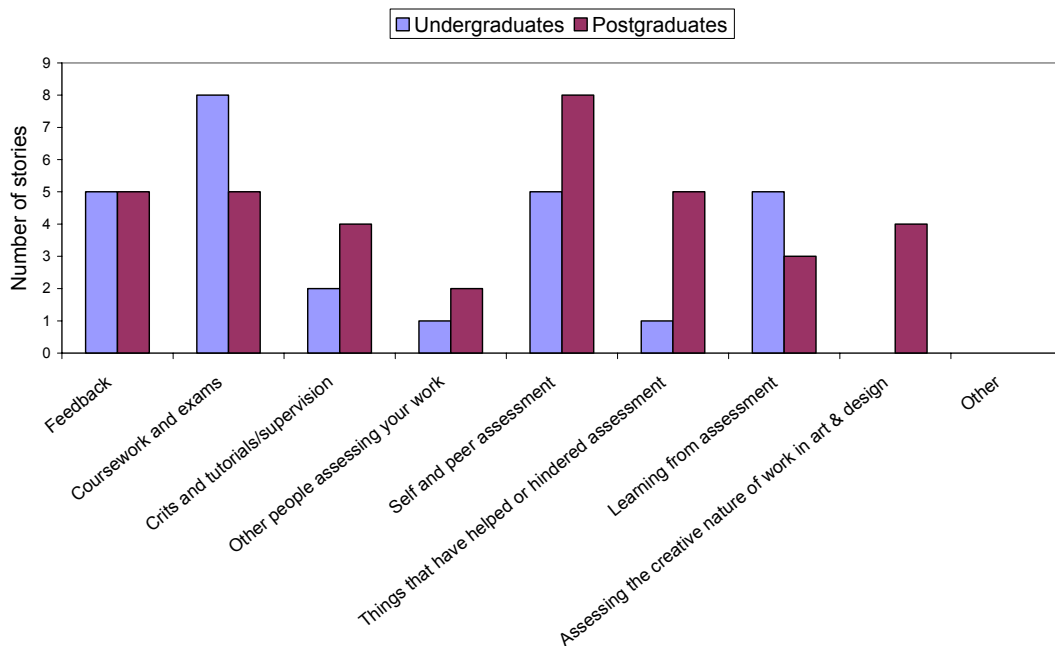

Figure 7.5.
Distribution of responses across the themes

Proportionally, students told similar numbers of stories in many of the themes. Undergraduates told more stories about feedback, coursework and exams and what they had learnt from assessment than postgraduates. Postgraduates, proportionally, told more stories about things that had helped or hindered assessment and were the only students to tell stories in the theme which covered the assessment of the creative nature of work in art and design.

The main reason for providing themes was to provide a focus to help students think about their own stories. It is difficult to determine the extent to which these themes helped as many stories were provided via the questionnaire and subsequently

uploaded. However, all the stories told appeared to fit into the broad categories covered by the themes. Plus, half of the stories were received via the web site under the themes, so this provides some evidence for success.

Images

Students who told their stories on the web site, generally did not upload files to illustrate their stories. Those who did used this facility in a variety of ways. A number of avatar-type images were uploaded to represent the student as shown in Figure 7.6.

Figure 7.6.

Avatar-type images

One student used this facility to upload documents, such as the one in Figure 7.7 showing a grading scheme.

Figure 7.7.

Grading scheme document

Another student uploaded images of her cats which had comforted her through the difficult experiences she described in her stories (Figure 7.8).

Figure 7.8.
Student's cat

Discussion of perspective 1

Students were able to convey their experiences succinctly. The style of stories varied in structure and in length. Some were longer, more involved, more 'story-like' through describing an individual situation, often with a reflective, moral of the story summary at the end. This is illustrated by the following story, parts of which have previously been presented:

> "Failing my first attempt at second year. I had been quite ill and unable to attend much of the year. It was clear i didn't know what i was doing and i agreed with their decision to make me repeat believing i would gain all my missed knowledge second time around. In the feedback session, i understood for the first time what i had done wrong yet i wasn't really advised at all on how to approach the next year. Simply the advise i received was attend more and produce more. It seemed logical enough at first until i found myself in uni with time on my hands but not knowing where to begin with all the producing i was meant to be doing. Now I find myself in a similar position again, despite my health being much improved along with my attendance. i know we are no longer at school and i do not wish to be guided but i do wish to be better informed. I think its important that when it is obvious a student is floundering in their work, that the tutors offer help and advice rather than merely observing their sinking path."

Other stories conveyed a more generalised, but still personal experience, whilst again expressing a particular point, for example:

> "My experience of assessment is quite daunting. All the tutors attention is apparently on you for the next 15 minutes, and thats probably more attention you've had off any of them for the last 4 months. Definately in my case anyway. And so i truly have no idea how my works going to stomach with them.. because none of them have probably seen it before! or know anything of it!"

A number of issues were raised in the students' stories that were having an impact on their learning experience, in particular, negative experiences. Although many students are having negative experiences, many are also attempting to see a positive side to their experiences and are trying to work hard, do the best they can and enjoy the experience. This was similar to some of the stories during the initial phase of the research (see Chapter 5) where students were trying to take a deep approach to their learning, but external factors outside their control were negatively impacting on this. The stories presented in this chapter provide further evidence to show the impact that some negative experiences can have on the learning experience, with these ranging from feeling frustrated, to wanting to give up.

Some of the students' experiences had caused them to nearly give up their studies, and for some those experiences were still vivid in their memories many years later. The later point was also raised during the initial study. The impact and lasting effects of assessment (both positive and negative experiences) should not be underestimated and have been highlighted throughout this research.

The difference between art and design and other subjects was evident in the stories – namely, the differences in assessment methods. Non art and design subjects had largely required memorisation of facts, whereas art and design was more interpretative and had suited most, not all, students.

Overall, students appeared to be supportive of each other, providing advice and support (implicitly or explicitly) within their story, which could be of benefit to a fellow student. Responses to stories were also supportive, largely through telling

similar stories or providing a particular viewpoint to the story. Peer support was highly valued in the stories.

There was one key difficulty encountered during this phase of the research which arose from the collection of the stories: lack of storytelling and interaction on the web site (although half of all stories and responses were told via the web site). It had been anticipated that more interaction would have taken place. This was based on the research conducted during the literature review which showed the increasing digitalisation of social lives on the Internet. However, during this research, it has become apparent that, whilst students have stories to tell, and the data from the research indicates few problems with the on-line setting, students are being hindered from telling stories due to the inhibitory effect of the subject area – assessment.

Using the questionnaire structure elicited as many stories as through the web site, and served to gathered more stories for the site. However, the approach taken by this research was to try and avoid the use of questionnaires, as they are prolifically used in end of course/module evaluations. We will discuss this further in Chapter 9 and consider how the site could be modified to improve interaction.

7.5 Perspective 2: Investigating the storytelling model using an example story

In order to examine the storytelling model, an example story was given to students in the Assessment Experiences survey (Appendix 7.1) to respond to using the four types of responses. This was done as there was a lack of response to stories on the site to ascertain whether the model was at fault or whether it was simply students choosing not to respond. The task was incorporated into the questionnaire discussed earlier. The example story was:

> **Morag M says**: I produced a print through using a variety of digital media techniques which I felt addressed the brief given in a creative manner and which produced an art work that was also stunning too. I put a lot of effort into it and at the end, although I felt I addressed the brief and got a good mark (5), I kept looking at it and thinking – is this really good, is it creative, is it only me that thinks it is good. I

worried about handing it in for assessment in case it got slated. Even with the good mark, I am not sure – I only have the mark, no comments – was I just going through the motions of addressing the brief or was I being truly creative in the methods I was applied, I'm not sure.

Next to this story was a picture depicting the print that 'Morag M' was discussing (Figure 7.6).

Figure 7.9.
Image next to example story

The story was composed to show a side of assessment in art and design that should be quite unusual – getting a mark without feedback. This was chosen as it was thought that it might provoke comments. Additionally, the story contained an emotional edge – the student put her all into the work, but then doubted her ability due to the lack of feedback. It was hoped this story would be accessible to students and spark some interesting responses. Fifty one responses were received to this task, 23 postgraduates, 18 undergraduates and 10 staff. Although the primary focus of this research was the student experience, staff members were not excluded from participating as they were once students too and may have had valuable stories to tell. Staff who wished to participate were asked to do so from their viewpoint as a student.

In total, there were 165 individual responses, from 51 participants. Table 7.3 shows the distribution of these responses amongst the different types of responses.

Table 7.3.

Frequency of story response types

Type of response	Number of responses
Viewpoint response	39
Wonder if response	39
Similar story response	45
What learnt response	42

The responses were analysed in three ways. Firstly, by analysing the overall content of all the responses into topic areas to give a broad overview of issues raised. Secondly, by analysing the content of each type of response story. Thirdly, by looking at the responses from postgraduates, undergraduates and staff to see if there were any differences in the types of issues raised. We will then conclude by discussing some key issues arising from this part of the research. The analysis of the responses will now be described.

All responses: an overview

We will start by looking at an overview of all the responses which were received before looking at these in more detail in the subsequent sections. The coded categories in Figure 7.10 arose from the analysis of the data using the Grounded Theory approach described in Chapter 3, which is the same method used to analyse the other stories submitted during this research.
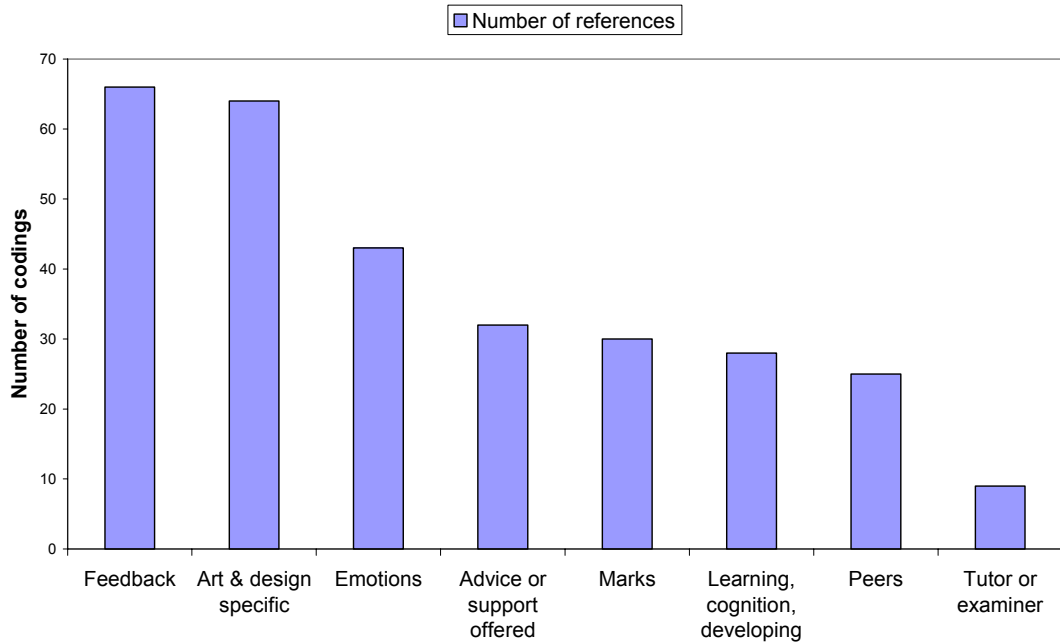
Figure 7.10.

Coded categories

Feedback

The most commonly raised area was that concerning feedback, in particular, the need to receive and to ask for comments on ones work. There was a consensus that asking for comments and feedback from tutors or even peers was important. The following responses illustrate this:

> "From the student's view communication and feedback is very important. It is understandable they desire clarity in assessment grading."

> "What if you had personally confronted the instructor for the particular class. Go to them and say "look, I know that my mark on this was satisfactory, but I am curious......why was it good and how could I have gotten a 6 our of 6. What thing did I not do that I could have done to make it better."

> "I think critical feedback is essential even if it is not what you want to hear. But sometimes one has to remain true to what she/he really feels inside."

It was recognised that a student could be worried about what the tutor thinks and consequently be reluctant to ask for comments. It was strongly felt that feedback should always be given and that it was important for gauging progress, to improve

performance, to identify weakness and build on strengths. Timely feedback should be given, but there were sometimes reasons preventing this. As one staff member commented:

> "I have just listened to student oral presentations, but feel as if I cannot feedback yet. The comments may allow those that are presenting later gain an advantage. A bit of a dilemma as feedback is essential for learning!"

Feedback also helps to place your ability amongst others' work and your own. As a great deal of effort had been put into the work, some reciprocal effort should be made in providing feedback. Without feedback students do not understand why they have gained their mark, regardless of whether this is a high or low mark.

> "When submitting work, feedback that goes beyond a grade is desirable for me so that I can identify strengths and weaknesses and from this make effort to improve my future work."

The difficulty with the ease of giving negative comments was raised and it was felt that more positive comments should also be given by tutors. Positive comments could boost motivation. Feedback can be difficult to take, but it was felt that critical feedback is essential even if it is not what you want to hear. Unhelpful or vague feedback was also felt to be a problem and the following story illustrates this:

> "When i passed my resit over the summer, i approached my tutor for my feedback about whether he felt the type of concept and style i had developed was worth pursuing. His response was, "Well, you passed, so its an up from last semester." (which i failed) I had no idea whether that was a negative comment or encouragement. I tried to press further but he didn't elaborate. I was left wondering, does that mean i'm onto something that i should explore further- that there is potential there, or is he implying that it was rubbish and i scraped through. He might as well have shouted "chicken salad!" for the help it was to me and my dwindling confidence."

A dialogue between examiner and student was thought to be important so that a shared understanding of the decision making process which led to the work being made can be achieved.

A comment challenged the assumption that feedback is only important for average or poorly achieving students:

> "As someone who achieved only average marks untill I suddenly understood design, I had assumed that detailed feedback was more important for the students who are average or bellow. Thank you for making me see differently."

One postgraduate commented on the difficulty of not receiving much feedback at postgraduate level when they had been used to a quite open feedback system previously. This had left them puzzled.

Morag, the student in the example story, was encouraged to ask her tutor, or peers, for feedback and to become more confident in her abilities. Multiple perspectives were suggested as a way of having confidence in her work. She was encouraged to not underestimate her abilities. Working together with peers to discuss assessment policies and communication was also suggested as a way to improve her situation, as was choosing specific tutors.

Art and design

Art and design specific issues were also one of the most commonly raised issues. The main areas talked about were creativity and issues concerning criteria and the design brief.

There were a number of comments regarding the role of the brief as a springboard for the creative process. There was also the issue of the brief resulting in a student just going through the motions and the impact this had on creativity. Some felt that fulfilling the brief must show that creativity had taken place, though others felt that the brief was simply a guide and ones own creative style should be apparent in the work. Examples of these responses include:

> "Briefs are there to guide you but you should let your own creative style come through in your work."

> "I have responded to a design brief by 'going through the motions', however sometimes I have produced a very average piece of work by doing this without enough motivation or effort."

A person's self-judgment and belief about the creativeness and impact of the work was raised and this relates to the issues raised about confidence which will be discussed shortly.

It was felt that if a student was happy with the work and that they had fulfilled the brief, they should not worry about it any more. If unhappy, then they should contact the tutor to be clear about the role of the brief in the assessment process and to understand links between creative theory and practice. Distancing oneself from the work to gain insight into different perspectives was also suggested. It was suggested that it is easy to over-work a piece and ruin it in a desire to perfect it, and that the skill of knowing when to leave work alone came with experience:

> "Many artist / designers are never completely satisfied with pieces of work. Many sometimes over-work on it and ruin the final design. However its a very difficult skill knowing when to leave the work alone and do no more with it, this comes with years of experience."

There was much discussion concerning the nature of creativity, what constitutes creative ability and how it should be 'judged'. As one staff member commented:

> "Firstly, Is there a truly objective measure of 'good' that can be applied? I don't think so. There may be specific things that can be looked at, how well executed is the piece, how well framed or composed, does it achieve its own objective.. but at the end of the day part of the judgement of any viewer is a matter of taste, which has been shaped and informed by the viewer's previous experience and knowledge."

An interesting point was raised about a dilemma facing feedback: could feedback truly address issues concerning creativity? Many responses brought up the subjective nature of art, commenting that aesthetics was a matter of taste and that anything could be considered as art these days. The nature of art, that it contains aspects which are difficult to measure, was a common theme. The following responses illustrate these areas:

> "Perhaps numerical marks are the ultimate red herring. After all, aesthetics is also mostly personal taste."

> "Why would someone who has obviously spent time and effort on this work question its true value. Surely part of art is the views in the eye of the beholder."

Students questioned their work and were unsure why at times their work was liked and sometimes disliked. An insightful undergraduate commented on the link between confidence in your abilities and creativity:

> "Confidence in your work is an important part of creative design, and will grow as more experience is gained."

It was felt that greater experience and knowledge would affect judgment. A bad comment at school had turned one person away from art:

> "Painful ancient memory of being 13 in a so-called "art" class where I painted a picture of a vivid memory. Execution was probably miserable, but my emotional involvement in the subject was high but I didn't know how to express that to the teacher who said "How trite!" and so now I am a librarian, not an artist."

This shows how difficult criticism of the highly personal aspects of art expression can be. It can be difficult to know the personal journey that the artist or designer has undergone in coming up with the artefact, so criticism of it can become entwined with personal criticism as opposed to criticism of the artefact.

Dialogue about the work was felt to be important for a creative mind. One postgraduate felt that a lack of discussion could result in closure issues for an artist which could leave them unable to move on. Was a lack of dialogue evidence that the work was poor, or did it mean you just weren't part of that art 'in-group'? The distinction between technical proficiency and creativity was raised and also whether students were able to assess the quality of their own work. The personal and subjective side to art was highlighted by the following postgraduate student who felt that a work was creative if it expressed something to the individual producing it:

"From the point of view of a peer I would say that if you feel that the piece is creative, if it expresses something to you. Then you have been successful."

A response from an undergraduate considered whether too much analysis in an art school had led to a loss of instinctive judgements about creativity:

"That it is important to hold on to the natural, instinctive qualities of your talent that led you to art school in the first place, and not get too tangled up pandering to the analysis processes of assessments."

Students' discussions on creativity and assessment were varied and insightful. Creativity can be stifled by external evaluation and a move towards an internal locus of evaluation can foster creativity (Rogers, 1954). Rogers also states that creativity cannot be forced, but conditions in which it can grow can be provided.

This leads us to another area which was discussed by many, the role of art school education. One comment felt that the example story reflected an inadequate course and that students should be more assertive in asking for what they need. Another felt that their expectation that creativity would be nurtured and supported at art school had not been fulfilled. They stated:

"I've learnt that art college is not the place where they talk about art. or at least not as much as we are lead to believe...Opinions are vast but not always voiced where appropriate and help or advice is rare. I thought before i arrived here that here at last was a place that would finally nurture the creativity that was quashed in school. And yet i feel more stunted now than i ever did. At least at school your art teacher would say whether they liked a piece of work and why. They would also suggest improvements. Perhaps i simply haven't picked up on the subtleties of their nurturing nature here..."

One student felt the same way about their work as the student in the example story, and had also felt their confidence dwindling as a consequence; however, they felt that since they were good enough to get into art school on the strength of their portfolio then they must be good. A tension between art education and the wider art world was raised by a student who stated that no one would be marking students'

work when they were independent artists. Another stated that marking in art and design is not just about marking answers with right or wrong. This tension was perhaps also being alluded to by the following question which was asked of Morag:

> "Do you develop your skills as learning/student as well as creative practitioner?"

There appear to be two distinct aspects to being a student in an art school which are being raised: the first being that they are a student who is there to learn, and the second being that they are also a creative practitioner who will continue to be a creative practitioner when they leave. This point is summed up by this response:

> "No one is going to mark your work when you are an independent artist."

This was echoed by another student who commented that the work produced stood as a separate entity to be judged as art, as opposed to being marked against a set of criteria on a course. The following comment succinctly sums this up:

> "Marks relate to courses not artworks."

Related to this is the issue of what is more important: good grades or creating works of art? A staff member commented that grades do not help you know what the person liked or disliked. The subjective aspects of art and design were again raised by a comment about who gets to say what is creative or not in the arts.

Morag was encouraged to develop her own creative style and to contact her tutors or others for feedback if she felt she needed it. She was praised for the obvious effort she had put into her design and for using a variety of techniques. She was advised to have more confidence in her work and her abilities. This is summed up by the following advice from an undergraduate:

> "The grade, to me, says they appreciated your response. Your addressed your brief appropriately and confidently. They may also feel that you have incoporated enough of your own agenda for the work to be valid in its own right without the prop of the brief. It sounds like they registered that you have perhaps developed your own visual

language, they may want you to continue with similar approaches to your coming briefs. Good luck and well done!"

There was empathy with the way she felt about her work with others expressing their doubts about the quality of their work.

Emotions

Many responses concerned emotional aspects, in particular, there were many comments regarding confidence.

Confidence

There was a lot of advice given to Morag to be more confident in her abilities. The advice was given in a friendly and motivational way, for example:

"believe yourself, if you really work hard you should proud of your work."

"Morag you should never under estimate yourself , or your creative abilities, you are the one that has produced this work of art. always be positive and demand feedback from your tutor."

"…have the confidence to believe that what you have done is good."

Advice was given to help confidence by suggesting she talks more to her tutors and peers and to trust her intuition. Talking to tutors about your work before it was assessed was also considered a good idea. Some thought that their own personal character helped them to be confident while others felt that their confidence was learnt. Feeling secure within a peer group was also seen as a condition which helped develop confidence.

Students also felt like Morag did and one stated:

"Yes, I have also felt this way about my work and sometimes I doubt my abilities and subsequently my confidence plummets which can make things even worse."

One staff member queried whether her lack of confidence was not just about her art ability and was more general in nature, touching on other aspects of her life, suggesting that perhaps prior life experience has led her to feeling this way.

Negative emotions

There were many comments which considered the more negative emotional aspects to assessment. A number of students did just enough work to get by and didn't feel motivated enough to work hard on the assignment. One postgraduate said that although they worked hard, they were not necessarily motivated whilst completing the work:

> "I've learned that everyone questions their work, even work that they think is really good! It also reminds me that I spend a lot of time completing assignments because I'm expected to, not because I feel motivated to complete them."

Another postgraduate wondered if Morag had been disappointed as she had been expecting praise for her efforts but had only received a mark. The difficulty with separating the emotional involvement with the work was raised, which can lead to problems if the work is criticised. The following story from a staff member illustrates how such an experience can have lasting effects:

> "Painful ancient memory of being 13 in a so-called "art" class where I painted a picture of a vivid memory. Execution was probably miserable, but my emotional involvement in the subject was high but I didn't know how to express that to the teacher who said "How trite!" and so now I am a librarian, not an artist."

The insecurity and isolation of being a student was raised by people reading Morag's story. Perhaps Morag was worried about the feedback she would be given, why had she not sought out the advice of her tutors or peers. Insecurity can lead to feelings of isolation and it was suggested that this may reflect on the culture of the institution. One student wondered whether previous negative responses had resulted in this insecurity. Overall, there was an understanding of her position:

> "This unsureness must be similar to many individuals inner thoughts."

> "i once had a project where i loved what i was doing and was getting realy into it, but then started to worry...if i'm enjoying this so much, is it right? am i doing the right thing?"

> "Yes, I have also felt this way about my work and sometimes I doubt my abilities and subsequently my confidence plummets which can make things even worse."

Two students stated that they had been discouraged from doing any further work in a particular area because of poor feedback. Two comments made it clear that the situation Morag had found herself in should never have happened.

Positive emotions

Students were very clear about the positive aspect of having confidence in your work and abilities and were keen to pass this on as responses to Morag's story:

> "Peer viewpoint, I think you should have more confidence in your work and trust your intuition."

> "I thought that there is nothing wrong in have a bit of confidence in youself. It certainly sounded like she knew what she was doing."

> "Relax, be more confident. Talk to the teacher and discuss it. Discuss it with friends."

One student turned the whole issue regarding insecurity on its head and viewed it as being positive as it leads you to questioning your own process which in turn can lead to better work:

> "I think insecurity is a good sign as a mark does not mean much and it is ones own questioning process that develops the work in the end."

Other positive aspects were the advice and support offered and these will be discussed separately in the next section.

Advice or support offered

A great deal of advice and support was offered to Morag and here we shall take a closer look at the advice and try and understand the reasons for the advice or support being given. Advice and support given fell broadly into two categories, practical advice and empathic support.

Practical advice

Students gave a number of practical tips and advice to Morag. This fell into two areas: advice regarding the actual print, its style and how it could be improved, and advice in how to approach her work, such as distancing herself from it or looking at it from another person's viewpoint:

> "i wonder if you changed your colour palette or something you would be more sure of it?"

> "did you consider colour? mask out sections perhaps frame or light differently"

> "Maybe you need to experiment more with other possibilities. Or need another persons point of view. Standing back from youre work always helps."

One postgraduate wondered whether the artwork would be shown outside of the University so that a different audience could make up their minds about it. Again this demonstrates the differences being raised between the way art completed in an art school context is judged and art completed in the wider world is judged.

It was felt difficult not to take criticism personally, but advice was given not to dwell on such criticism and to try and move forward and look at how the work could have been done differently in a different situation. Questioning work was seen as caring about work, but advice was given that sometimes you have to stop trying to make improvements. The following response sums this up:

> "I think it's wise to question your work, even after it's been submitted for a grade. It means you really care about what you've done. However, there is room for improvement with ALMOST EVERYTHING. Eventually, you have to stop and say

"Am I proud of this?" Otherwise, you could continue working on it for months without necessarily improving it dramatically."

Empathic support

Students were happy to reveal a similar worry:

"I know exactly what you mean, one of my main worries is what people really think, quite often i put myself down to save embarrassment, this only adds to it tho."

They were also eager to provide motivational responses to her plight, by making positive comments about the actual print she had produced:

"The grade, to me, says they appreciated your response. Your addressed your brief appropriately and confidently. They may also feel that you have incorporated enough of your own agenda for the work to be valid in its own right without the prop of the brief. It sounds like they registered that you have perhaps developed your own visual language, they may want you to continue with similar approaches to your coming briefs. Good luck and well done!"

"Morag has obviously put a lot of creative energy into her work, and by following a thorough design process has come up with an original end result."

As previously discussed, they also gave words of support to motivate her to have more confidence in her abilities. Having more confidence was one of the key pieces of advice they gave. One response which was highly motivational in nature was:

"You will be a great artist because you are constantly thinking if you are giving your best...and because you demand the best from yourself... you will be the best... "

Another response showed how the story had made an undergraduate think about the type of work that they and other students produce:

"You've made me think that everybody produces work that they themselves would like; otherwise we wouldn't been able to put so much work into it. Nobody can be completely objective about their work, so we shouldn't try too hard. We should just do your best and hand it in."

There were relatively few unsupportive comments, though the following ones were received which are not very supportive in nature, but they were definitely the exceptions:

> "I wonder who they are. They sound like they are in therapy – struggling with knowing things."

> "how could you be upset with a 5!"

Some of the advice given in the stories and responses could reflect tacit knowledge gained through their educational experiences.

Marks

Responses focussed on the need for justification of a mark. It was felt that this was especially important in art and design as the response to an assignment is not fixed. The subjective nature to judging what is good or not in art was also raised. One student commented:

> "Perhaps numerical marks are the ultimate red herring. After all, aesthetics is also mostly personal taste."

One undergraduate student felt that the subjective element was relatively common in their course:

> "I reckon the grade implies they like your work. From what i'm able to gather in my own class's experience, the tutors are fairly subjective and are prone to take active, personal dislikes to a piece of work."

Justification of all marks was required as even students who had received a good mark wanted to know what it was about that work that was good:

> "Dear Morag. This happened to me too, more than once. I obtained excellent marks without comments and wished the person who graded my work would at least have said something about what had been particulary good in this work."

Marks on their own were considered meaningless and valueless. Marks were not considered helpful unless they had feedback which can help you build on positives and negatives and to clarify how the work did not meet the required criteria. Putting effort into a piece of work should obligate the assessor into putting effort into providing feedback.

It was thought that it is often easy to accept marks which were good without finding out what was good, what could have been improved, etc. There was also a feeling that attitudes about marks stemmed from school, where the emphasis was placed on getting a high mark:

> "This attitude stemmed from school where getting a high mark, maybe even doing the best in class, seemed to be what mattered. I am learning to realise this is not necessarily a healthy attitude, although it is sometimes hard to fight against."

One postgraduate student recognised this and was trying not to fall into the trap of simply aiming for high grades at the expense of learning. Another postgraduate commented that their undergraduate course emphasised marks and that they had not sought out feedback enough. One student wondered if Morag would have felt differently if she had not received a grade.

There were some comments about receiving a high mark for an assignment because it had fitted the criteria, but the work had not been considered very good quality by the student. The difficulty with simply addressing the criteria was also raised by a postgraduate student who had felt a sense of injustice at receiving a poor mark which they feel had not taken into account the inventiveness of their work. Perhaps here the criteria did not include inventiveness. There were similar issues concerning receiving a poor grade for an assignment where a lot of work had gone into it. One postgraduate student lamented:

> "At other times, I have spent hours working on something and feel proud of it, but it receives a less than stellar grade. Grades are very subjective and can be influenced by a teacher's mood, impression of you as a person, etc. Teachers are only human!"

One undergraduate student suggested that grades should reflect progress made and not just be focussed on particular assignments.

Another student gave Morag some specific advice on why the grade may not have achieved a 6, suggesting perhaps that the print had concentrated only on mid tones.

Learning, cognition, developing

The ability to be able to stand back from ones' work and distance oneself from it was seen as a way of being able to develop a more critical approach to self-assessment by many. Looking at it from another person's view, asking another's view, trying different approaches or returning to the work some time later were seen as ways of helping a more critical approach. Ultimately, it was thought that a student needed to develop their skills as a self-critic and to develop criteria for the assessment of their own work. Students were aware of the benefits of learning to analyse ones own work and to question what you are doing. However, there were also pitfalls to this:

> "I think it's wise to question your work, even after it's been submitted for a grade. It means you really care about what you've done. However, there is room for improvement with ALMOST EVERYTHING. Eventually, you have to stop and say "Am I proud of this?" Otherwise, you could continue working on it for months without necessarily improving it dramatically."

Questioning work was seen as a reflexive skill and greater experience would provide a different frame of reference for the work. A reflective approach was valued, and the example story had enabled students to reflect on their responses to the situation:

> "This is a natural feeling, which I can relate to and actually makes me reflect on perhaps a different way to respond to the same situation."

One response questioned whether an artist could ever really distance themselves from creative work:

> "I wonder if an artist ever has the skill to take enough distance from a just completed work of art, because mentally (s)he is still involved in the creative process."

One student felt that all experiences were useful if you considered you had learned something from it and were happy with the work. Other students felt that it was positive to learn from all situations, whether good or bad. One student suggested that it was important to learn your roles and responsibilities as a student and they had learnt this from prior experience:

> "I have been in a similar situation – I didn't understand context and my roles, responsibilities and rights within that. I didn't make the distinction between me, my work, the course, the importance of communication, fallibility of methods, capacity for subjectivity - personal human 'error' within the educational context/process."

Ultimately, it was thought that a student needed to develop their skills as a self-critic and to develop criteria for the assessment of their own work. One postgraduate student criticised Morag for her lack of independent thinking.

Peers

The responses given were generally from a supportive peer group and the value of having a supportive peer group was also evident in the responses. Within this category the most common response concerned an empathic response from students that they recognised the story and had felt similar thoughts. Students expressed understanding with Morag's predicament; some students had very similar situations:

> "And as Morag said above about how she worried handing her work in for assessment, i was the same. Probably because i knew id come such a long way in myself, but i wasn't sure if they'd see that, or if they actually disagreed with me. turned out i got a 6! Great stuff."

Students expressed their understanding by stating, 'I know what she is saying', 'I have felt this way', 'I have often thought similar things', 'I know exactly what you mean', etc. Students were worrying about whether their work was good enough, or were doubting their abilities and as a result their confidence levels were dropping.

The importance of using the peer group for advice was also strongly suggested by many responses. Comments suggested discussing work with friends or peers to get their opinion and position your work with theirs, for example:

> "I wonder if, you had had more support in terms of peer debate you might have had more confidence in your work. It need not be so formal, just a small group of peers discussing their ideas."

Additionally, talking to peers may result in many people expressing their worries and providing advice and a way forward for dealing with future similar situations. Talking to peers may show that other people have had problems with feedback. If there was a problem with feedback, it was suggested by a staff member to discuss it at school level or set up your own project show where peers could give feedback. However, the student (Morag) needed to feel confident in her peer group too.

Tutor or examiner

Some responses directly concerned tutors or the examiners. One student felt that the tutors on this course should be informed about the lack of feedback being given.

One thought that the examiner may have had a problem in interpreting the image. Another felt that putting yourself in the position of the examiner was helpful but difficult to do as it is too easy to become too involved in your own work. There was some empathy with the tutor's situation in that it was felt that they were probably so busy that they didn't have time to adequately provide feedback. However, it was also suggested that maybe the tutor needed some staff development and one student clearly stated that to not provide feedback was unprofessional:

> "Unprofessional. A student should not ever be given a mark without the feedback comment, which is more important at the end of the day."

One postgraduate student who was also a tutor had felt that their experiences as a student had helped them become a better tutor:

> "As a tutor I have ensured that students never received a grade without comment. Even if they sometimes receive comment without grade. A good lesson learnt as a student, it made me a better teacher."

Interestingly some comments were provided from the point of view of the tutor, with the individual taking on the role of the student's tutor. This 'role playing' aspect will be discussed later in this chapter.

Institute

Some responses concerned the effect the institute might have on the process of assessment, in particular the culture of the institution: whether it had a supportive or authoritarian culture and the effect this might have on the student:

> "Learned that insecurity about feedback can lead to a vicious cycle of isolation – maybe this is linked to the culture/learning climate of the institution?"

Other comments queried what the institutional regulations were on feedback and whether they were being adhered to.

We will now look in more detail at these categories according to the story responses types. We are concentrating on this at this point as the aim of this part of the study was to see whether the model could support responses to an initial study which could reveal insight into the student experience and provide a reflective framework for discussions.

Story response types

Figure 7.11 and 7.12 show the frequency that each of the categories arose in the data, that is, the total number of times each category was coded within the story response types. These figures show the distribution of the codings from two perspectives, firstly, the coded categories by story response type (Figure 7.11) and, secondly, the story response type by coded category (Figure 7.12).
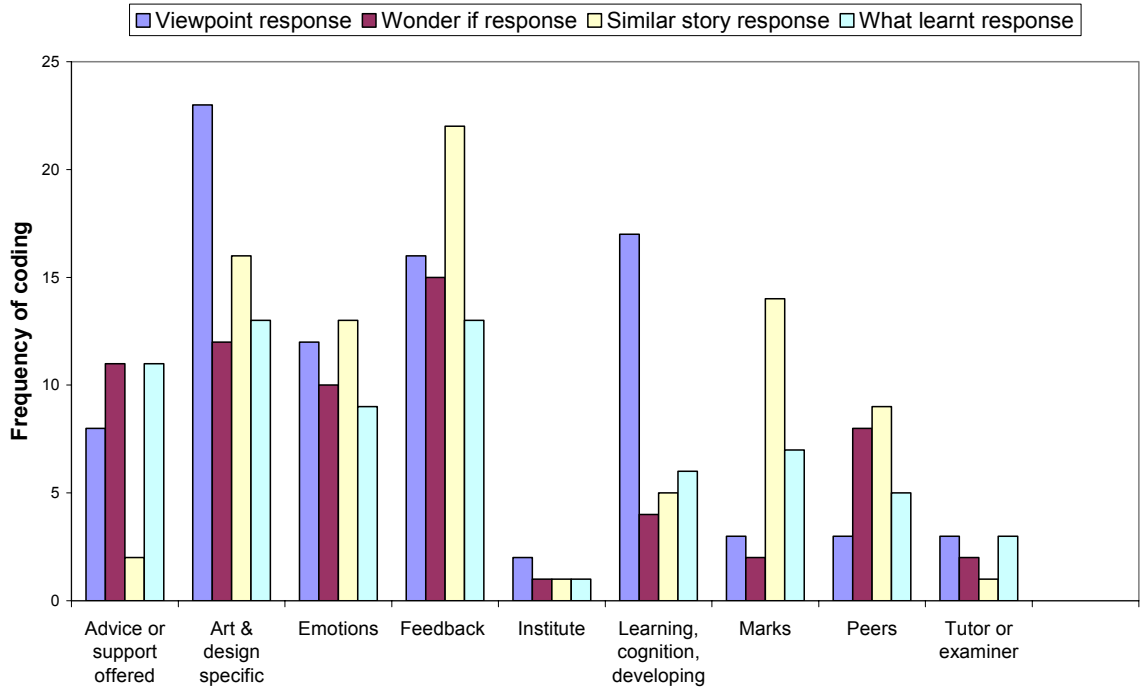
Figure 7.11.
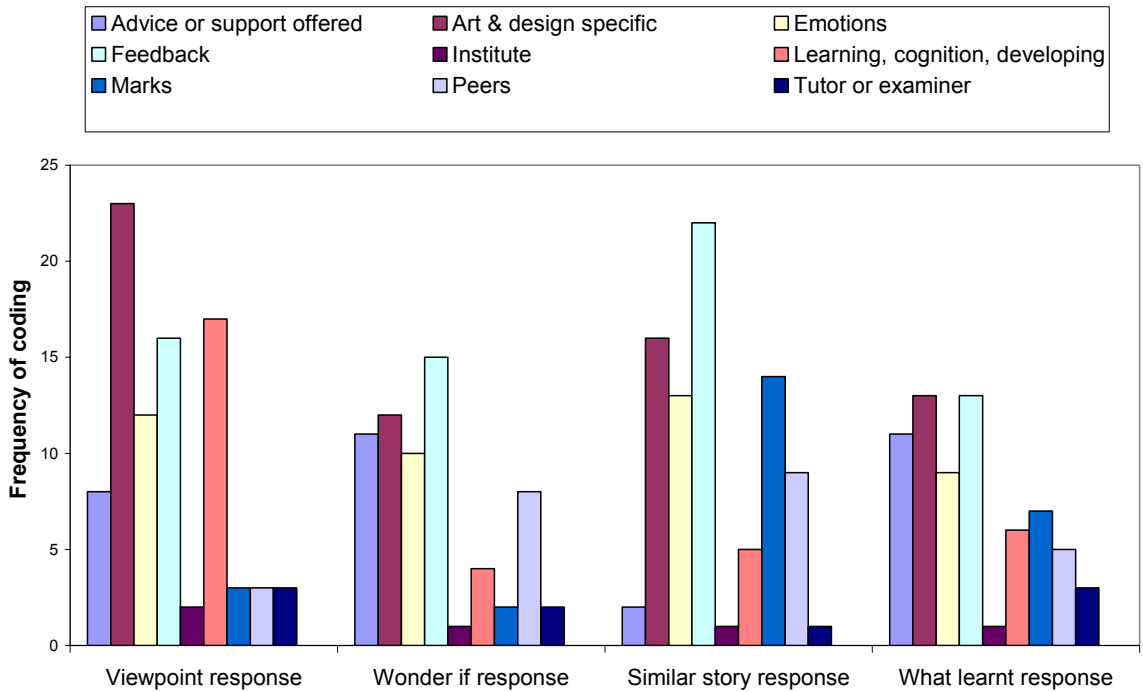
Coded categories by story response type

Figure 7.12.

Story response type by coded categories

Viewpoint response

In general, peoples' own viewpoints on the story were given, largely from a peer perspective. Some responded as if it was they themselves who were in the same situation Morag had found herself in and how they would deal with the situation:

> "This is not the work of art of my life. I will only learn out of my positives and negatives from the print. I will hand it in and anticipate for comments. It's not the end of the world."

Interestingly, four people responded as if they were the tutor responding to her story. We will discuss this further in a separate section. Some examples of their responses follow:

> "Morag, this was a really good piece of work and you can see that the assessor liked it. You only just missed getting 100%. The system isn't set up for you to get comments on your work from the assessor at this stage, but I'd be happy to discuss it with you, and how you can take your ideas forward in the future."

> "Dear Morag. I didn't realize that the grading points wouldn't be feedback enough. Please feel free to ask me about more details anytime. I guess, I should have told the students before that anybody who is interested in a detailed feedback can obtain it from me. I made the experience that many students are not interested in such details beyond their grades. And since it takes a lot of time to write explicit feedbacks, I had stopped doing so."

Within the viewpoint response the predominant area related to art and design, in particular to issues concerning creativity and the criteria and brief. The role of the brief in supporting creativity was raised, that it may be through the personal interpretation of the brief that an individual shows their creativity.

Learning, cognition and developing issues are also high in this response type. The key areas raised here concerned the need for the justification of marks with feedback and the need to question and analyse one's own work in order to develop and progress.

The viewpoint response type yielded the highest level of learning and cognition related responses. This thesis is based on Constructivist principles of education which highly values the need to look at learning situations from differing viewpoints. The data gathered here suggests that being asked to look at a situation from different viewpoints can facilitate the reflective process.

Responses about feedback highlighted the strength of feeling regarding the importance of receiving feedback and the need to ask for feedback if it is not provided.

Wonder if response

The wonder if responses pondered two main aspects: whether the student could have done anything differently, such as ask for feedback, or whether the situation would not have been that way if, for example, feedback had been provided. These musings highlighted issues concerning feedback, particularly the need to ask for feedback and the importance of feedback. These responses were very much about searching for changes which would lead to a more positive outcome for the student. Some of the changes were not about practicalities, such as asking for feedback, but about intrinsic changes to the student, such as becoming more confident in their abilities.

Most advice was given during this response type. As we have already discussed, advice was either practical in nature or empathic and supportive. The art and design specific issues raised here were largely concerning creativity and the difference between fulfilling a brief and creatively fulfilling a brief.

Out of 39 responses in this category, 25 started with 'I wonder if...' or 'I wonder...', suggesting that providing some guidance for thought can be productive.

Similar story response

We have previously discussed definitions of stories and suggested the term 'proto-story' can be used to describe stories which do not meet the usual literary definitions and which usually describe the types of stories we tell in an everyday context. The stories here varied in the types of structure presented. At times just a comment about

the story was provided, though these tended to be considered comments of a reflective nature; others were simply a description of an actual experience similar to the example story, and some of the time the description of the experience included a particular point raised by the story – the moral of the story. It is the moral of the story which highlights the reflective element of telling the story and shows how the storyteller has reflected on the experience. This element also gives greater insight into the experience for someone reading the story. The similar story responses also contained the highest number of emotionally classified responses.

Stories often started by expressing a shared understanding with Morag's experience, for example:

"Hi Morag, Your experience is like mine..."

"I have been in a similar situation..."

"Dear Morag. This happened to me too, more than once..."

The conclusion of stories was often the 'moral of the story', for example:

"What is so obvious to yourself isn't always made explicit to others."

"But the most important critic in the end is yourself. you need to be true to or depend on your own judgement ultimately."

"It left me with a slight sense of injustice."

"It made me think about my ability to creativity or the company's ability to give feedback."

The stories either related to an experience that the person had or one that a friend of theirs had. They focussed on aspects of the issues raised in Morag's story: feedback, confidence in abilities, marks, creativity. Stories generally related to similar situations in the art and design context, but also to similar situations that students had experienced outside of this context too.

The stories from an art and design context included those about a friend who had received comments that she could have improved her ceramic design although they had considered it a wonderful design; a glass work that had not been successfully completed and had been described as 'cack handed'; and receiving poor marks for a multimedia project because they had taken a risk and included drawn images. Some other examples of stories follow:

> "I was in my first printmaking class. I liked printmaking, and hoped it would add to my graphic design. I was receiving OK marks. They were good enough to keep me satisfied, and this allowed me to concentrate on my design assignments. About six weeks into the class, a print edition was due, and I was pulling an all-nighter to get out the edition. I handed in the work, and a few days later, the edition came back with the best grades I had received to date, and a note, which read, "when are you going to talk with me about your work?" When I went to see the professor, I not only received an individualized assessment of my work, but I was asked if I was showing my work to other professor, as well. This last part had never occured to me. My point being that up until then, I felt I was getting enough information out of critique. And since the class wasn't the focus of my degree, I was accepting my OK marks and not investigating how I could be even better. As an undergraduate, I had terrific professors. They cared about their students, and they expected for us to engage them. I expect this from my students, as well. But ultimately it is up to the students to seek out their professors, and often students, even with the professors' prompting, fail to do this."

> "i never put a lot of effort into the majority of last year but persuaded myself that i had untill the last project which really suited me and i did heaps of work and loved it. my overall grade was poor and i would have preferred it was marked seperately to show progress rather than a bad year."

> "i once had a project where i loved what i was doing and was getting realy into it, but then started to worry...if i'm enjoying this so much, is it right? am i doing the right thing?"

These stories show the range of structure used. The first one would fit more easily into literary definitions of stories. It has a plot, protagonist, characters, temporal aspect, even a story arc. The second and third represent a more anecdotal style and proto-story structure, yet these, including the last one despite its brevity, still convey

the experience as perceived by the student as well as what they thought about it. The last one clearly shows similarities with Morag's uncertainty over her work and therefore questioning a piece of work she was initially happy with. Proto-stories, or short anecdotes appear to be able to succinctly convey a richness of experiences.

What learnt response

The what learnt responses were either given from the viewpoint of the responder, what they themselves had learnt, or were in the form of advice relevant to Morag, or were pieces of advice or comments which were generally not directed to Morag or themselves. For example, some responses from the viewpoint of the responder:

> "I have learnt that if you don't discuss your work prior to assessment or gain sufficient feedback it can leave the student feeling confused or unconfident."

> "I 'relearnt' that communicating as a student is always difficult. We have such high expectations that we need to manage and this is especially true of creative practitioners. Your experience is a part of the process, but it would be good to know that you were given the support you needed to progress to the next stage."

> "I've learned that everyone questions their work, even work that they think is really good! It also reminds me that I spend a lot of time completing assignments because I'm expected to, not because I feel motivated to complete them."

> "im not the only one."

The story clearly made people think and 16 responses specifically referred to what they had learnt or how the story had made them think differently about things.

The following show responses which were directed at Morag's situation. Often these responses were offers of advice to Morag, for example:

> "She might have found it more beneficial to be given constructive criticism rather than a mark."

> "Morag, I've seen that the examiner's mark was valueless. Despite being good, it's helped you in no way at all. You really need some form of feedback, or some forum where you can discuss your work."

"I thought that there is nothing wrong in have a bit of confidence in youself. It certainly sounded like she knew what she was doing."

There were a number of comments made about the story which were neither directed at Morag or the individual providing the response. They appeared to be general comments and principles arising from the story, for example:

"Everybody requires feedback on performance. We need to know where we and our product stand in relation to others and other work."

"Marks relate to courses not artworks. Education is a context in which creative practice is placed for measurement against educational criteria, as the primary motive/agenda."

7.6 Perspective 3: Postgraduate, undergraduate, staff responses

In this section we will look at the distribution of responses according to participant type and discuss any differences in the types of responses they submitted. To recap, there were 23 postgraduates, 18 undergraduates and 10 staff who submitted responses. Table 7.4 shows the total number of responses that each group wrote, plus corresponding percentage of the total group.

Table 7.4.

Distribution of responses by participant group

Type of response	Undergraduate	Postgraduate	Staff
Viewpoint response	10 (56%)	21 (91%)	8 (80%)
Wonder if response	9 (50%)	22 (96%)	8 (80%)
Similar story response	17 (94%)	19 (83%)	9 (90%)
What learnt response	12 (67%)	22 (96%)	8 (80%)

Figure 7.13 shows these percentages as expressed in a graph. As can be seen from the percentages, postgraduates and staff consistently responded in each of the four

responses areas. However, undergraduates consistently submitted less responses in the viewpoint, wonder if and what learnt areas.
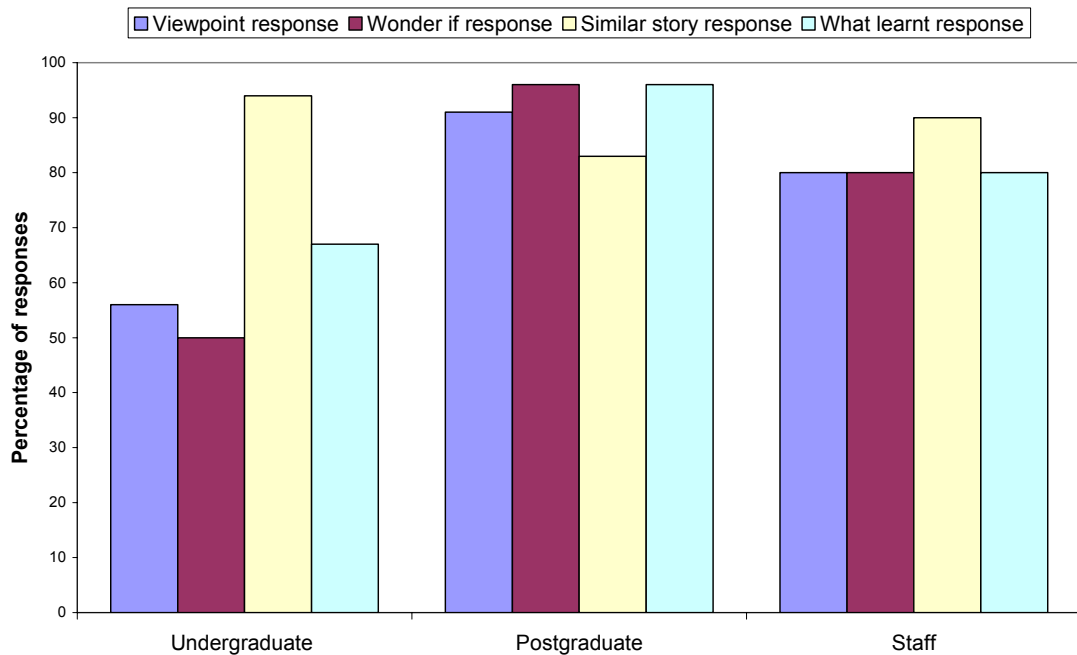

Figure 7.13.
Participant group by response type

The wonder if and viewpoint responses are particularly low in the undergraduate category. Both these response types are key in supporting a shift from surface to deep learning by enabling the student to look at different perspectives, make connections, consider solutions, and so on. Undergraduates were still able to learn from the story, although this percentage was also lower than those for postgraduates and staff. All but one of the undergraduates told a similar story showing they recognised the situation Morag was in and could identify with her plight.

This difference could reflect the differing meta cognitive abilities between students starting out on their studies, at undergraduate level, and the level of skills reached at postgraduate level and beyond. Providing specific support for these skills could enhance the student learning experience. Using tools such as 'StoriesAbout...Assessment' could enable students to think about their learning experiences in ways that they might not have considered. As stated earlier, in previous research, students were asked whether reflecting on their learning was

helpful (Malins & McKillop, 2005). Although 88% of students found reflecting on their learning helpful and could clearly identify the benefits of reflection, 81% stated they did not know whether they would reflect on their learning unless asked to do so. This suggests that tools such as this need to be included as part of the everyday student experience, so that a seamless approach to learning the subject area and developing learning can be achieved.

However, the following response from a staff member might provide some evidence against the notion that the higher you proceed academically, the more you are capable of learning:

> "I haven't learned anything from reading this story. Mind you, I am a tenured professor with many years experience, so I have heard stories like this so many times that I see a pattern without learning -- at least not learning anything new or notable."

This is in stark contrast to the many other staff responses who *did* learn from reading the example story, and thanked Morag for helping them see things differently, such as:

> "I am happy that you shared your thoughts/emotions with me. It extends MY angle of view for understanding your approach, but never forget that a work of art is filled with inponderabilia (things that are not measurable."

> "I can see that a good mark can be as ambiguous as an average one. As someone who achieved only average marks until I suddenly understood design, I had assumed that detailed feedback was more important for the students who are average or bellow. Thank you for making me see differently."

Perhaps encouraging staff members to use 'StoriesAbout... Assessment' would help them with their personal staff development as it has enabled some staff members to see things in a different light.

Staff members offered little in the way of advice or support. This can be seen in Figure 7.14 which shows a comparison of the number of codings, in proportion to the number of respondents, for each group. We can see from this chart that postgraduate

responses were more similar to staff with regard to the categories they were coded under, and that the undergraduate responses were most dissimilar.
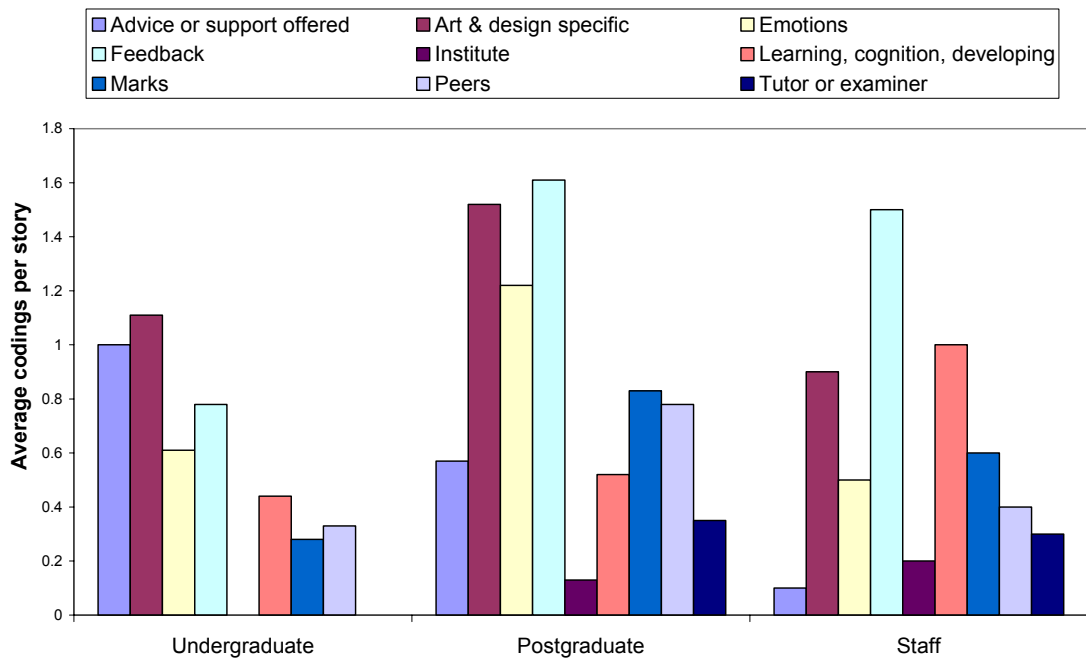

Figure 7.14.
Participant group by coded categories

If we look at the data from another perspective (Figure 7.15) we can then compare more clearly the individual categories according to type of respondent.
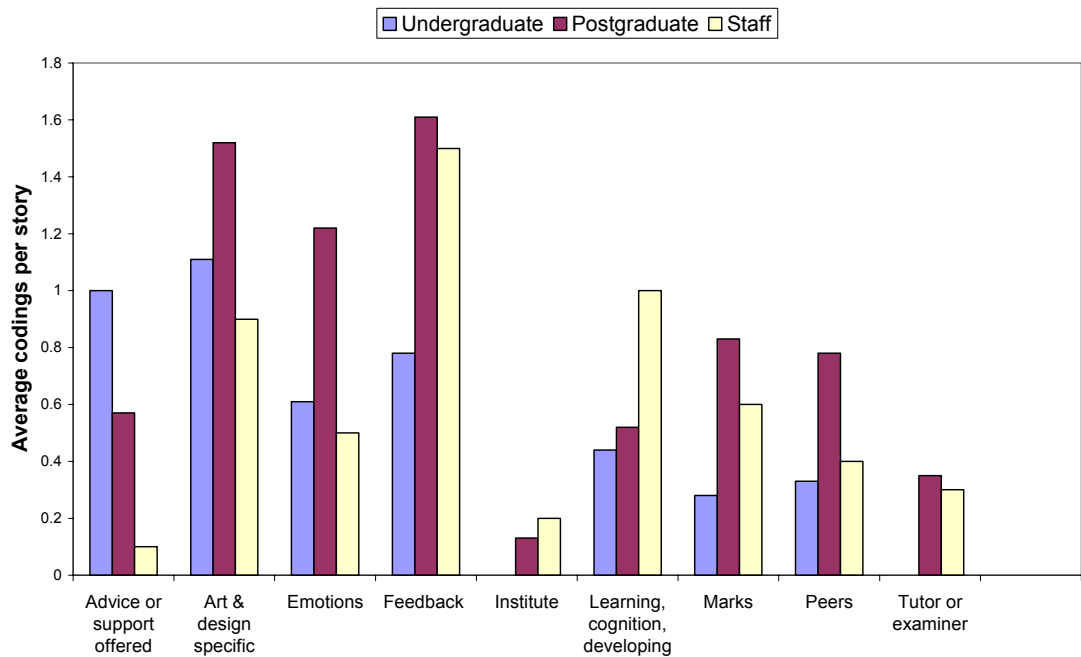
Figure 7.15.

Coded categories by participant group

Undergraduates provided the most support and advice, providing supportive advice on many aspects of Morag's story, including approaching the work in a different way and showing surprise since they had received a good mark and should be satisfied with that. Postgraduates felt that having the work assessed by others would be helpful. The staff perspective was that students should be more assertive about their learning needs.

Postgraduate responses predominantly were about issues concerning their peers and this was also quite high for staff, though much lower for undergraduates who have perhaps not realised the value of peer support at that stage. In this category, postgraduate issues were mainly about the importance of discussing work with peers and to a lesser extent, that they knew what the student was saying as they had similar thoughts of self-doubt. Staff suggested discussing work with peers and stated they had felt similarly when they were a student.

The postgraduate responses contained the most codings about art and design issues. They mainly raised issues concerning creativity and the criteria/brief, mainly how the brief could support creativity. Undergraduates' main concern in this area was also

the criteria/brief but did not relate to creativity issues. Their responses concerned fulfilling the brief and being happy about the work completed.

Postgraduate responses contained the highest level of emotion related codings, with the undergraduate level being much lower. Postgraduate responses largely focussed on the importance of having a confident attitude towards work. There was also a concern over Morag's insecurity about her work. Undergraduates also focussed on the need to have a confident attitude to work. The staff perspective was more varied with no single issue being flagged.

Staff highlighted learning, cognition and developing issues more than the student groups. Their responses were mainly about the need to distance oneself from work to gain a more critical approach to self-analysis. Postgraduates mainly felt that it was one's own questioning of work which helped to develop work. Staff also mentioned this too. Undergraduates also saw the benefit of attempting to be objective and standing back from your work.

Surprisingly, postgraduates raised marks as being an issue more than undergraduates. They were mainly concerned with receiving a justification for a mark, which they considered important and stated that a mark on its own was meaningless. Their responses highlighted the difficulty of providing marks in a subjective discipline such as art and design.

Fictional roles

One unanticipated aspect of this study was people's use of fictional roles. It had been thought that people would simply respond to the stories as themselves, giving appropriate responses. However, some responses (4 from the viewpoint responses) were from a fictional tutor viewpoint. They were:

> "Tutor
> Morag, this was a really good piece of work and you can see that the assessor liked it. You only just missed getting 100%. The system isn't set up for you to get comments on your work from the assessor at this stage, but I'd be happy to discuss it with you, and how you can take your ideas forward in the future."

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"Tutor - If we constantly say we 'like your work, it's amazing, it's fantastic' this will not aspire you to be a better designer...it is not meant to be personal criticism, but to push you towards ways in which you - the student can continually improve..."

"Dear Morag. I didn't realize that the grading points wouldn't be feedback enough. Please feel free to ask me about more details anytime. I guess, I should have told the students before that anybody who is interested in a detailed feedback can obtain it from me. I made the experience that many students are not interested in such details beyond their grades. And since it takes a lot of time to write explicit feedbacks, I had stopped doing so."

"My feedback as a Tutor, sorry it has been late getting to you, but my child was ill and I just had time to give you the mark. Interesting stunning image that has fulfilled the assignment brief in all ways. You clearly have read the assessment criteria and matched your work accordingly. However, I would like you to reflect on the creative processes that you have used as opposed to the use of technology. Please bring these reflections to our next tutorial. Well done 5/6"

This is an area which had not been considered and it is one that could be interesting to develop. Whilst the focus of the study was on students' real experiences, considering responses from other peoples' views in a role play manner could help students understand the wider perspectives of their learning experiences.

Role playing and fictional stories about learning could be a way for students to participate without worrying about sharing their real experiences, especially if those experiences were negative and they would worry what other people might think of them. The initial example story was fictional and no one expressed a difficulty with this. Students could take on the roles of tutor, examiner, policy maker, potential employer, to explore the different perspectives to assessment. Perhaps taking a gestalt view of assessment would help students in furthering their understanding of assessment processes.

Discussion of Perspectives 2 and 3

The storytelling model

Participants responded well to the storytelling model with most contributing responses to each of the stages. Their responses, as requested by the viewpoint, wonder if, similar and what learnt responses matched what would have been expected according to the intentions behind McDrury & Alterio's (2003) model.

The viewpoint responses enabled a variety of different viewpoints to be expressed, and these touched on much wider issues that those raised in the initial example story. This was surprising since the example story was a brief story and contained relatively little information. Each respondent was able to look at the story from a variety of perspectives, enabling aspects of it to be expanded and explored and for connections to be made with the circumstances in the story and wider issues, such as art education or general issues regarding confidence. Many questions were also raised at this stage, which is another important aspect of the model.

The wonder if responses considered different solutions and outcomes in the story. Most of these responses concerned searching for positive outcomes, although a few just wondered why the student, for example, hadn't been pro-active in seeking out feedback. Further links were made here to wider issues not specifically focussed on in the example story, such as aesthetic issues, peer assessment, staff development, and so on.

A critically reflective approach was evident in both these response types, with responses being critical about aspects of feedback, art education, institutional culture, the student, and so on. The responses demonstrated a reasoned and considered approach which went beyond a descriptive account of experience or mere personal opinion.

Many of the stories we tell on a day to day basis are stories in which we show our understanding of others by telling a similar story. The similar stories told also shared an empathic understanding towards Morag. The emotional content was highest in the similar story response, perhaps as students told their stories for the first time

about similar experiences, these stories still had a 'raw' emotional edge to them. It is possible that these stories were cathartic for the students and this was an opportunity for them to get them off their chest, hence the slightly heightened emotional aspects.

The what learnt responses demonstrated a wide range of areas which people had learnt about. Responses explicitly stated, 'I learnt that...', or similar phrasing, many times and there was evidence of students making changes to their ways of thinking or learning practices as a result.

The emotional content of the what learnt response was the lowest of the four types. This may suggest that reflecting on what they had learnt had led to a more objective and reasoned understanding of the situation.

Although this study was conducted largely over the Internet, with some paper-based versions of the questionnaire, people were largely responsive to Morag as an individual. Responses were often written as if they were a personal reply to her and 9 responses replied to her using her name, which personalised the process.

7.7 Assessment and learning words

In Chapter 5 we discussed the focus group which was conducted during the initial investigation of 'StoriesAbout... Assessment. During the focus group, a number of words were used to describe assessment which were rather negative in nature. Students' commented that stories about learning would be more positive. In order to explore this further, the questionnaire in the initial study (Appendix 5.3) had asked for 5 words to describe assessment and 5 words to describe learning. A preliminary analysis showed a marked difference between assessment and learning, with the words used to describe assessment being far more negative in nature than learning.

Therefore, it was decided to gather a larger number of words to enable a statistical analysis to be conducted. These words were gathered from the Assessment Experiences survey (Appendix 7.1). The words gathered during the initial study were added to the words subsequently gathered.

A total of 676 words describing assessment and learning were gathered. There were a total of 330 (49%) words describing assessment and 346 (51%) words describing learning. Most of the words (64%) were provided by postgraduates, with 24% from undergraduates and 12% from staff (see Table 7.5).

Table 7.5.

Distribution of words

Participant type	Total no. of words	%
Undergraduate	163	24
Postgraduate	434	64
Staff	79	12
Total	676	100

When the duplicated words were taken into consideration, there were 367 distinct words. Some of the words gathered were short phrases, such as, 'closing previous door that led wrong way' or 'mostly written grades for papers'. However, most of the submissions were single words.

Some of the words had a common root and meaning and were grouped accordingly, for example, 'disappoint', 'disappointed' and 'disappointing' were grouped together. Although the words 'help' and 'helpful' were not grouped as they have different meanings. This produced a set of 323 words (see Appendix 7.2) which were used in the rest of the analysis.

Frequently used words

Assessment

In order to examine the most commonly occurring words used to describe assessment, the resulting set of 323 words was sorted to show only the words which had 3 or more occurrences. This produced the more manageable list of words shown in Figure 7.16.
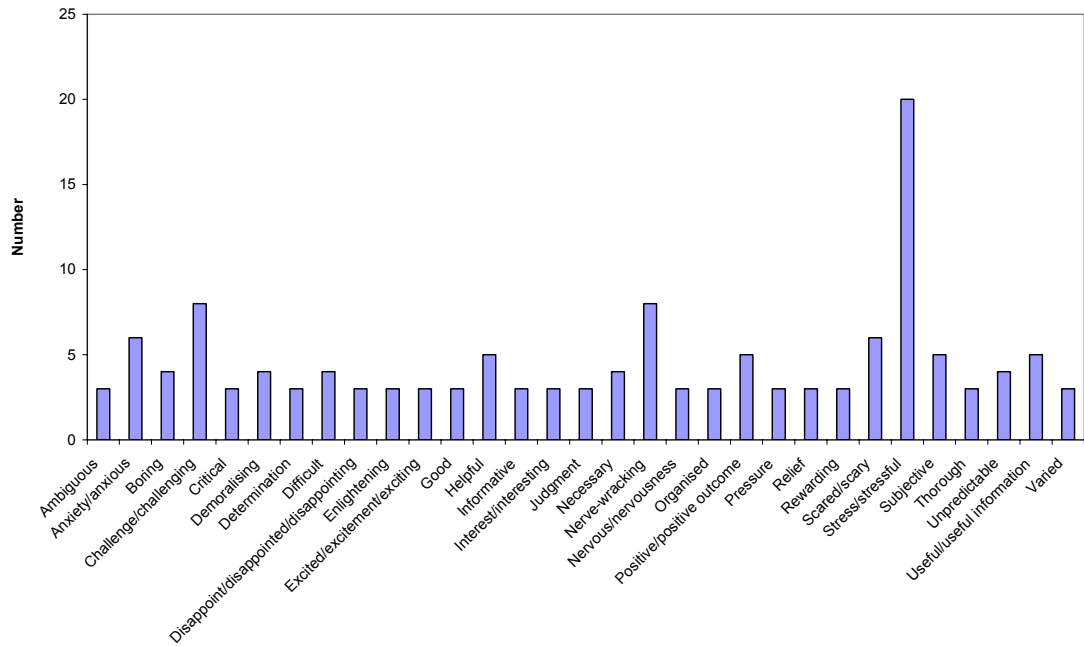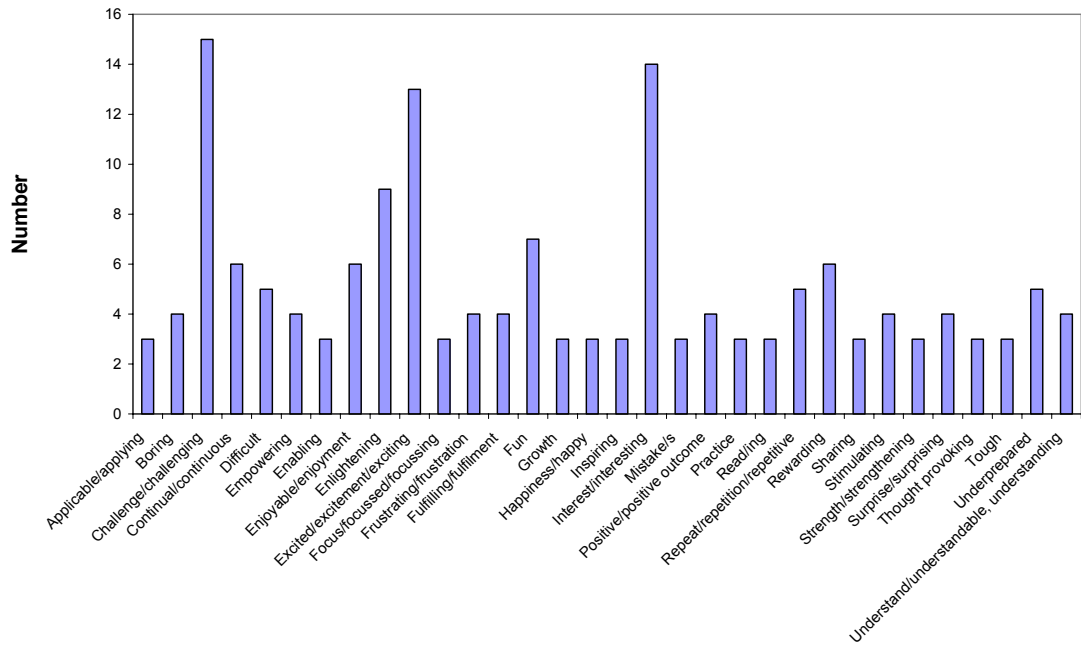
Figure 7.16.

Words describing assessment occurring more than 3 times

Table 7.6 shows the top 5 most common assessment words.

Table 7.6.

Top 5 most common assessment words

Word	Frequency
Stress/stressful	20
Challenge/challenging	8
Nerve-wracking	8
Anxiety/anxious	6
Scared/scary	6

As can clearly be seen, the most commonly used word by far was stress/stressful with 20 occurrences.

The following chart shows the words used to describe assessment which had 3 or more occurrences, together with the frequency with which these words were also used to describe learning.
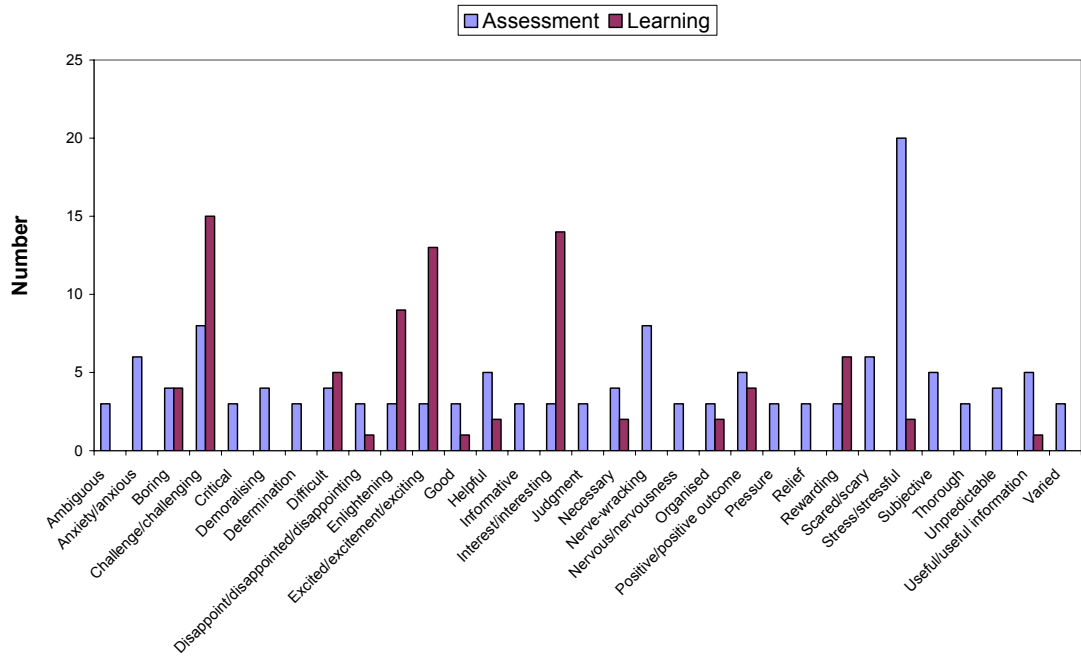
Figure 7.17.

Frequently occurring assessment words compared with learning words

The only word in the top 5 most common assessment words to be used to describe learning was 'challenge/challenging' which was the top most occurring word used to describe learning.

Learning

The following chart (Figure 7.18) shows the words used to describe assessment which had 3 or more occurrences.

Figure 7.18.

Words describing learning occurring more than 3 times

Table 7.7 shows the top 5 most common learning words.

Table 7.7.

Top 5 most common learning words

Word	Frequency
Challenge/challenging	15
Interest/interesting	14
Excited/excitement/exciting	13
Enlightening	9
Fun	7

The following chart shows words used to describe learning which had 3 or more occurrences, together with the frequency with which these words were also used to describe assessment.
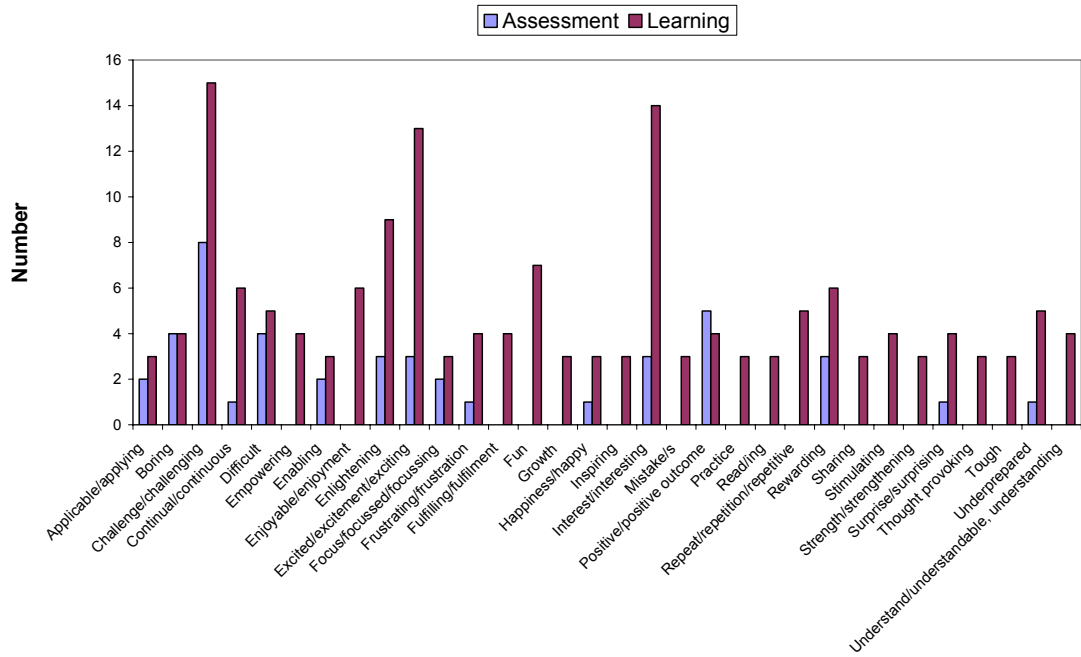
Figure 7.19.

Frequently occurring learning words compared with assessment words

Card sort task

Card sorting is a relatively quick and easy method for participants to categorise information. In this case, the most frequently used words which had 3 or more instances (total of assessment and learning) were used to conduct the task. This gave a total of 67 words (Table 7.8). The aim of the task to determine whether students' sorting of the words into positive and negative categories would show a significance difference between the classification of assessment and learning words.

The cards used in the task had an equal distribution of words between assessment and learning. Assessment was described using 51 of these words and learning was described using 51 of these words.

Table 7.8.

Words occurring 3 or more times

Ambiguous	Focus/focussed/focussing	Reflective
Anticipating/anticipation	Frustrating/frustration	Relief
Anxiety/anxious	Fulfilling/fulfilment	Repeat/repetition/repetitive
Applicable/applying	Fun	Rewarding
Beneficial	Good	Scared/scary
Boring	Growth	Sharing
Challenge/challenging	Happiness/happy	Stimulating
Confidence/confident	Helpful	Strength/strengthening
Confusing	Informative	Stress/stressful
Continual/continuous	Inspiring	Subjective
Critical	Interest/interesting	Surprise/surprising
Curious/curiosity	Judgment	Testing
Demanding	Mistake/s	Thorough
Demoralising	Necessary	Thought provoking
Determination	Nerve-wracking	Tough
Difficult	Nervous/nervousness	Underprepared
Disappoint/disappointed/disappointing	Organised	Understand/understandable, understanding
Empowering	Painful	Unpredictable
Enabling	Positive/positive outcome	Useful/useful information
Enjoyable/enjoyment	Practice	Valuable/value
Enlightening	Pressure	Varied
Excited/excitement/exciting	Process/es	
Exhilarating	Read/ing	

A fixed card sort task was used where participants were required to sort the cards into two main categories: one for positive words and the other for negative words.

Participants were able to put cards into a third pile if they found it difficult to classify. The results from the unclassified pile will be discussed at the end of this section.

Ten people participated in this study – 9 postgraduates and 1 staff member. The participant sampling was opportunistic and comprised a mix of people who had previously participated in this research and some who had not. Participants were given as much time as they needed to complete the task and given instructions to sort the cards into a pile which they considered represented positive words, a pile which represented negative words, and to put any words which they could not classify in this manner into a third pile. The cards were thoroughly shuffled between participants to minimise any bias from the order they were viewed in.

To ensure the validity of the results from the card sort task, an inter-rater reliability test was run on the data using Cronbach's alpha test which examines the consistency of ratings (Santos, 1999). The result was an alpha of 0.9385 which demonstrates a high level of agreement between participants in their sorting of the cards. Additionally, the same test was run on my results from separately completing the card sort task to investigate the reliability of my ratings. The alpha was 0.7885 which indicates a good reliability rating with the participants' classification of the cards. This result could give additional confidence in my interpretation of the emotional content of the data presented throughout this thesis.

In order to ascertain whether there was a significant difference between the classifications of the assessment words and the learning words, we needed a robust method for determining whether each word was considered negative or positive. To do this, we conducted a 1x2 chi square for each of the words and their groupings. This resulted in a probability (p value) for each word which indicated the likelihood of it being positive or negative. The p values ranged from $p = 0.011$ to $p = 1$. The words which had a p value of $p < 0.1$ (a less than 1 in 10 chance of being coincidence) were selected as being clearly positive or negative. The resulting classification can be seen in Appendix 7.3.

To see if people used more negative words to describe assessment compared to learning, we then used a 2x2 chi square on the words which where clearly positive or negative. The two independent variables in the chi square test were: whether the word was used in an assessment or learning context, and whether it was positive or negative. For example, if we look at the word 'stress/stressful' which is classed as a negative word. This word occurred 20 times in assessment and 2 in learning. This was put into the following table (Table 7.9).

Table 7.9.

Example using 'stress/stressful'

		Valence		Total
		Negative	Positive	
Context	Assessment	20		20
	Learning	2		2
Total		22		22

This was completed for all the words and their frequencies and classifications and the totals are shown in Table 7.10.

Table 7.10.

Classification of all words

		Valence		Total
		Negative	Positive	
Context	Assessment	38	82	120
	Learning	20	155	175
Total		58	237	295

A chi square was applied to this data which resulted in a chi square value of 18.459 which is strongly significant at $p < 0.001$. This shows a very strong tendency for negative words to be used to describe assessment as opposed to learning. This verifies the observation in Chapter 5 that words used to describe assessment tend to be negative.

There were a total of 44 words that participants were unable to allocate to the given categories of positive and negative. Around the name number of assessment words

as learning words appeared. The majority of participants (8 out of 10) were unable to categorise some of number of the words. Most (n=8) were unable to categorise up to 3 words; one participant was unable to categorise 12 words and another was unable to categorise 37 words. The words which appeared most frequently in the uncategorised group were 'Mistake/s' and 'Unpredictable', with 4 instances. There is not sufficient information to make any inferences from the uncategorised words.

7.8 Evaluation

To conclude this research, an evaluation was conducted to gather feedback on students' perceptions of their experiences of using the 'StoriesAbout… Assessment' site. Emails were sent out to all students who had previously been invited to participate and a total of 18 responses were received. There were 8 undergraduates, 8 postgraduates and 2 staff replies. Although staff were not directly targeted in the evaluation, some postgraduates were also staff members so a staff category was given on the survey. The request went out during the summer so fewer numbers of students were available. The on-line survey (Appendix 7.4) used a mix of free text comment boxes and Likert scales to elicit information. We will now go through each part of the questionnaire and discuss the findings.

Reading other students' stories

Students were asked to rate a number of statements about how they felt about reading other students' stories. The results can be seen in Figure 7.20.
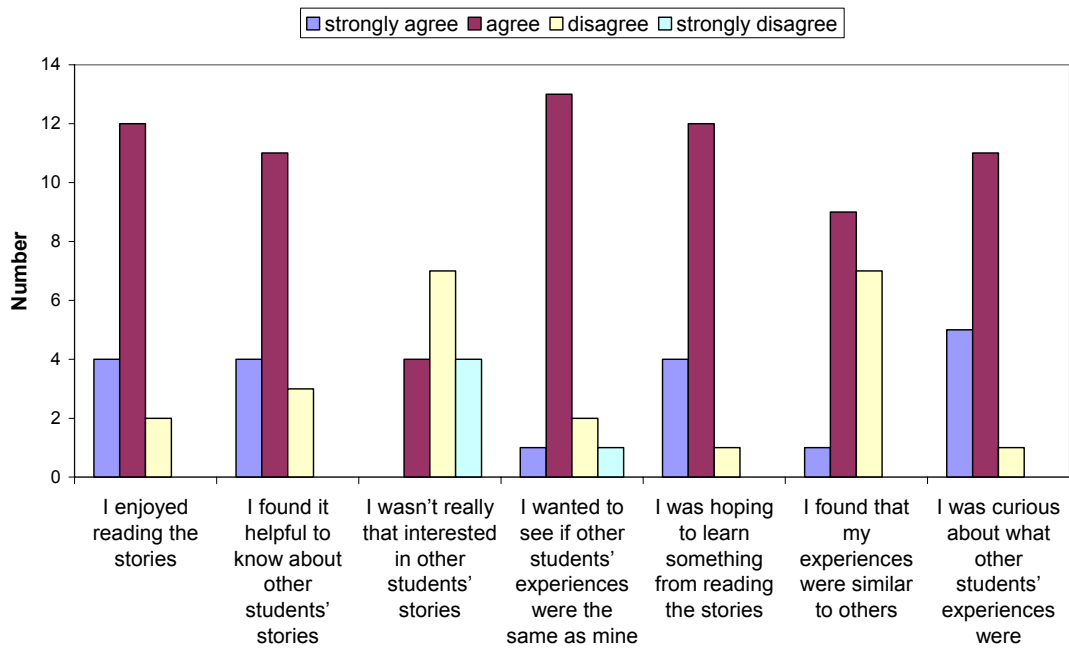
Figure 7.20.

Reading other students' stories

We can see that most respondents enjoyed reading other students' stories. It is important that students enjoy reading each others' stories in order to keep them engaged in the process and to ensure they return to the site and contribute.

Students indicated that they found it helpful to know about other students' stories. If students find it helpful reading about other students' experiences then they may be more likely to return to the site.

There were a small number of students who stated they were not very interested in the stories on the site which is slightly disappointing, although the majority were interested.

Most students were interested in finding out whether their experiences were the same as other students and were hoping to learn something from reading the stories. Students have previously expressed a natural curiosity over other students' experiences and we can see that this is still the case with most students, though it is interesting that there was such a split with students regarding whether they found their experiences similar to others. If we look again at this information, as displayed

in Figure 7.21, we can see that postgraduates were more likely to find stories on the site which did not match theirs.
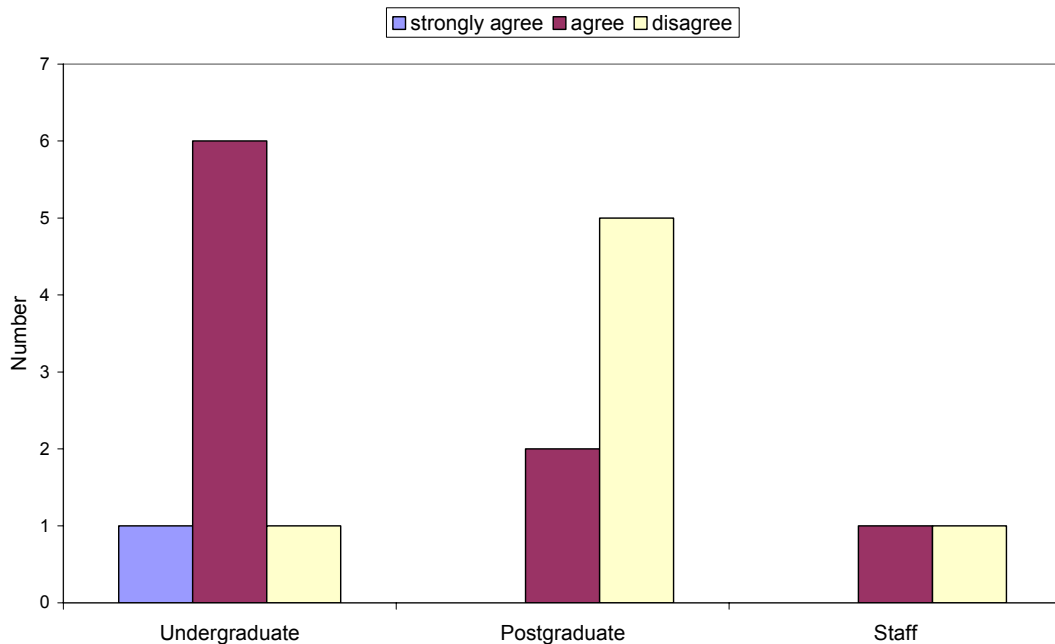
Figure 7.21.
Found experience was similar to others

It is difficult to know why this would be the case. They could have been reading the undergraduate section of the site and some of the stories on the postgraduate site also referred to undergraduate experiences.

The results shown in Figure 7.20 are very similar to the results discussed in Chapter 5 (see Figure 5.2) when five out of these seven statements were presented. The only real difference was for the statement about hoping to learn something from the stories. In the previous study most students had disagreed with the statement, whereas in this study, most students agreed that they *were* hoping to learn something.

Thinking about their own experiences

Students were asked whether reading the stories had made them think about their own experiences. Sixteen students responded that it had made them think about their experiences; only 2 said that it hadn't. It is useful to know that the stories are making students think about their own experiences as some of the value of the site

may be the internal reflection sparked off from reading the stories. However, this type of information was not gathered as the research focussed on the responses to the storytelling model.

Students had thought about a variety of different aspects of their learning experience. Some had thought about forthcoming assessments, or previous study experiences, whilst others had been interested in the student/staff perspective. The comparative angle was also common, from comparing undergraduate and postgraduate experiences, to differences in expectations as one progressed throughout education, to differences with other courses which have different assessment methods. Specific issues were also raised that echoed the difficulties brought up by the students' stories, such as the lack of feedback and problems with group projects. One student had thought about finding work experience, whilst another had thought about the criteria for assessment in fine art. One student commented that whilst sharing experiences was good, students' experiences and backgrounds varied greatly.

Learning from the stories

Students commented that it was comforting to know that others in art and design felt the same way. They had learnt a variety of different ways to think and view situations. Students learnt that there was still much to be done to improve teaching practices, such as improving the information given about courses. One student stated they would try and focus on good experiences and avoid bad ones. One student commented that maybe the reasons for there being so few stories was that people didn't care, or they did not want to appear silly.

Doing things differently as a result

To see whether students would actually make changes following reading the stories, they were asked if there was anything they would do differently, or want to do differently, as a result of reading the stories.

A few students stated that they would not (n=4) do anything differently. The reasons given were that they already had their own ways of working, or that there was no

point as the painting tutors did not care. One of these students did suggest that they would reflect on their own 'opinionatedness', so perhaps this student is actually doing something differently as a result.

Students who did state they were doing something differently, said that they would find more evidence to improve a current project and think more objectively. Another would ask more questions and get more feedback. One student said they would try and accept criticism more constructively and another would not worry so much when working in group projects.

One comment reflected on how the stories had reminded them about the personal nature of art and how they had previously taken a tick box approach to their studies. Another commented on how useful it is to be inspired by others' experiences, whether directly or indirectly.

One staff member stated they would think and plan things in advance and ensure that students had assessment practice before the official assessments.

Changing the site

Comments regarding possible changes to improve the site focussed on adding images, especially images of work. Although students were able to do this, few made use of it.

Encouraging more students to use it was also mentioned and one staff member commented that they will try harder to get their students to use it. Changing it to be more blog-like, or like the RGU message boards was suggested, as were the addition of links to relevant web sites.

One student found the navigation frustrating, although others thought it was fine and did not need any changes. The colour and design was thought to be fine and it was described as having a 'clean site' design which functions well.

Other Comments

Other comments from students offered 'good luck' for the research and stated it had been interesting participating. A comment from a staff member stated that they would like a similar site for their own students to have focussed discussions.

Although a small sample, this evaluation has shown that students are generally positive about reading stories about their fellow students' experiences and that these stories are helpful. They have clearly stated that the stories have made them reflect about their own experiences and that they have learnt something from reading the stories. A number of respondents were making changes as a result of reading the stories. Overall the site had been received well and some positive changes have been suggested. One of these changes, to make it more blog-like, is discussed in Chapter 9.

7.9 Summary

This chapter has presented the bulk of the data and analysis of this thesis. We have used a number of different methods in this investigation. Storytelling has been the main method and we have analysed the students' stories and responses to gain greater insight into their experiences of assessment in art and design. We have identified that many of these experiences are negative, yet students are still attempting to see the positive side to their learning. They are keen to provide their fellow students with advice and value the support their peers give them. The stories and responses demonstrated an empathic understanding amongst students. Feedback is consistently an issue for them, as is the lack of clarity of assessment criteria. Although there are criteria for assessment in art and design, students are perceiving problems due to the subjective nature of creativity and aesthetic judgement. This may result from a lack of understanding of the criteria or insufficient discussion with students about assessment processes

We have specifically targeted the storytelling model for investigation and used an example story to elicit responses. This enabled the efficacy of the model to be

examined. We found that the model stood up well to this investigation and resulted in responses which demonstrated reflective thinking and transformative learning. The responses to the example story covered a wide range of areas not included in the original story and serve to demonstrate the effectiveness of the underlying model.

We have seen how undergraduates are less likely to respond to the categories in the model which correspond with a shift from surface to deep learning and conclude that reflective tools such as 'StoriesAbout… Assessment' could be used to help undergraduates develop these skills.

We identified that the words used by students in describing assessment were significantly more negative than those used to describe learning. Stressful was the most frequently used word to describe assessment, whereas challenging was the most frequently used word to describe learning.

In summary, this chapter has revealed a number of practical and emotional issues associated with the student learning experience in art and design, in particular the negative dimension and how it affects the student. The model of storytelling has proved itself effective and shown evidence of reflective thinking and transformative learning.

Chapter 8 – Visual representations of assessment

'Visual storytelling of one kind or another has been around since cavemen were drawing on the walls.'
Frank Darabont

8.1 Introduction

This part of the research investigated whether visual representations could provide further insight into the student experience and whether, in predominantly visual subject areas such as art and design, it is worth investigating whether we can draw on the creative abilities of our students to improve our understanding of their learning experiences. The student experience in art and design is largely visual and consequently there are high levels of visual literacy amongst students. This chapter will investigate whether taking a visual approach to understanding the student experience of assessment could be an appropriate and effective method. The intent of this exploration was to see whether students' drawings would elicit more visceral conceptions of the assessment experience, to complement the text-based storytelling method.

The chapter starts by providing an overview of the method used and how the analysis was conducted using a Grounded Theory approach. This approach was developed using a two stage process: the first stage enabled the meaning and relationship of the drawings to each other to be categorised, and the second stage enabled the individual components, the syntax, of each drawing to be focussed on.

We will then discuss the drawings themselves, the actual form they took and the categories that emerged from the analysis. We will focus on key aspects of the drawings such as the extensive use of figures and the emotional content of the drawings.

A sub study which compared the drawings of computing and art and design students will be described and the similarities and differences of the drawings outlined. A

follow up study where the drawings were exhibited and participants asked for their responses to them will be discussed.

The difficulties of interpreting such images will be discussed and we will show that one of the values of this method lies in the interpretation of the drawings and the discussion this promotes.

8.2 Method

Undergraduates and postgraduate students in art and design were asked to visually represent assessment, whether an actual experience or how they felt generally about assessment. As the study aimed to obtain an overview of how students felt about assessment in general, the term assessment was not discussed with them in order not to influence how they approached the task. Students were asked not to think too much about it, but just draw what came to mind. This approach enabled students' more instinctive responses to assessment to be gathered. The focus group study had identified students' concerns about discussing their assessment experiences so students submitted their drawings anonymously. Students were not asked to explain their drawings, again so they could feel free to interpret and present the task in any way they wished without having to worry about justifying their method of representation or having to explain the imagery.

The drawings were gathered using opportunistic sampling of undergraduates and postgraduates at various points throughout the research. Postgraduate students at Gray's School of Art were asked to submit a visual representation of assessment following a seminar on this research. Both undergraduates and postgraduates were invited to participate during an exposition of PhD work at Gray's School of Art. PhD students attending the NAFAE (National Association for Fine Art Education) supervisor's network meeting at Nottingham Trent University were asked to complete a drawing, as were students attending the annual Summer School at Gray's School of Art. On-line representations were gathered via the on-line questionnaire described in Chapter 7.

To enable a comparison to be made between students of differing disciplines, two specific sets of drawings were gathered: the first, from second year students at Gray's School of Art on the Design for Digital Media degree and the second, second year students from the School of Computing on the Graphics and Animation degree. Both groups represent a similar type of creative subject area, but with students from distinct backgrounds. The intent was to see whether differing background disciplines might produce differing ways of representing experiences.

A total of 88 visual representations were gathered which were analysed using a Grounded Theory approach (Glaser & Strauss, 1967). We have previously discussed Grounded Theory (Chapter 3) and at the end of this chapter we will critique this method for the analysis of visual representations. This form of analysis enabled drawings to be grouped according to similar features and for categories, and links between categories, to emerge.

Two stages of analysis were undertaken. The first involved placing all the drawings on a large table and grouping them according to common categories. This was done in a similar way to the analysis of the stories. Each drawing was placed in turn on the table. If a drawing appeared to share some commonality with another, it was placed next to it. For example, in Figure 8.1 we can see all the abstract drawings were placed together in a category named 'abstract drawings'. In keeping with the Grounded Theory approach, these categories were not pre-defined, they arose from the sorting of the drawings. This spatial and semantic process enabled drawings to be easily moved into newer categories as they emerged and for semantically related groupings to be positioned closely for comparison.

Figure 8.1.

Initial categorisation

Secondly, the scanned drawings were analysed using NVivo. This enabled a more fine grained analysis focussing on elements of the drawings to be undertaken (see Figure 8.2).
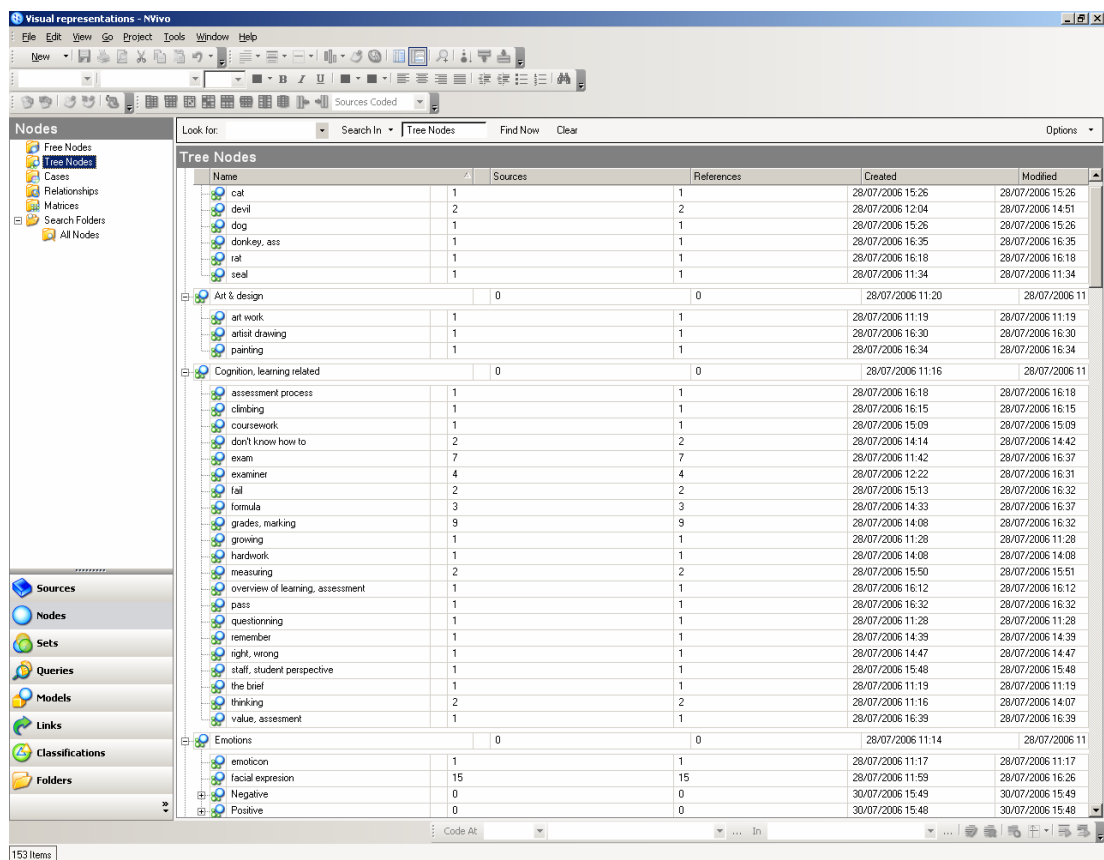
Figure 8.2.

NVivo screen shot of coding

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Each element in the drawing became a code and these codes could then be sorted into categories. Focussing on the individual components of each drawing facilitated a greater understanding of the syntactic elements of the drawings.

Using this two stage analysis process was important as it ensured that key issues were not missed. The first stage focussed on the 'bigger picture': the meaning being conveyed by the drawings and their relationship to each other. The second stage enable a more thorough investigation of each individual drawing, which could then be analysed in relation to the other drawings through coding and running queries in NVivo.

8.3 The drawings

In this section we will look at an overview of the drawings that were received and discuss them according to categories they were grouped into. A number of common themes emerged and we will now discuss the type of drawings received, explore the commonly occurring themes and look at the objects and symbols used by students to portray their experiences.

The form of the drawings

A wide range of forms of drawings were received. Overall, most of the drawings were cartoon-like or informal in nature. These forms of representing experiences are similar to drawings received by other research (see, for example, Bracher (2003); Ludlow (1999); McLean et al. (2003); Wheelock et al. (2000)). Some which were submitted on-line were photographic or had used software to produce the drawing. A number of drawings were more abstract in nature and some had graphic design elements to them.

Most of the drawings had elements in them which assisted their interpretation, for example, an image depicting an exam or the use of metaphor. The use of exclamation marks and question marks, which were frequently used, also assisted in

the interpretation of the drawing. Thought and speech bubbles also clarified meaning. Often a few words or a sentence was included to explain the image.

The more abstract images were harder to interpret. For example, Figure 8.3 shows rows of boxes and circles decreasing and converging to a single circle. The last box looks like an envelope. The meaning of this image is hard to extract. One possible meaning could be the boxes and circles represent courses and assessments, with the convergence representing a focussing of thoughts or subject matter. If it *is* an envelope, perhaps this could be the final degree result.
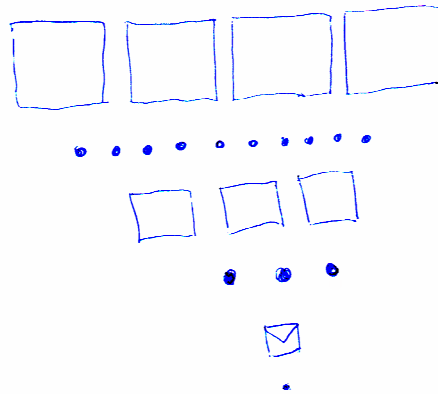
Figure 8.3.
Abstract drawing 1

This drawing is very similar to the one in Figure 8.4 which also has boxes converging to a single point.
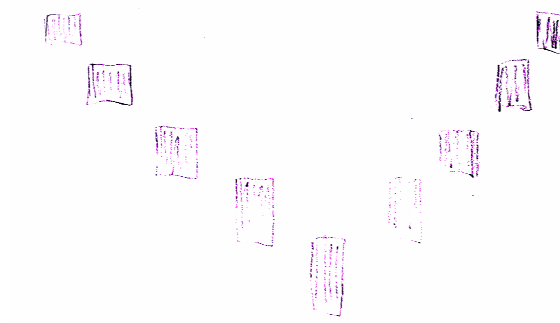
Figure 8.4.

Abstract drawing 2

The next drawing (Figure 8.5) is also hard to interpret.
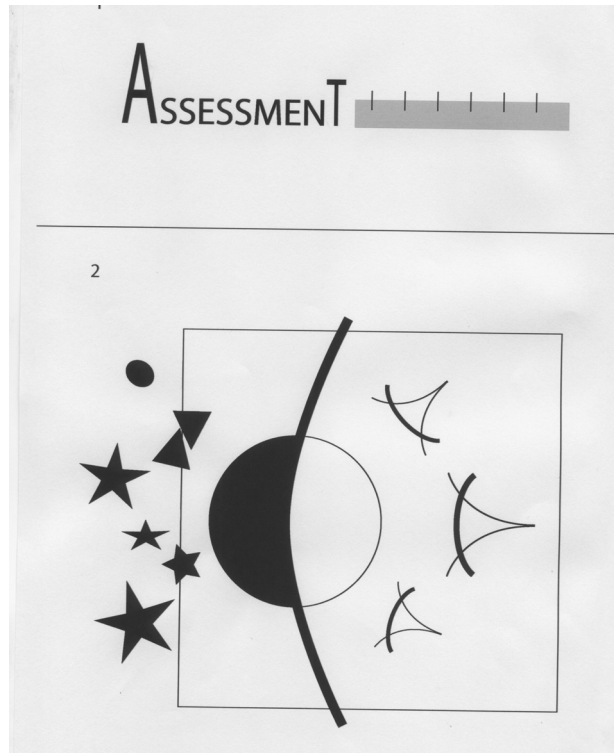
Figure 8.5.

Abstract drawing 3

The shapes on the right are eyes or spotlights illuminating part of the work being assessed. There is more to be seen, as represented by the stars and triangles, but the assessment process cannot see this. This particular student was one of a few who offered an explanation for the rationale behind his drawing.

Process of assessment

The actual process of being assessed was frequently represented, often portrayed by an exam layout of rows of desks, a student sitting at a desk, or an artwork being 'judged' (Figure 8.6).
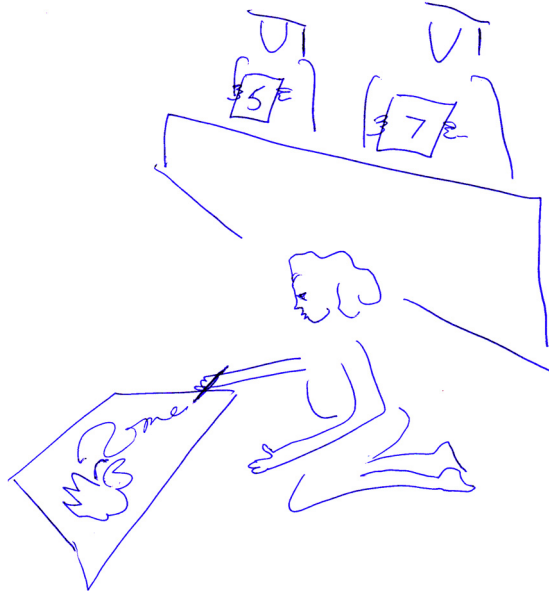
Figure 8.6.

Assessing an artwork 1

The possible unfairness of the process was also represented, as illustrated in Figure 8.7 where examiners are judging a perfect sunflower, but not giving high marks as it is 'lacking in imagination'.

Figure 8.7.

Assessing a sunflower

The lack of transparency and uncertainty in the process was illustrated through images such as a rat in a maze (Figure 8.8) and a lucky dip with a blindfolded student jumping in (Figure 8.9).

Figure 8.8.

Rat in a maze
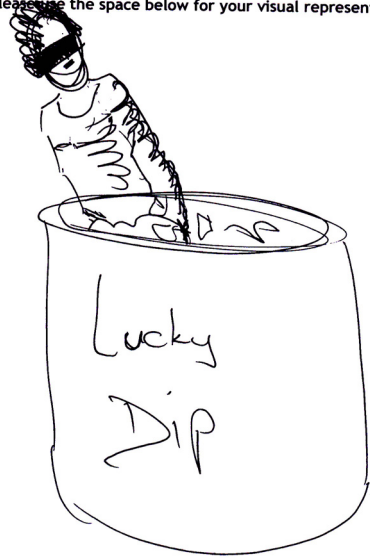
Figure 8.9.

Lucky dip

The notion of the individual, rather than the work, being assessed is shown in Figure 8.10 where two anonymous people measure a student who is clearly not enjoying the process.
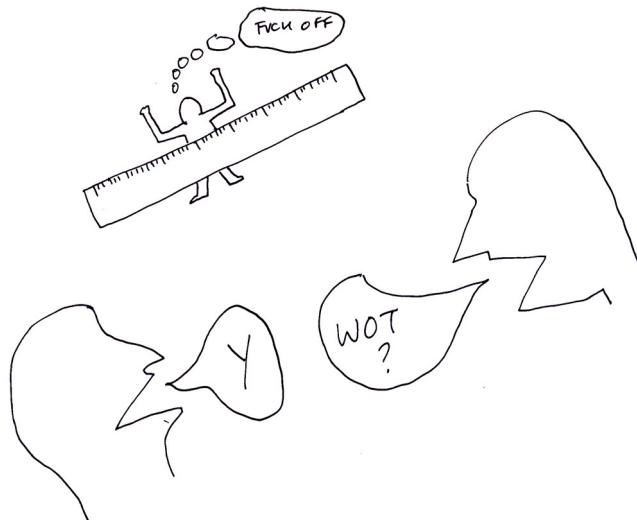
Figure 8.10.

Being measured

This is a key problem in assessment, where the student feels like they are being assessed, not just their work. Negative criticism is then seen as a criticism of themselves as a person and the language of assessment is often to blame for this. Boud (1995, p40) has the following to say on this:

"Too often we fail to make absolutely clear the distinction between giving feedback on a specific product which has been produced by a person and judging them as a person. We write and say things which can readily be taken as comments about the person rather than their work and in doing so we link in to the doubts and uncertainties which they have of themselves and our remarks are magnified at great cost to the self-esteem of the persons concerned."

Figure 8.11 also shows assessment as being about measurement. Here the student plays with the carrot/stick metaphor, with assessment being the stick. The student has chosen not to draw a picture of a student, but has drawn a potato being measured, which forces an interpretation of what they have meant by this. Perhaps the student feels like a 'potato-head' when they are being assessed.
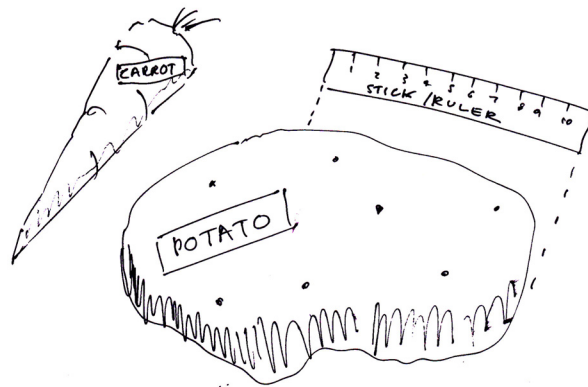
Figure 8.11.
Carrot and stick

People

A total of 43 drawings contained representations of people. This was largely done through using stick figures (17 drawings), or as a figure (19 drawings). Other drawings only represented parts of the body: a head, torso or simply a hand or an eye.

Figure 8.12 shows the range of ways in which people were represented.

Figure 8.12.

Representations of people

Some drawings used a very simple representation of a face, akin to an emoticon[4] to convey how they felt about assessment (see Figure 8.13)

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[4] Emoticons are used to convey emotion within on-line text-based email and instant messaging. They are generally constructed using keyboard characters, e.g. :-) or graphically, e.g.
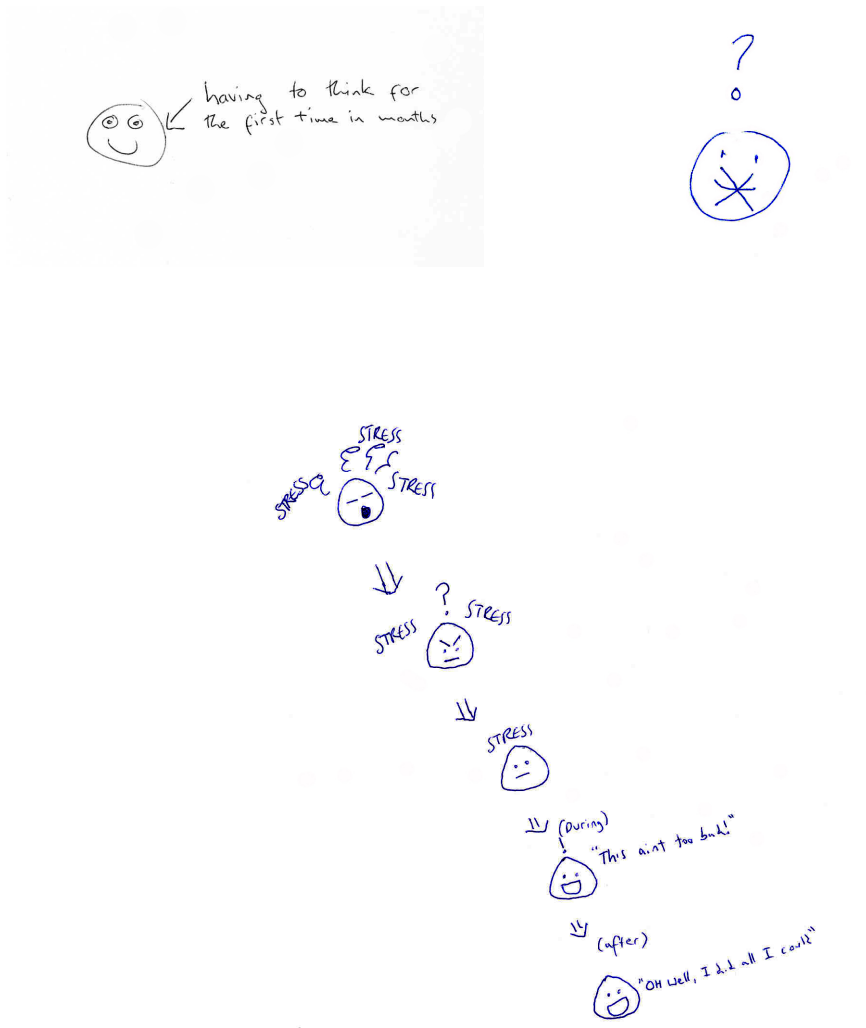
Figure 8.13.
Emoticon style

This shows how the most basic representation can convey experiences. The emoticon style images in Figure 8.13 are used to convey a range of feelings about assessment.

Most of the time, the person or people represented were students, mainly a solitary student, but other students were also sometimes present, mainly in drawings showing exam situations. Overall, assessment was seen as a solitary activity. Students were not seen supporting other students through this process. This is in contrast to the stories where peer support was important. There were only two drawings showing

some form of student interaction. The first (Figure 8.14) shows the relationship between elements of assessment and learning and other people, including peers.
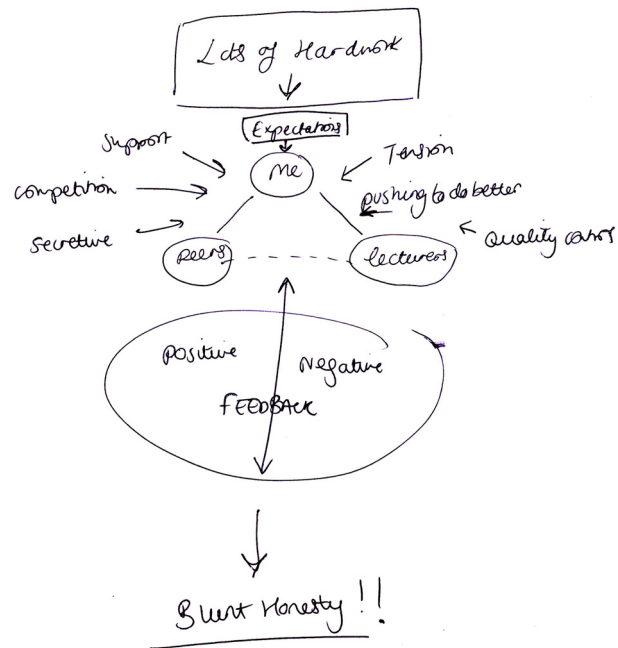
Figure 8.14.
Relationship with others

The second is shown in Figure 8.15 where the student at the front of the drawing is saying to another student, "What's the answer?"
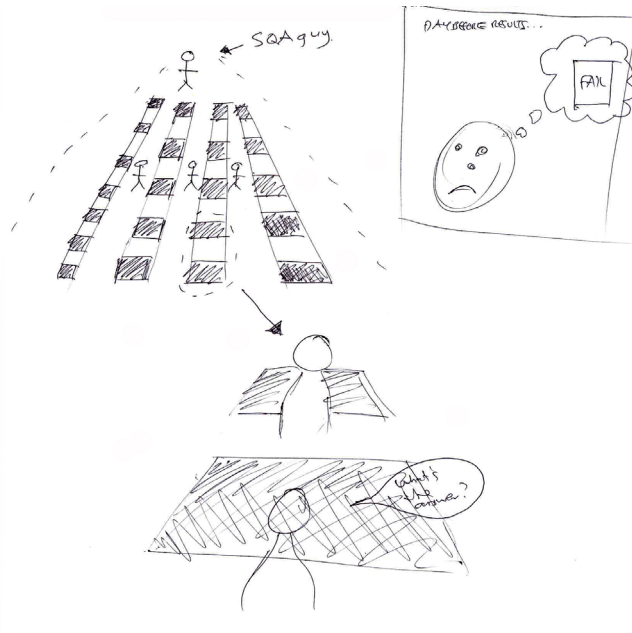
Figure 8.15.

Talking in an exam

Examiners were also represented and often they were faceless or just represented by a chair (see Figure 8.16).
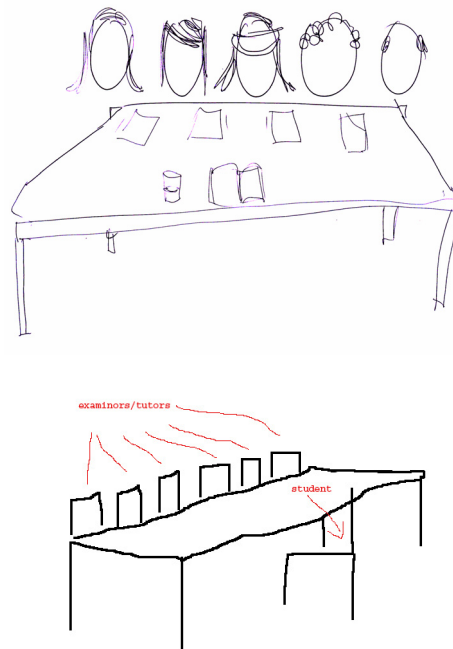
Figure 8.16.

Representations of examiners

Students were often depicted sitting at a desk (see Figure 8.17), either studying or in an exam situation, though the majority of figures were standing. It would appear, from this study, that desks are synonymous with assessment, appearing in around a fifth of the drawings.

Figure 8.17.
Desks

Emotional content

Around half of the drawings appeared to be conveying negative emotions and the few drawings that expressed any form of positive feelings about assessment, revealed another aspect to them – a negative view of assessment. For example, Figures 8.18 and 8.19 show two of these images. Figure 8.18 shows a student climbing a steep staircase to be rewarded with the trophy of assessment, but there are dangerous edges to be careful of, plus clouds obscuring the way. Figure 8.19 shows a hanged student on a gallows to represent exams, but on the other side of the wall a happy student with flowers and an ice-cream cone represents coursework. There were no unambiguously positive images. Any drawing that had a positive element usually contained a negative aspect to it.
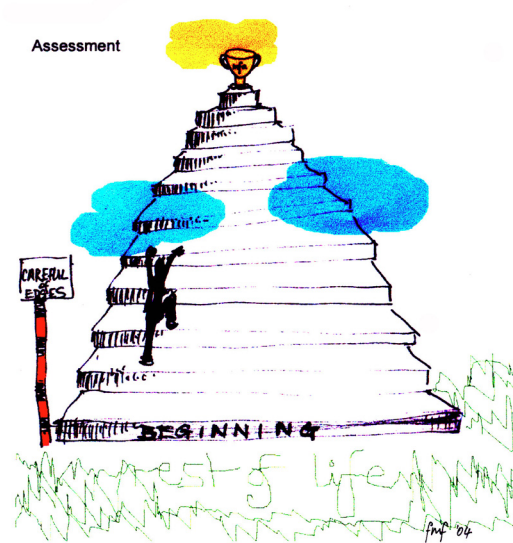
Figure 8.18.

Staircase with reward
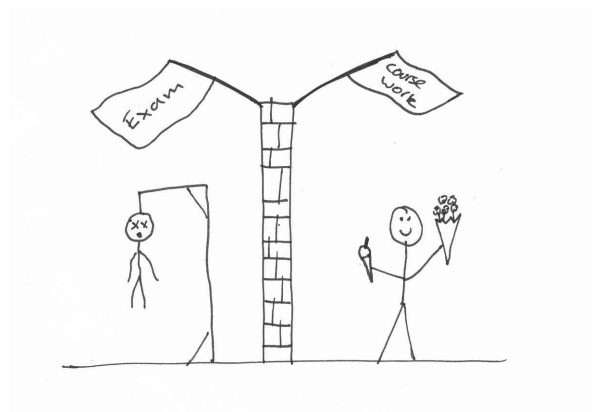
Figure 8.19.

Coursework/exam dichotomy

Assessment was often shown as being something uncomfortable or painful being done to you. Figure 8.20 shows a student crying with pain, yet smiling, and the pain is represented though a series of acupuncture needles. This student shows her insight into the process by stating next to the image that the assessment, whilst painful, was also 'joyous' and that this was only evident, on reflection, afterwards.

Figure 8.20.
Pain of assessment

Figure 8.21 also shows this feeling of being uncomfortable when being assessed by showing a darkened room with a chair in the corner, illuminated by the metaphorical 'spotlight on you'. Although this drawing does not contain a person, you can easily imagine yourself sitting in that chair and the resulting stress.
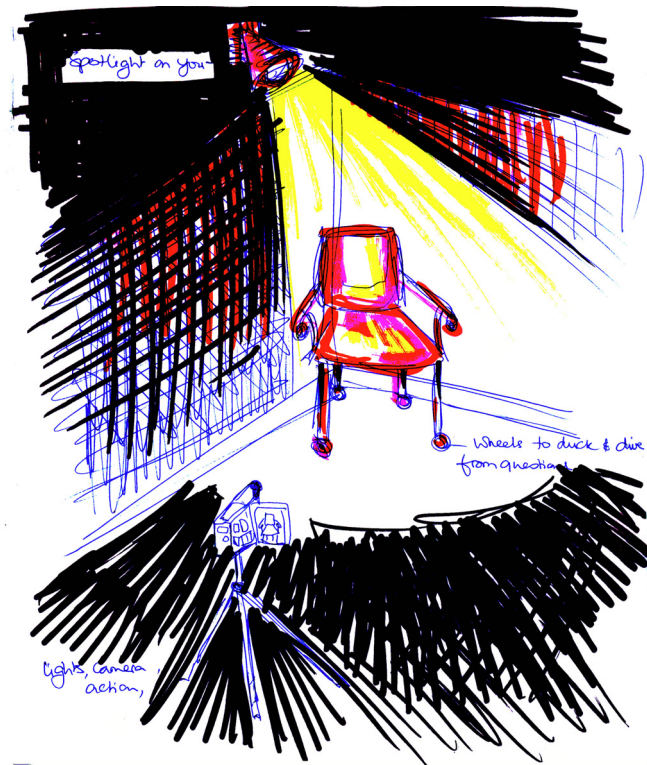
Figure 8.21.

Spotlight on you

The use of the spotlight on you was also used in the top drawing of Figure 8.22. Here an angle-poise lamp is being shone directly into the eyes of a person, as if they are being interrogated.
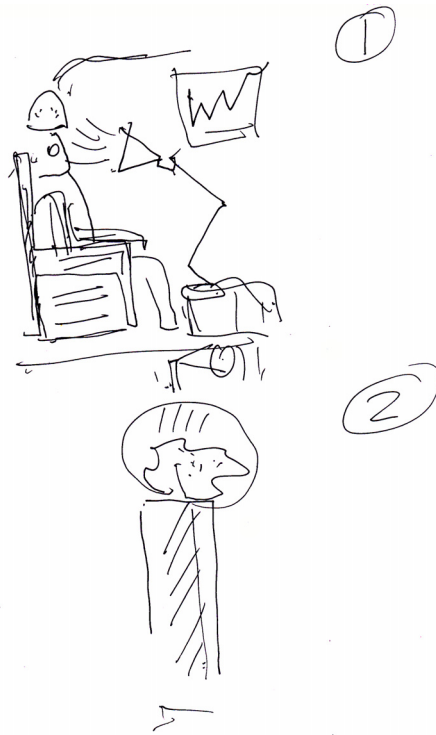
Figure 8.22.

Interrogation

Figure 8.23 has a student cringing in the corner holding onto their work and looking very small in comparison to a number of shaded in and faceless figures who are laughing at them, one of whom is pointing at the student.
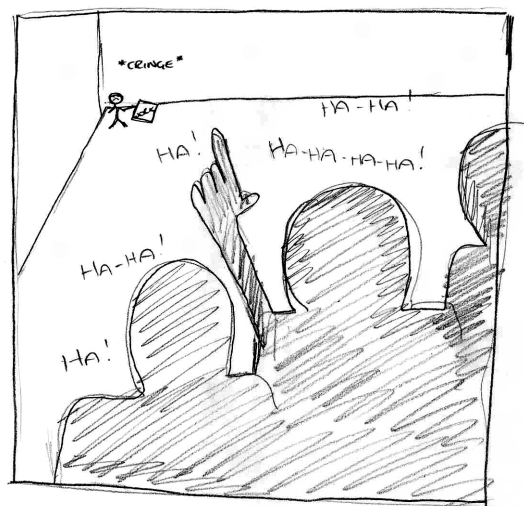

Figure 8.23.

Small student in corner

There were a number of particularly extreme images that were used. Figure 8.24 is quite disturbing as it shows a student holding their assessment, gun in mouth, with a thought bubble showing a gravestone (coursework) with the caption 'join me in death'. Interestingly the student is not holding the actual gun.

Figure 8.24.

Assessment and death 1

Figure 8.25 illustrates a frustrated student wearing a t-shirt stating 'Kill me!', grimacing in front of a book screaming 'AAAAAAHH!'

Figure 8.25.

Assessment and death 2

Other more extreme images included images of the devil, a student plunging a knife into an assignment, and a brain filled with TNT explosives (see Figure 8.26).
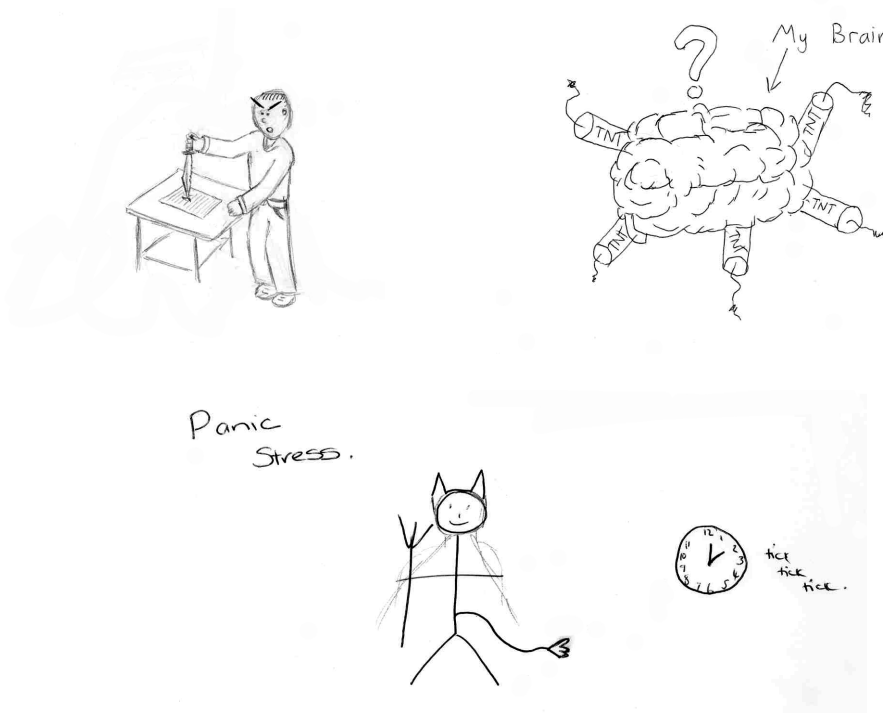

Figure 8.26.
Other extreme images

Although the stories being gathered contained negative stories, the strong negative reaction to assessment which emerged in the drawings was still surprising. In the discussion at the end of this chapter we will look in more detail at reasons why the drawings may have resulted in negative images.

Metaphor

Students used a number of metaphors and similes in their drawings to highlight how they felt about assessment and some of these drawings have already been presented in the preceding sections, such as: being measured (Figure 8.10 and Figure 8.11), in the spotlight (Figures 8.21 and 8.22), brain exploding (Figure 8.26), being made to feel small (Figure 8.23), a lucky dip (Figure 8.9), a rat in a maze (Figure 8.8), a seal balancing a ball on its nose, carrot and stick (Figure 8.11), the weight of the world on your shoulders, climbing a steep staircase (Figure 8.18), an ECG/EEG trace (Figure

8.27), and assessment as the devil (Figure 8.26). These are very expressive and succinct ways for a student to convey their experiences and not the usual type of information that is gathered through course feedback systems.
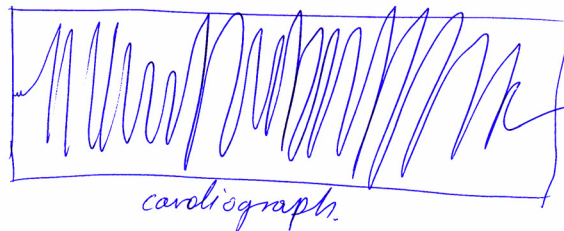

Figure 8.27.
Cardiograph

Time

Time issues arose many times with clocks, alarm bells, the passing of time and the lack of time being represented. Time was also represented by a calendar and the ticking of clocks. Figure 8.28 (p257-258) shows some of these images.
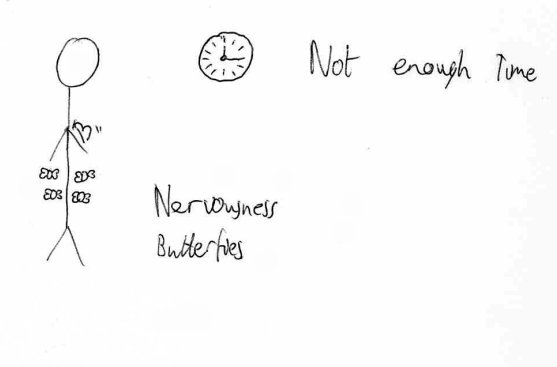
Figure 8.28.
Time drawings

Clocks appeared in 11 of the images with further references to time or the passing of time in a further 2.

Cognition and learning

Most of the elements related to cognition and learning were about grades or marking, or aspects of exams, for example, Figure 8.29 shows a representation of a formula.

Figure 8.29.
Formula

Often these aspects were more surface elements to learning and few drawings clearly portrayed the more cognitive aspects to learning. Figure 8.30 is one drawing which appears to be tackling this by attempting to show relationships between thought and the senses.

258

Figure 8.30.

Learning

Figure 8.31 attempts to convey the link between assessment and learning by using a diagram structure with text to explain it.
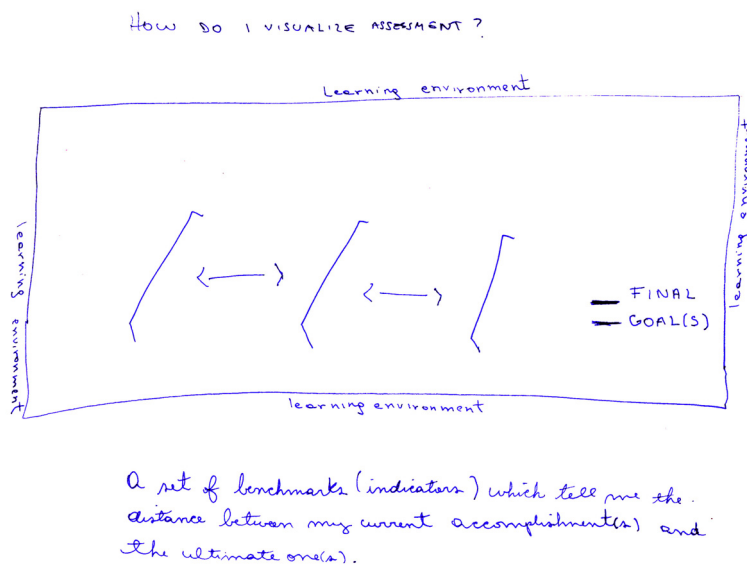

Figure 8.31.

Diagram of learning process

Art and design

There were few obviously art and design specific drawings. Figures 8.32 and 8.33 show drawings which have something to say about assessment in art and design. Figure 8.32 shows a student drawing on the floor, contrasted with academic judges,

behind a table awarding marks. There seems to be a distinction here between the relaxed informal stance of the artist and the formalism of the judges.
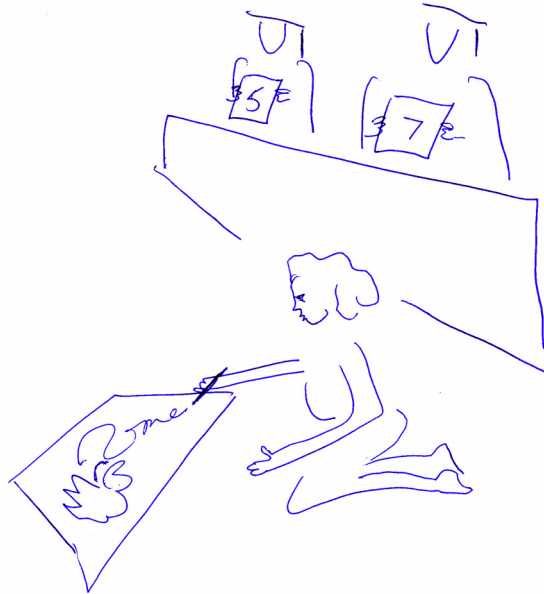

Figure 8.32.
Artist and judges

Figure 8.33 perhaps shows a 'crit' or examination of an art work where the assessors/students all appear to be scratching their heads in puzzlement as to how to assess the drawing.
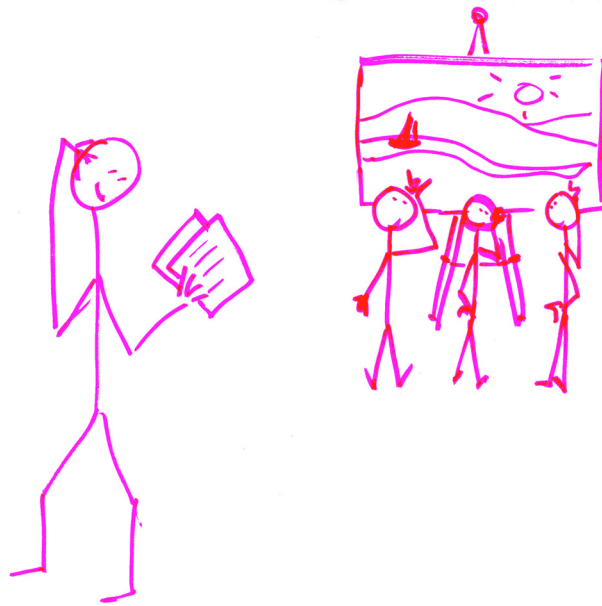
Figure 8.33.

Crit of an artwork

The art and design 'brief' is referred to in Figure 8.34 with perhaps the eye representing the eye of assessment.

The brief ....
....
....
....
.

Figure 8.34.

The brief

The lack of art and design specific references is in contrast to the stories discussed earlier in this thesis where there were many references to art and design issues. This again highlights the fact that the drawings were accessing other facets of the assessment experience.

Objects

A wide variety of objects were included in the drawings. Excluding drawings of people, desks and chairs were the most commonly used objects, occurring in around a fifth of the drawings. Clocks and paper representing coursework and assessment were the next common. Pens and books were also represented multiple times. A full list of objects used can be seen in Table 8.1.

Table 8.1.
Objects in the drawings

alcohol	gallows	potato
computer	gate	Sainsburys
blindfold	gravestone	spotlight
book	gun	SQA
box	ice cream	stairway
brain	knife	stick, ruler
brain device	light bulb	sunflower
calendar	lucky dip	TNT
carrot	maze	trophy
chairs	musical note crossed out	video camera
clock	needles	wall
corridor	paper, coursework, exam script	walled garden
desk		Whitechapel
	pen	
drawing board		work on a pedestal
	photo	
flowers		
	plant	
forest		

Abstract images shared a number of common objects. Most common was the use of arrows and boxes. We have already seen two images which used boxes (Figure 8.3 and Figure 8.4) in a preceding section, 'The form of the drawings'. Arrows were used to indicate flow or relationships in abstract diagrammatic images; see, for example, Figure 8.35. This figure also shows shapes converging in a similar way to those previously mentioned.
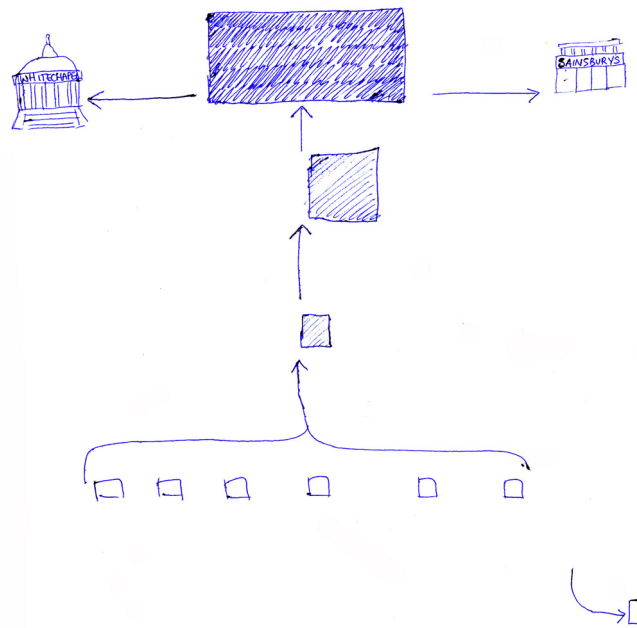

Figure 8.35.
Arrows used to show flow

Other shapes used included dots, lines, stars, triangles, and a dark circle.

Animals

A number of animals were depicted in the drawings: a cat, dog, rat, seal, donkey/ass and even the devil. Figure 8.36, an engaging image, attracted a great deal of interest regarding its possible meaning.
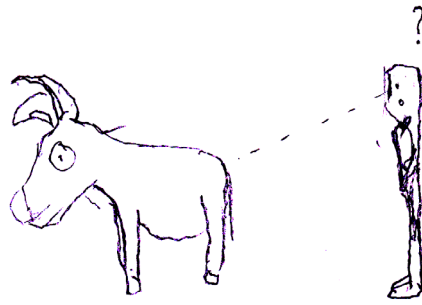
Figure 8.36.
Donkey/ass

My own initial interpretation was that it was a reference to the game, 'pin the tail on the donkey', as an analogy with assessment. However, another student felt that perhaps the *donkey* was an *ass* and that the person in the image was staring in puzzlement at the ass of an ass, with *ass* representing assessment.

Staff perspective

Although staff were not invited to provide drawings from the staff perspectives, one drawing from the staff perspective was received (Figure 8.37).
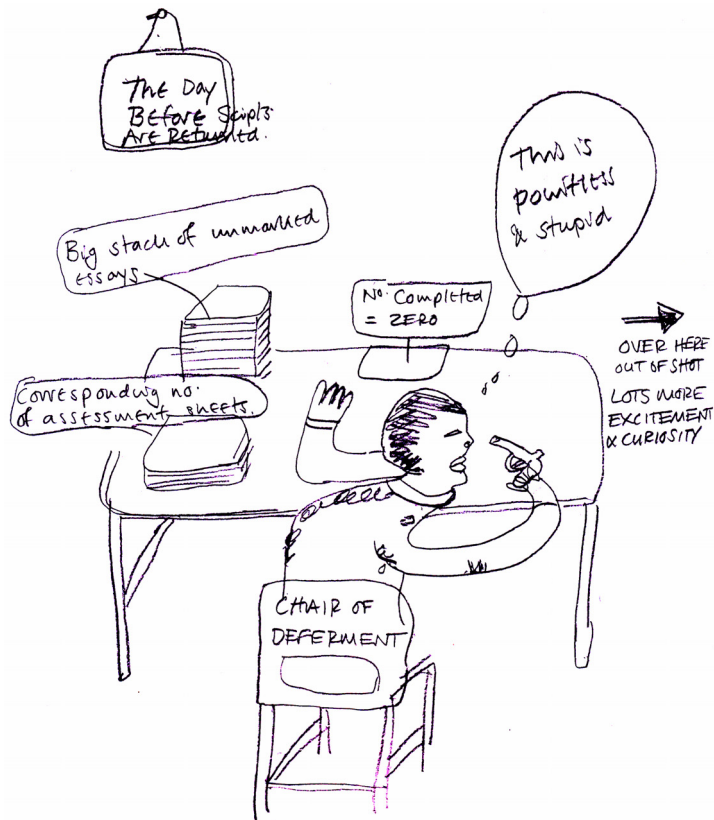
Figure 8.37.
Staff perspective 1

Additionally, the following drawing was left on the whiteboard by a member of staff following the viewing of drawings at the School of Computing (Figure 8.38). The photograph of the drawing shows both student and staff perspectives of assessment. The student experience is seen as a timeline spanning getting out of bed, drinking, dancing, sitting an exam, then being free of studies. The staff perspective is viewed as a life sentence and the staff member represented behind bars, faced with more exams and resits year after year.
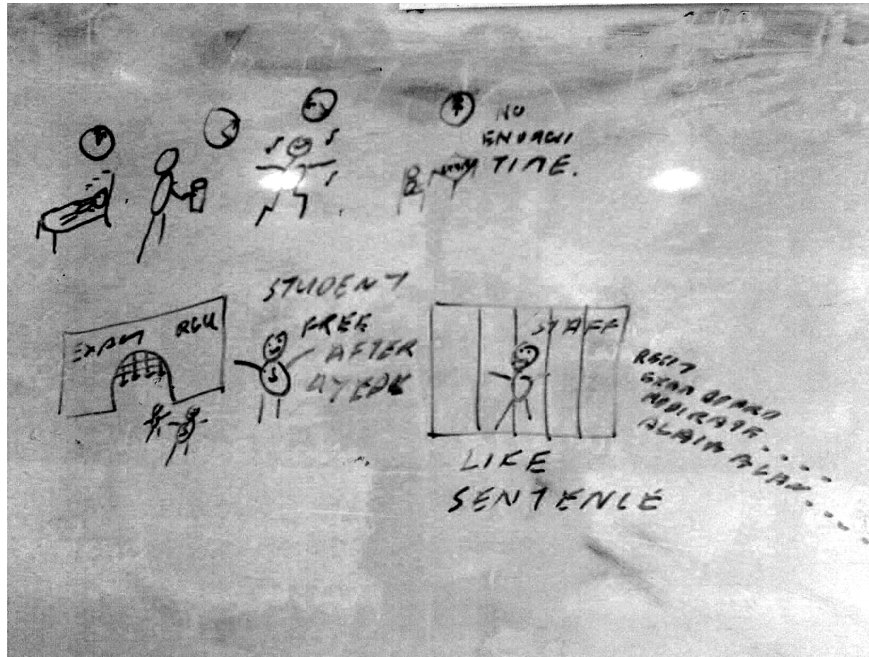
Figure 8.38.

Staff perspective 2

In response to the email inviting staff and students to attend an exhibition of the drawings, an email from a staff member was received which contained the following picture (Figure 8.39), which succinctly sums up how many people feel about assessment. Whether this was meant to represent the staff or student perspective is not known.
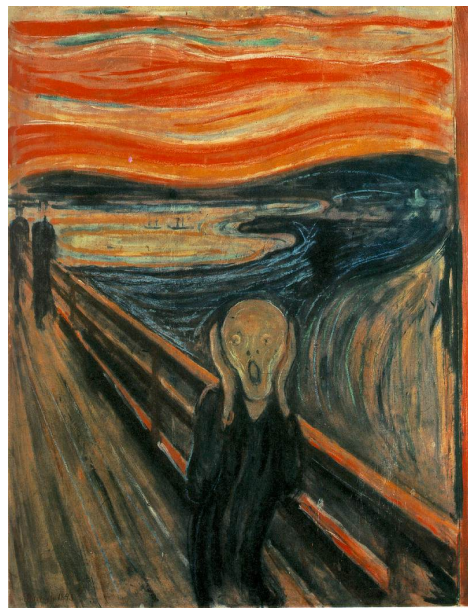

Figure 8.39.

The Scream

These drawings suggest that staff may have a lot to say about assessment from their perspective and that their experiences are filled with many difficulties, just as their students' experiences are. Using visual representations of staff experiences would be a possible future extension to this project. As the staff experience will impact on the student experience, conducting a future study in this area could prove beneficial.

8.4 Discipline comparison

As stated earlier, two groups of 2nd year students were identified to enable a comparison of visual representations to be made: graphics and animation students from Computing (n=18) and digital media students from Gray's (n=21). The following discussion will now focus on the similarities and differences between the two groups.

Neither group included any art and design specific images. Both groups used very few abstract images in comparison to the rest of the students in this study. The references to the devil, mentioned earlier, came from both these groups. A similar level of using tables and chairs showing exam or study type situations was shown in both groups. Time issues were raised approximately equally. Gray's students used a slightly greater range of objects than Computing students to represent assessment.

In both groups, around two thirds of the drawings contain representations of people. In Computing, they were more likely to be stick figures who were standing. Gray's students were less likely to draw stick figures and more likely to draw fleshed-out figures, sometimes a whole person or just from the torso up. Their figures were more likely to be seated. Computing students used slightly more faces in their drawings, although Gray's students were more likely to use faceless faces. Overall, Gray's drawings used representations of people in a greater variety of ways. Computing's figures of people were generally standing or sitting stick figures (see Figure 8.40). Overall, Gray's student drawings were more expressive, with a greater range of situations used and ways of expressing themselves. This was the main difference between the groups.
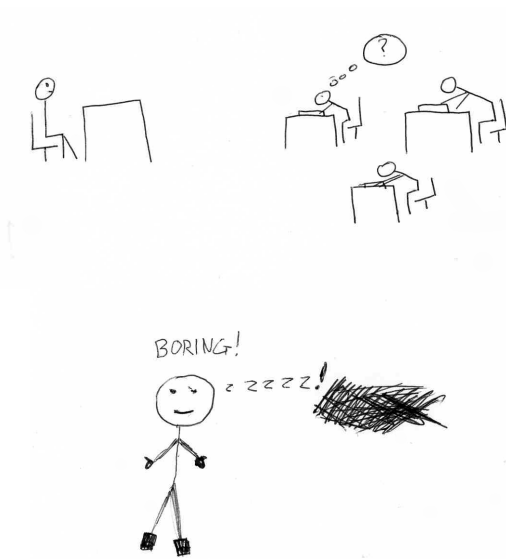
Figure 8.40.
Computing figures

Gray's figures were more complex and were used to represent a greater variety of situations, see for example Figure 8.41.
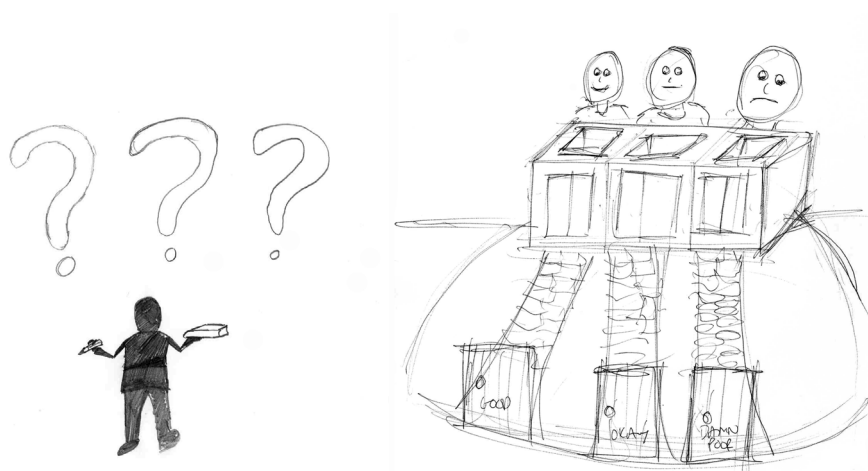

Figure 8.41.
Gray's figures

Both groups used a range of techniques to show that they did not like assessment, one Computing student simply used facial expression, see Figure 8.42, while a

Gray's students used a variety of assessment 'logos' to get across a similar point, see Figure 8.43.

Figure 8.42.
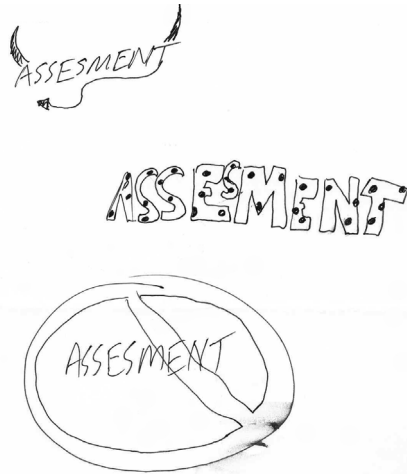
Facial expression

Figure 8.43.

Logos

Most drawings conveyed negative aspects of assessment or the more formal and functional aspects, such as exams. Figure 8.44 seems to eloquently sum up one Computing student's attitude to assessment.

Figure 8.44.

Attitude towards assessment

There were few positive images. The following drawing (Figure 8.45) from a Computing student at least appears to view having to think as being positive.
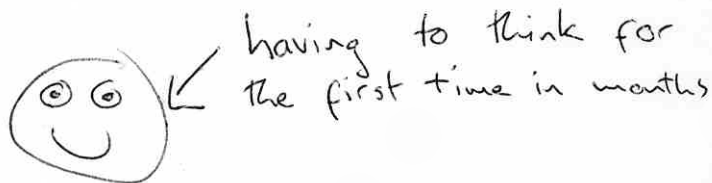

Figure 8.45.

Positive attitude?

Figure 8.46 also shows a positive aspect to assessment. Here a Gray's student seems to prefer coursework, as represented by a smiling figure holding ice-cream and flowers. Like the other drawings mentioned previously which have positive aspects to them, this drawing has a negative side in its portrayal of exams using a hanged figure.
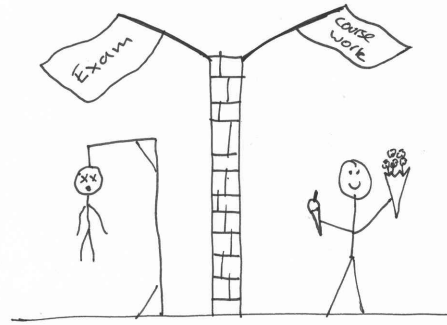
Figure 8.46.

Positive and negative aspects

Both groups' drawings contained more extreme images than those in the rest of the study. The following drawing, Figure 8.47, is from a Computing student and shows a student angrily stabbing what appears to be an assignment with a knife.

Figure 8.47.

Stabbing a desk

Figure 8.48 is from a Gray's student and represents one of the most disturbing images received. Hopefully, some of the drawings are more metaphorically based, rather than literal, in nature.

Figure 8.48.
Student with gun

Figure 8.49 shows a chart comparing the use of exclamation marks, question marks and thought bubbles. Gray's students made more use of these than Computing students.

Figure 8.49.

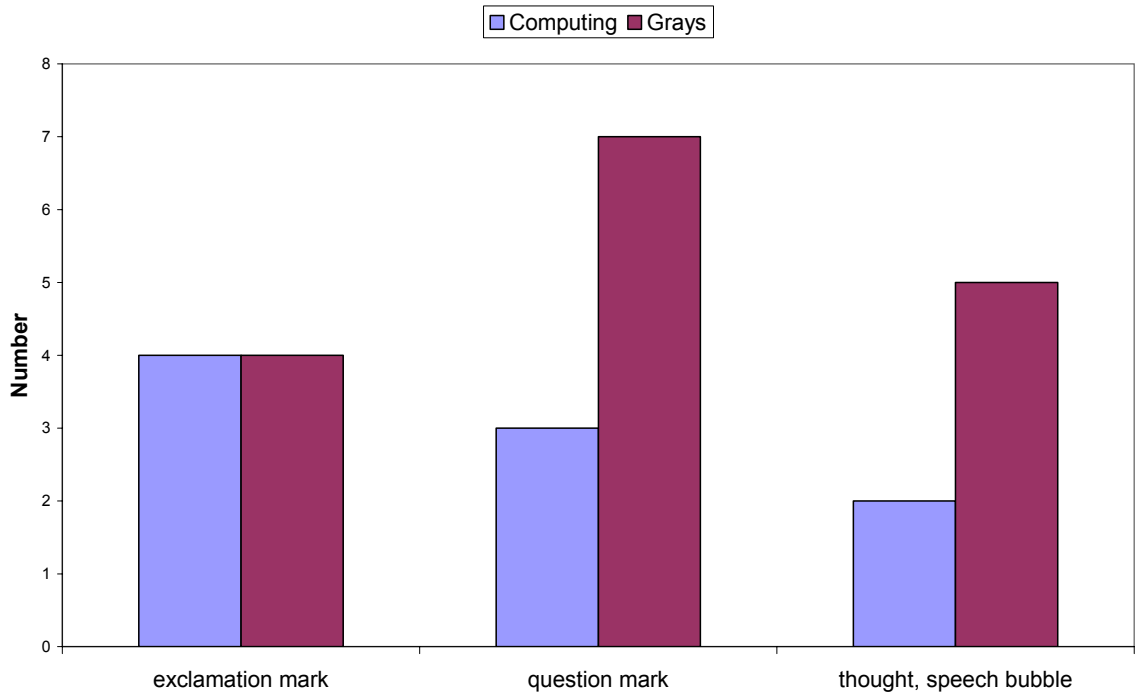Use of exclamation/question marks, and thought/speech bubbles

Overall there were only small differences between the two groups, despite their differing backgrounds and different assessment processes in their degrees, with Computing being more exam driven.

When the drawings from these two groups are compared with the rest of the images, one key difference is apparent: more exam related imagery is present in the drawings discussed in this section. All of these drawings were collected from 2nd year undergraduates. The rest of the drawings were predominantly from postgraduates, although specific data was not gathered on this so a precise comparison cannot be made. However, given that there is such a difference it is worth using visual representations as a method to investigate the extent to which assessment experiences prior to university study are having a negative impact on undergraduates' experiences.

8.5 Follow-up study

In order to obtain other perspectives on these drawings, they were exhibited one lunchtime during the end of degree show at Gray's School of Art and also at the School of Computing. Participants viewing the drawings were asked to complete a short 'comments form' (Appendix 8.1). Twenty eight comment forms were received. Two aspects of this follow-up study are of note. Firstly, the comments on the feedback forms received, which will be discussed shortly. Secondly, the discussions prompted by the drawings. Many people commented on the exam type representations and the bleak picture being portrayed by the students and wonder why this was: were they thinking about previous bad experiences, for example, at school; why did they feel the need to use such strong imagery? The consistent use of exam imagery was surprising to those in art and design.

The drawings

The comments were analysed using the same coding process used to analyse the students' stories, as described in Chapters 3 and 7. Comments largely focussed on the emotional content of the drawings, in particular the negative aspect to the experience which was frequently raised. Just under half the codings of these comments were on the negative emotional nature of the drawings. The stress produced by the assessment experience was evident from the drawings. Most of the words used to describe what the drawings were conveying were negative: depressing, confusion, anxiety, fear, harmful, overwhelmed, pressure, torture, uncomfortable, worry, victim, isolation. The comments serve to reinforce the findings from this research that demonstrate the highly negative nature of students' experiences of assessment. Some comments include:

> "The overwhelmingly negative experience of assessment. The challenge is to turn this around."

> "There is a lot of negativity represented. Also some downright hostility. Many of the images show a system imposed from 'on high' with the assessee (is that a word?) as a victim. Very few (if any) show assessment as a positive experience. This issue should be explored/addressed."

> "I think in general the students feel afraid, stressful, etc. towards assessment. There seems to be a consensus of having negative thoughts about assessment. This has to change."

As these comments show, there was a strong sense that something should be done about this negative experience and some of the respondents' suggestions about this will shortly be presented.

A few comments raise some positive aspects, though (like the drawings and stories) these tended to have a corresponding negative aspect. For example, that the drawings were showing students' likes and dislikes, good and bad times, that visualising stress was good.

The methods used in the drawings were commented on, such as the use of colour, facial expression, the detail and the elaborateness of some of the drawings. Generally people liked the drawings and thought this was an excellent method, especially as the drawings were open to interpretation. Only one person did not think much of the drawings.

Assessment and attitudes

The drawings identified a number of opinions about assessment, other than the overwhelmingly negative attitudes. Respondents felt that drawings showed assessment as being a random process that had adversarial overtones. Comments not only mentioned negative emotional aspects, but also raised issues about the effect of assessment of students' health.

It was noted that the more traditional view of assessment was being frequently represented. Assessment was viewed as being alien to the creative process. It was described as an 'interruption' to the natural process of learning, taking place in a hostile environment and the following comment sums this up:

> "Most of the drawings convey notions of artificiality, mechanisation and arbitrariness which are exacerbated by the arrangement of physical space and time within which

assessment takes place, generating a hostile and intimidating learning environment. Assessment is thus represented as an interruption of a natural process."

This comment perhaps illuminates why these negative images were used and why more negative words were being used to describe assessment. Learning is seen then as a more natural process, resulting in a more positive attitude towards it.

The importance of the learning process being as important as assessment was highlighted, which ties in with the comments stating that assessment needs to be put in perspective.

The drawings seemed to show a preference for coursework, which was viewed as more challenging than exams. Not knowing the outcome in this context was seen as causing problems.

There was also some criticism of tutors for failing to communicate with students and a feeling they were in their 'ivory tower'. Were tutors providing enough support? The staff perspective was frequently mentioned, and there was a clear indication that assessment affected both students and staff:

> "Getting a balance in the assessment process between creativity and stress for both students and staff. After all marking does seriously damage the brain after a while."

Changing assessment

There was a feeling that, in the light of these drawings, assessment needed to change to make the student experience more positive. Many of these comments came from the staff members. They thought that assessment should be made part of everyday processes and should be put in proportion to the rest of life. Assistance with time management skills may help this. Being clearer about the assessment criteria could help students understand the assessment process better. Having more practice was also thought to help students understand assessment more. The feelings of being intimidated by the marking process could be alleviated by encouraging students to mark their own work:

"Since most of the students seem to be intimidated by marking or the fact that they are being judged by academics, alternative ways of evaluating assessment may be appropriate. For instance letting students evaluate their work. Or even get marking of the picture."

Making the assessment process more friendly and personal was seen as one way of reinforcing positive aspects:

"Greater, friendlier and relaxed communications about assessments between staff and students. Take away the angst through familiarity. Students need to see assessment as a positive learning opportunity."

This would alleviate the feelings of the faceless 'others' who were being represented in the drawings.

Making assessment more meaningful was seen as a way to help students change their negative perception of assessment:

"The facilitation of more meaningful assessment experiences is required in order to encourage students to change their perception of evaluation and thus comprehend its learning potential."

Though in order to make positive changes, it was noted that this may have an impact on already limited staff resources. As a result, turning around these negative experiences was seen as a challenge, although raising staff awareness was seen as a start. Discussion and dialogue about these issues were seen as being needed. These drawings are one way we can start raising this awareness and ways of using these drawings as reflective tools will now be discussed.

Drawings as reflective tools

One of the interesting aspects to this part of this research was that the drawings acted as a catalyst for discussion. The drawings raised a number of clear issues, such as the negative experience, which prompted informal discussions on why this may be

the case. Additionally, discussions were promoted by people trying to interpret some of the drawings, for example, 'why had they done that in the drawing, was it because of x, y, or z? What you do think they were trying to say, why?' etc. McKenzie et al. (1998) found that the latent information in the drawings served as a basis for discussions amongst staff about teaching issues when they met to discuss the course evaluations. It would appear that this discussion was naturally occurring in this study, suggesting that these drawings naturally invite a dialogue.

This has resulted in a very interesting outcome to this research: the fact that the drawings are open to interpretation can be used to spark off wider discussions about learning experiences. This is summed up by one respondent:

> "I tend to think the conversations about the drawings are what is important. It seems that conversations about assessment are not happening."

Using visual representations of learning to promote reflective discussions on topic areas such as assessment will be explored further in a project arising from this research. That project will also consider visual representations as individual reflective tools to support students' reflective dialogues about their learning.

8.6 Discussion

The drawings

Common language

Many of the ways that students used to portray their experiences were shared, the use of chairs, desks, question marks, figures of students and examiners, and so on. These drawings shared similar characteristics with previous drawings of the learning experience drawn by both children and higher education students.

If we consider the matrix produced by Wheelock et al (2000) in investigating high school students' perceptions of learning, we can see that many components of the drawings from this study are included in the matrix (Appendix 2.1). Interestingly

Wheelock et al.'s study focussed on students' perception of a particular exam, yet still shares significant common features with the drawings in this study. Figure 8.50 shows one of the high school students who used a skull and crossbones. Perhaps the student felt similar to the student in Figure 8.24.
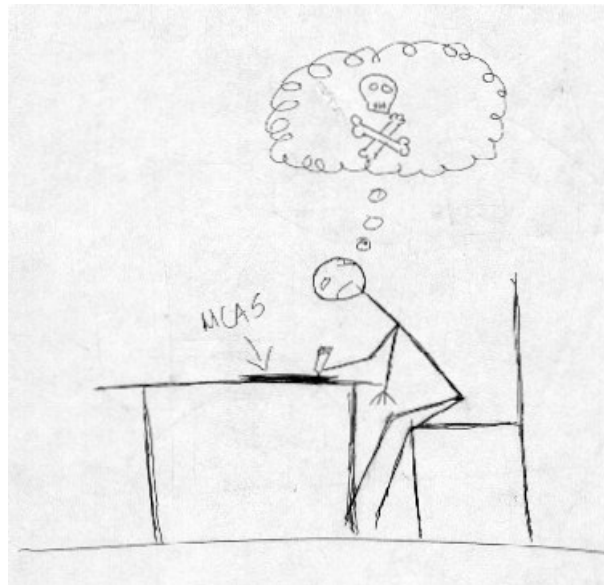

Figure 8.50.
Feeling of despair

The student in Figure 8.51 is expressing a similar sentiment to the student in Figure 8.25.

Figure 8.51.
Feeling of frustration

Some similar imagery occurs in McLean et al.'s (2003) investigation of medical students' perceptions of their courses.

Figure 8.52 shows the metaphorical 'on top of the world' image (previously shown in Chapter 2) in contrast to the drawing received in this study (Figure 8.53) showing a student with the weight of the world on their shoulders. These drawings demonstrate how similar imagery can be use to convey two opposing concepts.
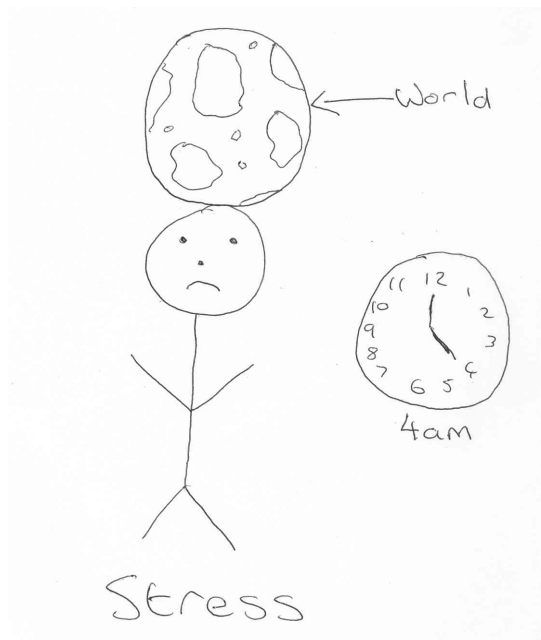

Figure 8.52.
On top of the world

Figure 8.53.

World on shoulders

Figure 8.54 shows another drawing from their study, it appears to depict a metaphorical journey, where the student is rewarded at the end with their goal – their qualification. This is similar to the journey being taken in Figure 8.18 where a student is climbing a steep staircase to reach their gleaming trophy – Master of Fine Art.

Figure 8.54.

Journey

The following drawing (Figure 8.55) taken from Ludlow's (1999) research into his students' experiences on a statistics course, shows how his students also used thought

bubbles, exclamation marks and question marks to show how they felt about the learning situation.
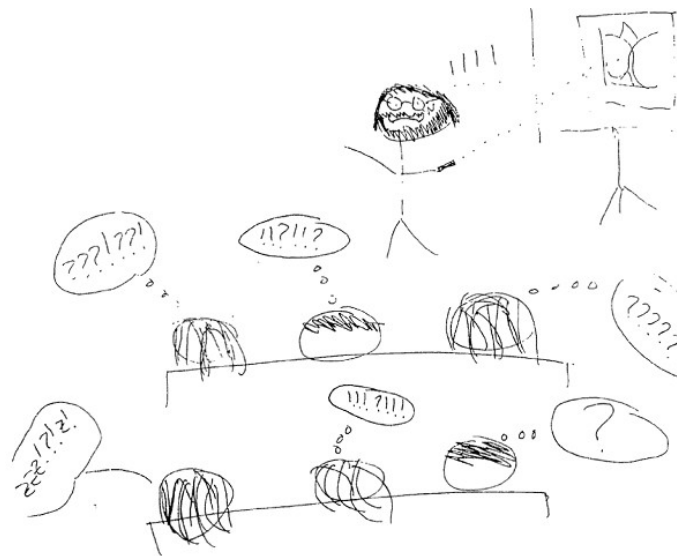

Figure 8.55.
Thought bubbles and exclamation/question marks

It is worth investigating these commonalities further to see if a 'language of educational experience' could be compiled to help read educational visual imagery. This language would include the metaphors students use in their drawings. The matrix provided by Wheelock et al. (2000) is one starting point, although providing a matrix for coding does not help with the interpretation, which is more complex. Therefore, further research in this area is needed. This study and its conclusions serve as a basis for that research. An investigation of this nature was beyond the remit of this exploratory study.

Table 8.2 provides a list of metaphors from this research which could inform future research in this area.

Table 8.2.

Assessment metaphors

Assessment Metaphors
Journey – climbing a staircase
Rat in a maze
Lucky dip
Carrot and stick
Spotlight on you
Being measured
Exploding brain
Made to feel small
Balancing a ball on your nose
EEG trace

Metaphor is a powerful tool at conveying perceptions. Sfard (1998, p4) states that:

> "...metaphors are the most primitive, most elusive, and yet amazingly informative objects of analysis. Their special power stems from the fact that they often cross the borders between the spontaneous and the scientific, between the intuitive and the formal."

The visual metaphors used in this study revealed students' instinctive attitudes towards their assessment experiences and served to draw out the underlying emotional content of the stories.

Negative images

There was a lack of positive images of assessment, either indicating that most experiences had a negative aspect, or that there was a need to express the negative experiences, perhaps as a form of catharsis. This could also have been due to prior assessment experiences influencing how students felt overall about assessment. Also lacking were images representing the role of assessment in learning.

The overwhelming negative emotions and extreme nature of the drawings is worth pursuing as it may explain the lack of cohesion between assessment and learning in the drawings. Negative feelings can be a barrier to reflective thinking leading to a

fixedness of thought (Boud et al., 1985a).   Boud (1995, p35) also points out the harm that persistent negative experiences can cause:

> "This hurt did not encourage them to persist and overcome adversity as some of our more intellectually muscular colleague might argue: it caused them to lose confidence, it dented their self-esteem and led them never to have anything to do with some subjects ever again."

Gordon (2004) calls for students in creative disciplines to be rewarded in the assessment process for their creative abilities and warns that not doing so will lead to students who simply work to the assessment criteria. She points out that although these 'wow' factors are not easily defined, there are inherent dangers in always aiming for objectivity as it can lead to the:

> "...dampening of those eccentric leaps of thought and practice, which relate disparate concepts and that are the mark of the most insightful and talented students." (Gordon, 2004, p61)

Exams and stereotypes

The number of formal, exam type representations is surprising in a creative discipline. It may be that the stereotypical images were more prevalent due to students being asked to draw what first came to mind. This is more likely to have enabled students' instinctive feelings about assessment to emerge. Rowntree (1987) suggests that there are many stereotypes in assessment which can lead to its prejudicial nature. This study may have identified some of the reasons why the student learning experience is not the positive one we would hope for. Assessment is at the heart of learning, and whilst we may change assessment processes and believe they are better for the student, we may still be battling against long held feelings about assessment which students have amassed from prior experiences.   These experiences may forever cloud the way students perceive their assessment experiences.

Stories and visual representations

The intent of using visual representations of assessment alongside the investigation of stories was to establish whether the students' drawings could elicit aspects of the assessment experience that were not apparent in the stories.

The obvious connection between stories and drawings is their emotional content. Both the stories and, especially, the drawings had negative emotional elements to them. The frustration, anger, nervousness and stress expressed in the stories were all evident in the drawings. The stories tended to try and give a positive angle to counter the negative experience. On the other hand, the drawings rarely portrayed a positive side to the students' experiences.

One distinct difference was the lack of peer support in the drawings. Students were portrayed in assessment scenes as solitary characters, dealing with the situation on their own. The stories emphasised the importance of peer support in the assessment process.

Chapter 9 – Discussion and conclusions

'Storytelling is an ancient and honourable act. An essential role to play in the community or tribe. It's one that I embrace wholeheartedly and have been fortunate enough to be rewarded for.'
Russell Banks

9.1 Introduction

This chapter will draw together the main issues arising from the investigation of the research question and objectives. The thesis has investigated the use of storytelling as a reflective tool and we will consider how effective the storytelling model has been in fulfilling those objectives. In doing so we will consider what we have learnt about students' experiences of the assessment process in art and design and the usefulness of the model for supporting collaborative reflective processes.

We will examine how well the model has transferred to an on-line environment and discuss the effectiveness of the 'StoriesAbout…Assessment' web site. In the light of our experiences, we discuss reasons for the lack of interaction.

We then turn to the visual representations which were explored as a complementary method to the students' stories. This method served to illuminate the emotional aspects which were being raised in the stories. The drawings were particularly effective in capturing students' affective responses to assessment, especially the negative elements. We explore how these negative feelings could impact on creative thinking.

The research methodology will be critiqued, in particular the story-based approach and use of visual representations as a method. We will highlight visual representations as a method, as it has raised a number of interesting issues and ways for using this method are proposed. We will discuss the value of the research to other disciplines before discussing the limitations of the research. The difficulties of researching in a qualitative paradigm will be revisited.

We will outline the main conclusions arising from the research and focus on what we have learnt about the student experience and how we can improve the student learning experience in art and design higher education

The research's contribution to knowledge will then be outlined. This lies in the following areas: pedagogy and learning, the development of storytelling as a reflective tool, storytelling as a method for understand students' experiences of assessment in art and design, a greater understanding of students' experiences of assessment in art and design, and the development of visual representations as a method.

We end this thesis by outlining suggestions for future research arising from these investigations and will show how two aspects of the research, storytelling and visual representations, could be developed further.

9.2 Storytelling

The intent of the research had a duel aspect: to develop an instrument which would serve as a reflective tool for students, and one which would facilitate our understanding of students' experiences of the assessment process in art and design. We have investigated this by considering the role of storytelling as a reflective tool in art and design higher education. This method was chosen as storytelling is fundamentally important to us as social beings (Read & Miller, 1995) and from its development as a reflective tool in higher education (McDrury & Alterio, 2003). The research was implemented in an on-line setting to take advantage of the concept of computers as cognitive tools (Jonassen & Reeves, 1996), discussed in Chapter 2.

First we will discuss storytelling as a method and then consider the success of using the model in an on-line context.

Storytelling model

McDrury & Alterio's (2003) model was adapted and transferred into an on-line setting to investigate the first two research objectives which focus on the storytelling aspects of the research:

1) To investigate students' qualitative experiences of the assessment process in art and design through the use of storytelling.

2) To investigate whether collaborative storytelling can encourage students to reflect on, and learn from, each others' experiences of assessment in an art and design context.

The storytelling method elicited stories on many different aspects of students' experiences of assessment in art and design, especially the negative dimension of their experiences. The affective component to learning is often overlooked as functional aspects to learning become priorities for tutors and institutions: planning and writing the course, learning objectives, assignments, teaching, studio work, quality assurance issues, and so on. Traditional investigations of the student experience through, for example, surveys often do not value the individual learning experience because of its perceived subjective viewpoint (Johnson, 2000). Most course survey instruments focus on the need of the quantitative paradigm for robust reliability to ensure validity (Coffey & Gibbs, 2001).

Additionally, such evaluations do not encourage a holistic reflection on the learning experience by the student. The multiple stakeholder approach to learning and assessment (Brown & Knight, 1994) also means that often the student and their learning experiences are not the prime focus for evaluations. The value of this research lies in the development of techniques which enable students to express the emotional side to their learning experiences. The research has also shown the importance of the role of metaphor in this form of expression.

In this research, the students' stories raised problems in key areas of their education – the emotional impact of their studies, lack of good feedback, lack of clarity of assessment criteria, unfairness of group work, how to self assess, poor tutors, the

positive impact of peer involvement. Whilst these areas could be applicable to many subject areas, students' stories also revealed art and design specific difficulties. Issues concerning the importance of creativity, and its nature, were evident as well as the relationship between creativity and fulfilling the brief. The tensions between art school education and the wider art world were raised: students' perceptions were that artists' work is not marked, that there is no right or wrong answer in art, and they queried whether it is the mark or the art work that is important. Students considered themselves to be a creative practitioner whether they are in an art school or not, but their creative processes are subject to the workings and regulations of an art school. This impacts on their experiences of the assessment processes.

These findings from the research could be due to the difficulties of objectively assessing work in art and design. As we have discussed in Chapter 2, the 'wow' factors in creative subjects are not easily reducible to objective measurement (Gordon, 2004). Students are focussed on the end result, producing a 'perfect' artefact for assessment and are not fully aware of the assessment criteria. Many tutors are also practitioners and may be reinforcing the art world approach to assessment of the final artefact. Additionally, traditional components of the arts school pedagogy, such as the degree show, also serve to reinforce the view that it is the end product that is of prime importance. The assessment criteria should reflect the learning process, yet if both tutors and students are focussed on the end result rather than identifying the learning process, students are likely to be confused about what is being assessed. This can lead to them feeling *they* are being assessed rather than their work. These feelings of judgement were apparent in the stories and particularly in the visual representations.

Despite this uncertainty over the assessment process, the findings from the research showed that, through their stories, students were able to articulate their needs: constructive criticism, not dismissal of work that needs improvement; better communication and clarity of assessment criteria; feeling that the assessment system was fair; better feedback and feedback at more appropriate timings; fairer group work assessment processes; more peer support. This indicates that the story telling process can provide valuable feedback on the course and the student learning experience which could then be used by tutors to improvement the student learning experience.

Although the stories were often quite critical, and told from the personal perspective of the student, the impact of certain teaching practices was clearly conveyed.

The informality of telling a story has elicited considerable insight into the student experience. Schank (1998) states that stories have a 'gist' and it was clear that each of these stories, even though they were often short, succinctly conveyed a particular point the student was attempting to convey. As we discussed in Chapter 7, the stories followed a wide range of structures. Some were more classically story-like in their structures with plot, protagonist, characters, timeline etc., though many were extremely short and lacking in formal structure whilst still able to convey a rich and succinct account of the students' experiences. This demonstrates that students need not write lengthy stories to share their experiences with other students. This may be especially important in the art and design context where students may be less text-oriented.

In terms of being a collaborative reflective tool, the investigation of the example story demonstrated its effectiveness; however, the collaborative aspect was less successful on the actual web site. During the focus group discussions, described in Chapter 5, students stated that they felt there was some merit in discussing their experiences immediately following an assessment, but also stated that they would be more likely to want to forget about the experience. They also suggested a reluctance to tell stories due to a fear of their story itself being assessed and a reluctance to make a private experience public. Students need to be sure they can reflect on their experiences without negative consequences (Boud & Walker, 1998) and the comments from the focus group discussions indicate that they did not feel this would be case.

There is also considerable evidence throughout this thesis concerning the emotional nature of the stories and it is likely that many of these stories were told to 'get it off one's chest'. McDrury & Alterio (2003) suggest that cathartic stories can inhibit dialogue, which may explain the lack of dialogue around the stories.

In the evaluation of 'StoriesAbout…Assessment' outlined in Chapter 7, and during the first study (Chapter 5), students clearly articulated the usefulness of reading and learning from each others' stories, thus demonstrating the value of this type of

interaction for learning. Other research has also shown that students value interacting with their fellow students, and tutors, in an on-line context, and that these interactions can lead to more meaningful learning (Su et al., 2005). The lack of social interaction has been demonstrated as one of the prime reasons for the failures in on-line learning (Muilenburg & Berge, 2005). In the case of this research, it would appear that the emotional and personal content of the subject matter was the main factor inhibiting interaction.

Although there were fewer stories being told and responded to on the web site than were expected, the model stood up to an in depth investigation of its efficacy by using the example story, as described in Chapter 7. This demonstrated the effectiveness of the adapted storytelling model as a reflective and collaborative tool for students. It was remarkable that one brief story resulted in such a range of opinions being expressed, issues raised, and changes being made to thinking and practice, as well as insight into how students perceived their learning experience. Schank (1998) explains how different people will understand and respond to the same story in differing ways depending on their pre-existing knowledge and experience, and how this is indexed and triggered by the story. The wide range of issues raised by the example story shows how the method supports a Constructivist perspective to learning, by enabling students to respond to the story by exploring the issues as they related them to their own world model.

Each type of response in the storytelling model elicited responses demonstrating its ability to draw out reflective responses. This thesis has stressed the importance of looking at learning situations from different viewpoints and the viewpoint responses produced the highest level of learning and cognition related replies. Undergraduates submitted fewer responses in the viewpoint, wonder if and what learnt areas, which may demonstrate that their reflective thinking skills are not as well developed as those of postgraduates and staff. There is a current emphasis on developing skills for reflection to support the Dearing Report's call for lifelong and reflective learners (Dearing, 1997). Tools such as 'StoriesAbout... Assessment' could be used to provide support for the development of these skills.

'StoriesAbout… Assessment' site

We have already discussed the effectiveness of the model as a reflective tool and in facilitating our understanding of students' experiences of the assessment process in art and design. This section will focus on what we have learnt through the investigation of the third research objective:

> 3) To develop and evaluate an on-line tool to support collaborative and reflective storytelling.

The intent of developing the storytelling model on-line was to capitalise on the concept of computers as cognitive tools (Jonassen & Reeves, 1996), as discussed in Chapter 3. Whilst there is little doubt from the data gathered during this research that the storytelling model was successful, there was less success when we look at the data which was solely gathered via the web site. Although half the stories were directly gathered on the web site and there was some evidence of collaborative reflection, this was not sustained throughout the research.

As we have discussed in the previous section, there is some evidence from the focus group that the topic area of this research, assessment, could itself have been responsible for the lack of interaction. The site was also not closely associated with RGU nor included in students' day to day learning activities: this remoteness may have compounded the difficulties students were already facing in telling their stories. Additionally, it can be hard to get users to accept a new system and barriers to acceptance can have both technical and social reasons (Masterton & Watt, 2000). In taking a storytelling stance, there are added difficulties, such as the reluctance of people to tell stories (Lawrence & Thomas, 1999). We sought to overcome this by providing a range of themes and example 'seed' stories as suggested by Lawrence & Thomas (1999), which had some success.

The original intent was to have small groups of students who knew each other using the tool. This decision was taken to ensure students felt safe in discussing their experiences with people they knew. As Boud & Walker (1998) stated, students need to reflect on their experiences in a safe environment. It transpired that smaller groups

of students were more likely to discuss their experiences when they met each other, so the decision was taken to open up the web site for all students to use.

Taking this decision at the start of the research may have helped with participation. The site is receiving increasing traffic from all over the world and with the proposed changes to the site arising from this research (see Future Research section), it is hoped that a critical mass of users could be reached to ensure that the success of the storytelling model, as demonstrated by the example story, is replicated on the web site.

9.3 Visual representations

The visual representations were used to investigate objective 4:

> 4) To investigate art and design students' experiences of assessment by asking them to visualise their experiences using drawings.

Using visual representations as a method has provided a considerable amount of information about how students feel about assessment. Whilst there is no doubt that there can be difficulties involved in interpreting such qualitative data, there is something persuasive about these representations that is difficult to ignore. They convey, at a glance, a gestalt of the assessment experience which would be difficult to obtain through other methods. It is as if by looking at them we are vicariously experiencing some of what the students have gone through. They succinctly and rapidly convey a richness of experience that would be difficult to put into words. Perhaps the old adage is appropriate here, that a picture is indeed worth a thousand words. The drawings portrayed the learning experiences in a way that is just not being identified using course evaluation forms. Multiple methods may be more effective at capturing the whole learning experience (McKenzie et al., 1998).

The exploratory nature of this part of the research provided a richness of the data which was unexpected and this echoes Ludlow's (1999) own surprise at the richness of his students' drawings. As previously discussed in Chapter 2, there is little

research being conducted in this area, which is perplexing considering the richness of data collected, although this is perhaps because of the difficulties of interpreting and analysing such data and the lack of methodological frameworks to guide the analysis. Another reason could be due to the emphasis of traditional investigations of the student experience on quantifiable data for institutional reasons (Johnson, 2000). The research presented in this thesis sought to understand the whole student learning experience by taking a Constructivist approach which valued the individual experience, rather than seeking a statistical account of the homogenised student view of a course.

In keeping with previous research (Ludlow (1999); McKenzie et al.(1998); McLean et al. (2003)), the visual representations were particularly effective at conveying the more affective responses to assessment and in capturing what appeared to be students' visceral understandings of assessment. The drawings contrasted with the storytelling method which prompted a more reflective and considered response to students' experiences. We can see the emotional states described in the stories more clearly conveyed in the drawings in Chapter 8 and, as such, the drawings provide additional information and insight as to why there is a sense of frustration in these stories.

There was evidence in the drawings that previous assessment experiences, for example, the images of exams (Figures 8.15 & 8.16), may be having a negative impact on students' current experiences with assessment. This was particularly evident in the undergraduates' drawings and may indicate a need for additional support being given to undergraduates, for example, in understanding assessment criteria and self assessment. Recent research has demonstrated that efforts to develop students' understanding of assessment criteria results in improvements in learning (Rust et al., 2003), however, the research did not consider the affective side to these changes.

The overwhelmingly negative reaction to assessment was evident in the drawings and this has particular implications for students in art and design. Negative emotions can be a barrier to learning (Boud et al., 1985a) and in a creative discipline the effects can be even more far reaching. Figure 8.7 demonstrated this by showing the tensions between the objective and subjective issues of assessing a 'perfect' sunflower. Figure

8.6 shows an artist sitting on the floor creating her art work, while formal judges hold up a mark. These tensions reflect the tensions between art school education and the broader art world which students will become practitioners in, which was previously discussed in Section 9.2.

Perhaps as a result of the strong and emotional imagery, the drawings facilitated discussions on why students had used those images to portray their experiences. This is a similar finding to McKenzie et al. (1998) who also found that the drawings encouraged tutors to discuss teaching issues. The fact that the drawings are open to interpretation enables discussions on their nature and encourages wider discussions about students' learning experiences and the impact of institutional processes.

In discussing creative thinking, Wynder & Conway (2001) demonstrate how extrinsic motivation can change the reasons a student has for completing a task, e.g. an assignment task. This leads to feelings of lack of control over the task and a decrease in the student's intrinsic motivation, although they accept that some forms of extrinsic motivation can have a positive effect on the individual's intrinsic motivation, particularly if they have a positive effect on feelings of personal control. They cite evidence which indicates that a decrease in intrinsic motivation can have detrimental effects on creativity. They also demonstrate that creativity needs an internal locus of evaluation as external evaluation inhibits creativity (Rogers, 1954). We have already discussed in Chapter 5 how feelings of lack of control over their learning was having a negative impact on students' experiences and these issues were emerging in their stories.

Assessment can lead to students feeling oppressed by their assessors (Meldrum, 2002) and Freire (1998) warns of the dangers of using methods because of their efficiency at the expense of the freedom of the student. It may be the lasting harmful effects that are emerging through these drawings. We have seen images of 'interrogation' (Figure 8.22), students being portrayed as tiny in comparison to their assessors (Figure 8.23) and feelings of despair being expressed as suicidal images (Figure 8.24). Students' stories also highlighted the lack of control they had in the learning process and these drawings may represent the impact this has on their psyche.

9.4 Research methodology

The research aimed to take a Constructivist and student-centred approach to the methods it used in attempting to understand and enhance the student learning experience. In Chapter 3 we outlined how we would use story-based methods and drawings to investigate the research question and objectives. In this section we will critique these methods and their suitability for other discipline areas.

Story-based methods

The success of the method lay in McDrury & Alterio's (2003) decision to base their model on Moon's (2002) stages of learning which in turn has been based on key theories of reflective thinking and learning. This provided a strong foundation for the storytelling model adopted. There was a danger that simplifying the model by transferring it on-line would negate some of its effectiveness, however, care had been taken to preserve the fundamental components underpinning the original model.

Although the model was successfully transferred on-line, the web site did not spark the level of interaction hoped for. The focus group raised the issue that this may have been due to the nature of assessment. The responses from the questionnaire indicated a mixed response as to whether students had a problem telling their stories on-line, although the smaller numbers make this more difficult to extrapolate from. Although the storytelling method work well, in terms of the value of the stories gathered, this lack of interaction was the most problematic aspect of the research. The 'Future research' section outlines proposed research to alleviate this problem.

The analysis of the students' stories identified issues that were impacting on their studies. A number of these are not issues that would be raised in traditional course evaluation surveys, and as such, demonstrate the value of the storytelling method in helping us to understand the whole student learning experience. For example, some stories were about how previous negative experiences of assessment were affecting current assessment experiences. Some stories showed a tension between the student as a creative practitioner in an art school and their practitioner role in the wider art

world. Other stories showed how lack of clarity over the assessment criteria and lack of appropriate feedback could affect the students' experiences. Previous research has identified a lack of understanding about how students use feedback (Gibbs & Simpson, 2002). Through this research, we now have a better understanding of students' needs regarding feedback in a creative arts context.

The information gathered by this method is almost impossible to capture in survey format and the motivations for filling in a survey are also very different from telling a story. Surveys are largely formal and institutional. The aim of telling stories in this research was to share stories with fellow students, therefore the motivations for providing the stories was very different to filling in forms.

Visual representations

Interpreting the meaning behind drawings was sometimes straightforward and sometimes difficult. Students helped the interpretations by providing text, thought bubbles, exclamation and question marks, etc. The two stage analysis method assisted the interpretation by enabling the overall meaning to be focussed on more in the first stage, then looking specifically at the components of the drawings in the second stage. Grouping drawings that appeared to have similar aspects facilitated the overall meaning of these drawings; that is, the act of looking for similarities helped interpretation. The second stage then concentrated on the individual components, the syntax, that provided this meaning. Interpretation was also helped by peers (and participants) who offered their own perspectives on interpreting the drawings. The two stage analysis method shares similarities with the two types of content discussed by McKenzie et al. (1998) – the manifest and latent content.

Although Grounded Theory is more commonly applied to text, this approach worked well as a method to analyse the drawings. It avoided taking a psychoanalytical approach which is more common in image analysis where the images represent experience. A psychoanalytic approach can result in an over-interpretation of the images based on pre-existing concepts regarding the way an individual constructs a visual representation of their experience. Taking a Grounded Theory approach

enabled the meaning to emerge from the images; it facilitated a student-centred approach to the analysis, where the analysis was driven by a genuine desire to understand what the student was attempting to convey, rather than fit the interpretation into an already decided upon framework. We have previously discussed researcher bias (Chapter 3), but the bias in this research was a student-centred approach and the research question sought to understand the student learning experience.

An important outcome of this phase of the research has been the effectiveness of the drawings in acting as a catalyst for discussion about the student learning experience. This was not part of the original intention of the research, but emerged as a result of (a) informal feedback and discussions from PhD students who commented on the drawings as they walked by the table the drawings were being laid out on for analysis and (b) the drawings being formally exhibited and students and staff being asked for comments.

The drawings prompted a considerable amount of discussion regarding interpretation of some of the images, the rationale behind the drawings, and why students chose to use those images to portray their experiences. It is therefore proposed that the discussion and debate generated in attempting to understand the drawings can be just as important as the actual meaning of the drawings themselves. Rather than just see the analysis of these drawings as the researcher's task, it is proposed that these drawings should be used as a tool to promote reflective discussions about the student learning experience and institutional practice. This aspect of using visual representation of students' experiences to promote discussion was raised in 1998 by McKenzie et al. (1998), yet there have been few studies furthering it.

This method has demonstrated its effectiveness at eliciting students' feelings about their experiences; therefore it could be used as a method in other areas which are investigating attitudes and perceptions. This point is expanded upon in the following section.

Applicability of methods to other discipline areas

The focus of this research was students' experiences of the assessment process in art and design. The methods were chosen as they were techniques already being used for different purposes in the art and design context, so students would already have some familiarity with them and they would seem to be a natural extension of their learning experience at an art school.

The methods were successful at revealing a number of key areas which were of concern to students. Some of these areas were art and design specific, such as those concerning creativity and the fulfilment of the brief. There were other issues raised which highlighted more general concerns about assessment experiences, such as feedback, marks and negative feelings and these issues may have much in common with other discipline areas, though sometimes these issues did incorporate an art and design theme.

It is proposed that storytelling would be applicable in other discipline areas for two reasons: firstly, there were a number of general issues concerning assessment which were raised; and secondly, storytelling is such a pervasive part of our everyday lives that students will already be telling each other stories about their learning experiences in an informal manner.

The use of visual representations in other discipline areas could be more problematic. Drawing, and drawing skill, is closely associated with visual and creative disciplines such as art and design. Students in other disciplines may not feel they have an aptitude for drawing. However, the drawings received during this research were more cartoon-like, for example, people were often represented by stick figures, plus diagrammatic representations were used in a number of cases. This level of skill is within the capabilities of most people. McKenzie et al.(1998) also commented that the drawings they received did not require skilled artistic ability and could be done by people in all disciplines. Most people would not regard statisticians as having highly developed drawing skills, yet the drawings completed by Ludlow's (1999) students on a statistics course have much in common with the drawings received during this research The computing students in this research were also able to convey their

assessment experiences visually, as did the students in the other studies discussed in this thesis (Bracher (2003); McLean et al. (2003); McKenzie et al. (1998)).

Therefore, it is proposed that visual representations as a method could be applicable in other discipline areas as well.

9.5 Limitations of the research

The qualitative nature of the data gathered makes this research open to some criticism. Analysing qualitative data is inherently subjective and we have attempted to put in place processes to address some of these potential criticisms, as discussed in Chapter 3. Triangulation of data and using participants' interpretation of the data to confirm findings has gone some way to ameliorating this potential problem. Additionally, reframing positivist concepts has enabled the 'trustworthiness' of this research to be demonstrated through the transparency of the research in this thesis (Lincoln & Guba, 1985).

The visual representations' study was an exploratory study and this approach, in a higher education context, has few tried and tested methods associated with it. Therefore, this part of the research could be open to criticism because of lack of methods, especially in the analysis of the data. We have applied the same methodological approach to the visual representations' study as the rest of the research in an attempt to address this issue. The two stage method (using a Grounded Theory approach) helped with a comprehensive analysis of the drawings and served to develop methods for the analysis of drawings representing students' experiences in the higher education setting.

Only one model of storytelling was used and developed. Currently, it is the only model of storytelling as a reflective tool in higher education which has been developed, so it cannot be certain that this is the most effective model for higher education. Developing an alternative model was not the intent of this research. We have reviewed this model and demonstrated how it is based on key research and thinking in the field of learning and reflective thought, which indicates that the

theories supporting the model are sound. Should alternative models be developed, this research can be critiqued in contrast with them.

The lack of sustained interaction on the web site could indicate there are problems with this approach. We have demonstrated the effectiveness of the storytelling model in a research setting, but have yet to demonstrate its effectiveness in real world use. Though we have some evidence to support this, more is needed. A solution to this is proposed in the 'Future research' section.

The original intention was to have more focus groups to discuss issues with the participants who were initially largely based on the campus in which the research was based. The participant group changed as more geographically disparate groups of students were invited in an attempt to raise interaction on the web site. This resulted in an increase in data being collected anonymously through questionnaire-type surveys. On reflection these discussions could have helped provide additional data in support of the research findings and the anonymous questionnaire-type surveys detracted from the attempt to take a Constructivist approach to the research.

9.6 Conclusions

The richness, and detail, of the information generated from the stories and their analysis have demonstrated the effectiveness of storytelling as a method for understanding the students' experiences of the assessment process in art and design. The range of issues raised in the stories went far beyond those investigated by standard course evaluation surveys. Student's stories provided an insight into their whole learning experience, only part of which is covered by surveys. The visual representations added another method for understanding the whole student learning experience, in particular, the affective side to this experience. The research concludes that multiple methods may be more effective at fully understanding student's learning experiences. This finding concurs with McKenzie et al.(1998).

The investigation of the storytelling model using the example story, described in Chapter 7, demonstrated the value of using this model. Students were able to respond

in insightful and meaningful ways to the example story and the resulting responses went beyond descriptive accounts and showed reflective and transformative learning. The responses also considered a much wider range of issues than had been apparent in the initial story. The findings of this research show that undergraduates were less likely to use the full range of responses, indicating a need to practice and develop reflective thinking skills. Therefore, tools such as 'StoriesAbout... Assessment' could be used to provide support for the development of these skills.

The storytelling method elicited responses which provided a rich qualitative data source for analysis. By analysing students' stories we have not only learnt about their perceptions of the assessment processes, we have also identified some potential failings in the system, how these affect students and how they are dealing with these issues. The research findings are in agreement with Rowntree's (1987) assertion that investigating assessment processes reveals the truths about the underlying education system. In a similar manner to Snyder's (1971) concept of the 'hidden curriculum', the findings from this research have revealed the 'hidden experience' of art and design students.

The stories and responses presented in this thesis demonstrate the importance of affect in the learning process and the need to more fully understand its impact on students. The affective component to learning is not adequately addressed in standard course evaluation forms and the methods used in this research can be used as additional methods to investigate the whole learning experience. The methods presented in this thesis have demonstrated how they enable students to communicate the affective side of their learning experiences.

Although the value of using on-line storytelling as a reflective tool has been shown, there were difficulties in establishing sufficient interaction on the web site. The research has identified the emotional nature of these stories, and it evident that discussing negative experiences on-line has an inhibitory nature despite students acknowledging the value of these discussions.

The use of visual representations was particularly effective at conveying students' emotional responses to assessment. Students' use of strong imagery, such as

interrogation, suicide, a hangman noose, etc., provoke considerable discussions amongst students and tutors. This research concurs with McKenzie et al.'s (1998) conclusion that students' drawings can act as a catalyst for discussions about teaching.

The manner in which students visually portrayed their experiences was similar. There was a common language where students expressed themselves using cartoon-like images, thought bubbles, exclamation and questions marks, and metaphorical representations. These techniques were also common in previous research investigating students' drawings of their learning experiences (Ludlow (1999); McKenzie et al (1998); McLean et al. (2003)).

Through the investigations of the research objectives, we have learnt a great deal about students' experiences of the assessment process in art and design. This information also gives us a number of indications for how we can improve the student learning experience. We will now focus on conclusions regarding what we have learnt about the student experience and what we can do to improve that experience.

What have we learnt about the student experience?

We have learnt many aspects regarding the student experience in art and design and these are highlighted in Chapters 7 and 8. In particular, we have learnt how negative experiences are affecting the student: students' experiences were frequently represented as stressful and frustrating. These negative experiences were clearly stated in their stories and depicted in the visual representations using strong imagery. Students are attempting to take a deep approach to their learning, but situations outside their control, such as assessment, result in them adopting more surface approaches. Students are supportive of their peers and value this support. The research has demonstrated students' willingness to offer practical and empathic support.

We have gained greater insight into how students view the role of the brief in assessment and how this can be used as a springboard for their creativity or to stifle it. Students are engaged in discussions about the subjective nature of art, aesthetics and creativity and, as such, are keen to receive feedback which adequately deals with

these issues. Students are finding the lack of good feedback problematic. This is particularly difficult in art and design where marks are not an adequate indicator of how well the student has done. Feedback is important to students in helping them improve future work and practice and is a key area in current higher education research (Nicol & Milligan, 2006).

The importance of being confident in your abilities was a running theme and the art school can be a place to help or hinder this confidence. The problematic role of art school education versus the processes in the wider art world was raised.

How can we improve the student experience?

The research has shown that one way we can improve the student experience is by listening to the stories the students tell. The students' stories have revealed a number of areas which need to be addressed in art and design higher education. These are:

- addressing the negative feelings that students associate with the assessment process. This is particularly important due to the impact this may have on reflective thinking and creativity. This could be done by challenging the stereotypes students have and by discussions on the nature of assessment and students' experiences of assessment.

- encouraging peer support as students find this valuable; providing peer assisted learning and greater opportunities for peer discussions.

- encouraging discussions about the assessment process. This would enable students to have a greater understanding of the purpose of assessment and greater familiarity could lead to less fear about the process.

- addressing tensions between the student as a creative practitioner, and the student as a creative practitioner working within the constraints of an art school. The emphasis of learning needs to shift from an emphasis on the end result to an emphasis on the process of learning and what has been learnt.

- involve students in the assessment process through setting criteria and peer and self assessment and supporting students in gaining skills to do so.

- using visual representations to understand the student experience and to engage tutors in discussions about their teaching and how this impacts on the students' learning.
- using visual representations as a personal reflective tool, for example, as part of PDP processes.

Recommendations for use of 'StoriesAbout... Assessment' site

As a result of the success of the model and the difficulties in maintaining successful levels of interaction on the web site, the following recommendations for use are proposed:

1 – The site needs to be a key part of the student's day to day learning activities, for example, part of PDP processes.

2 – It should be closely associated with the University or department, ideally being part of the Intranet or VLE system so it is visible, as students use these systems on a daily basis.

3 – Students should be encouraged to use the site and should be aware of its advantages. The site could then form a basis for ongoing reflective discussions.

9.7 Contribution to knowledge

The contribution to knowledge from this research lies in the following areas: pedagogy and learning; the development of storytelling as a reflective tool for students; storytelling as a method for understanding students' experiences of assessment in art and design; a greater understanding of students' experiences of assessment in art and design as a result; and the development of visual representations as a method for understanding the learning experience in higher education. We will now discuss each area's key contribution to knowledge, starting with its overall

contribution to pedagogy and learning, then looking at the individual components comprising this.

Pedagogy and learning

One of the key contributions of this research is in the significance of its methods for pedagogy and learning, in particular experiential learning. The methods the research puts forward support the concept of lifelong learning and the need to ensure students have the skills to reflect on and assess their own development (Dearing, 1997). Additionally, they align with current quality enhancement themes within the higher education sector (http://www.qaa.ac.uk/enhancement/default.asp).

Both the storytelling and visual representation methods offer novel processes which can become part of students' PDP processes. The narrative aspect of the 'StoriesAbout…Assessment' site addresses the need for PDP processes to be more suited to an art and design pedagogy (Malins & McKillop (2005); James (2004)).

The methods offer an alternative way to understand the student learning experience; they focus on understanding the individual experience and the subjective qualities of that experience, such as attitudes, feelings, etc. As we have previously discussed (Chapter 1 and Section 9.2 of this chapter), the quantitative approach to surveying learning is lacking in consideration of the individual and affective aspects of the learning experience. This research has demonstrated how storytelling and visual representations can help us to understand the whole learning experience as well as provide methods to encourage students to reflect.

Storytelling is a Constructivist tool enabling students not only to explore their actual experiences, but to be creative and explore other possibilities (Bruner, 1990). The development of creative thinking skills is key in art and design higher education. The Cox Review (Cox, 2005) identified the need for creative thinkers in business and highlighted the important role of education, especially design education, in developing creative skills. This research contributes methods which can help underpin reflective and creative thinking.

In summary, these methods offer students a novel way to reflect on their assessment experiences and learn from other students' experiences, as well as providing us with insight into aspects of the student learning experience that are not readily amenable to traditional methods.

The development of storytelling as a reflective tool

The research has developed storytelling as a reflective tool in art and design higher education. This use of storytelling is a novel approach and the research conducted in this thesis serves to develop and establish this area. The research has adapted McDrury & Alterio's (2003) storytelling model for the on-line setting and an instantiation of this model as the 'StoriesAbout… Assessment' web site has been designed and built. 'StoriesAbout… Assessment' is, currently, the only tool to be built that is based on this model, and appears to be the only on-line reflective tool for higher education which uses a storytelling model.

'StoriesAbout… Assessment' was used in art and design for students to share and discuss their experiences of the assessment process. Although there was some reluctance to reflect on assessment experiences, the analysis of students' stories in Chapter 7 shows how the method enabled reflection on their experiences of assessment and also facilitated new learning on experiences. The concept of the critically reflective practitioner (Schön, 1983) is important in art and design education and practice. This research has provided a reflective tool for higher education which has been proven in the art and design context.

Whilst the aim of the research was to provide discipline-appropriate methods, the evidence presented in this thesis shows its relevance to non-art and design areas also.

Storytelling as a method for understanding students' experiences of assessment in art and design

The storytelling method has furthered our understanding of students' experiences of the assessment process. Traditionally, course evaluation surveys and similar instruments have been used to understand the student experience. These methods do

not address the whole student learning experience, in particular the emotional aspects. Nor do they seek to provide an opportunity for students to learn by reflecting on their experiences.

This research contributes a new way of understanding the students' experience, using storytelling, and the research has demonstrated how this can be used in the art and design context. This method has led to a greater understanding of the issues faced by art and design students, and these will be summarised in the next section.

A greater understanding of students' experiences of assessment in art and design

As a consequence of using storytelling to explore students' experiences of assessment in art and design, this research has contributed a greater understanding of students' experiences in this area, in particular, to our understanding of the emotional impact of assessment. This is an area that is rarely covered in more traditional forms of student surveys and the findings from this research serve to broaden and deepen our understanding of the student learning experience.

Through this research we have gained a greater understanding of how students' learning can be affected by negative experiences. Student's stories revealed how experiences from several years ago were still having an affect on their learning. The exam images in the visual representations also show how previous assessment experiences are having a negative effect.

This negative aspect was also evident from an analysis of the words used by students to describe assessment which revealed that significantly more negative words were used to describe assessment (as opposed to learning) with 'stressful' being the most frequently used word. This was supported by the analysis of students' stories which found that the stories frequently contained emotional elements, primarily negative (Figures 7.3 and 7.4).

Issues concerning feedback and the clarity of the assessment criteria were identified in the stories. This is particularly important in art and design due to the subjective

nature of the discipline. We have gained an understanding of the difficulties the students perceive as artists/designers in an educational setting where their work is being assessed in a different manner to the way it will be assessed when they become practitioners in the wider art world.

The development of visual representations as a method for higher education

This research has developed visual representations as a method for understanding students' experiences of assessment in art and design, and has offered suggestions for how this method could be further developed. A two stage process using a Grounded Theory approach is proposed as an effective way to analyse drawings in this context: first by looking at the overall meaning then focussing on the individual components of the drawing. This two stage process can be used by researchers who wish to use alternative methods for researching the student experience, in particular, by those seeking to understand the affective dimension to learning.

The research proposes that the drawings can be used as a focus for discussion and debate about the student experience. This finding concurs with McKenzie et al (1998) who found the drawings were a trigger for discussions.

Through the analysis presented in Chapters 7 and 8, the research has highlighted the differences between two methods: the more reflective and rationalised storytelling method and the more affective and instinctive elements displayed in the visual representations. It is proposed that combining these two methods could prove even more effective. Using multiple methods may exploit information sources that are not normally apparent (McKenzie et al., 1998).

9.8 Future research

Storytelling

This research has demonstrated the validity of taking a storytelling approach in understanding the student experience and in providing a reflective tool. However, there are still challenges to overcome if this approach is to be widely adopted. A new version of 'StoriesAbout...' is proposed and it is hoped that this modified site will alleviate some of the difficulties faced by this research regarding participation and interaction. The new version being proposed is more blog-like in nature, which is more in keeping with the way in which people share their experiences on-line. The basic idea remains the same: to provide an environment where students can tell their stories and one in which their reflections are guided and supported. Figure 9.1 shows an overview of how the key components may interact with each other.
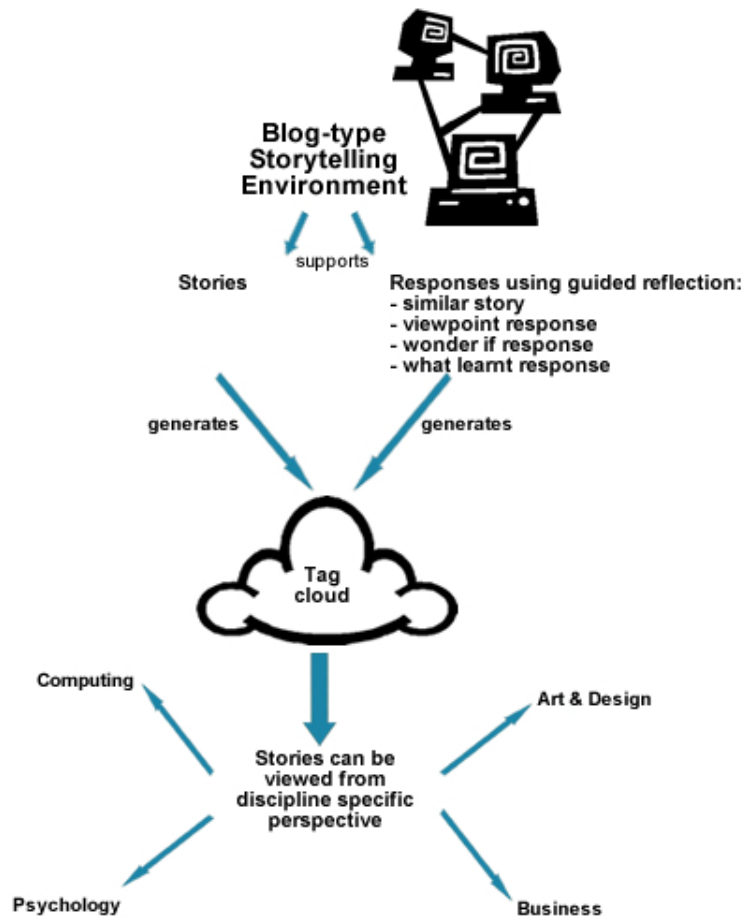
Figure 9.1.

Future adaptation of 'StoriesAbout...'

Here we can see how the core aspect of the model is still there. The four response types of the original model are used as reflective prompts but they are not the only types of responses students can make. Students are able to tag their own responses accordingly, and tagging enables more connections to be made between the stories, responses and differing disciplines. A tag cloud[5] highlights the most frequent tags and provides a visual overview of students' responses. This represents a move towards students having more control over the linking of their stories and will enable students to see at a glance the kinds of stories that students are telling. Stories can also be viewed from a discipline specific perspective, therefore allowing all students to contribute their experiences. It is hoped that this will heighten the natural curiosity of students by providing a multiple discipline approach and will open the site up to more students and potentially more interaction, which was lacking in the original

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[5] See http://www.tagcloud.com/

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version.   The function of the themes in the previous version is taken over by the tags, though suggestions will still be provided.

Students are able to share and discuss any aspect of their learning experience: course specific, assessment, social experiences, study experiences, career development, etc. The ability to discuss all aspects of the learning process is intended to take the primary focus away from the emotional aspects of learning, which can still be discussed, as these had previously inhibited interaction.

Students can use the environment as a blog, recording their daily thoughts, as a journal for critical reflection, and so on. As such, the environment could form part of a Personal Development Planning (PDP) process or ePortfolio. Blogs have already been proposed as playing a key role in the ePortfolio process (Tosh & Werdmuller, 2004), though here we are stressing the storytelling nature of these interactions and how using a model of storytelling as a reflective tool can guide the interactions.

Paulson & Paulson (1991) suggest that portfolios tell the story of what a student knows, why they know it and why others should also know that – it is *their* story of discovery as told by them. Barrett (2004) takes their storytelling metaphor further and suggests that portfolios can be supported by blog-type environments if the portfolio is seen as being for *learning* as opposed to being used purely for assessment. She argues for electronic portfolios to be viewed as *digital stories of deep learning.* The story the ePortfolio portrays can be enhanced by the actual stories students tell of their learning experience. Providing guidance for these stories, as through the storytelling model discussed in this thesis, ensures an ePortfolio can became a rich environment for learning and a key component in PDP processes. Students can not only reflect on their learning, but can discuss their experiences further with their peers. The key difference being proposed here, is to provide a pedagogical structure for those reflections: a mechanism not provided by most blog-type environments, even educational ones.

Visual representations

Visual representations of learning are under-utilised as a method in higher education. Although we have considered a number of studies, there are still too few to have established this field of research. It is proposed that further work in this area shows considerable promise. Although the research conducted here was exploratory in nature, it has proved effective at revealing students' instinctual perceptions of the assessment process in art and design and has prompted debate about the underlying reasons for students depicting their experiences in these ways.

Therefore, it is proposed that visual representations of learning could be used as a course evaluation technique in art and design to understand the effect learning is having on students. Understanding the student learning experience is key to improving the quality of assessment methods. Visual representation may be a more expressive medium for some groups for students, for example, students who have higher levels of visual literacy or a preference for the visual medium. Furthermore, it is proposed that this method could be just as effective in other discipline areas.

Visual representations could also be used as a reflective tool for students in art and design. Students are encouraged to keep reflective logs and sketchbooks as part of their learning process, so asking them to visualise their learning as part of this process would seem a natural extension to this. Schön (1983) encouraged learners to engage in a reflective conversation with their designs and perhaps we should be encouraging students to reflect and engage with their learning in ways more suited to the subject area. Visual representations could provide the focus for reflective conversations, just as students are well used to having conversations about their work through, for example, the 'crit' (Oak, 2004). This could be one way of adding to PDP processes in art and design, by moving towards multiple media formats more suited to students' visual learning styles (James, 2004) and the experiential and practice-based nature of the subject (Malins & McKillop, 2005).

Using visual representations as a catalyst for generating discussion and debate about the student learning experience is also proposed. The drawings in this research have generated a great deal of discussion, from how to interpret an individual drawing to

why it is that students are representing their experiences in this way. Drawings like these appear to engage us in intuitively asking questions and seeking answers through discussion with others. It is during these discussions that we may find we understand our students' learning experiences, and discover new insights into how we can make our students' learning experiences better.

Based on the findings of this research, funding has been received to continue the work on the development of visual representations as a course evaluation method and as a reflective tool for students. It is hoped that this continued research will develop guidelines for using and interpreting visual representations of learning.

Epilogue

Personal reflections

Conducting this research has been a fascinating experience for myself as a researcher and as a student. In Chapter 3 I raised the issue that I too am a student who faces assessment and the realisation of this as the research progressed enabled me to view the research findings from a very personal perspective. I found a personal connection with the stories and the visual representations, and the empathy I felt for the students and their experiences enabled me in taking a student-centred approach to the research. I also found I had to stay distanced from them at times in order to bring a level of rigour into the research.

The data being gathered was a constant reminder that this research would be assessed. Whilst some of it has already been 'judged' in some way, through its resulting publications and peer review, ultimately it is the final exam on which the merit of this thesis rests.

Visual representation challenge

While analysing the visual representations, I thought about how I would represent my experiences of assessment, and focussed on a key assessment experience – my viva. On thinking about this, an image immediately came into my mind and I have drawn this image. This image is very interesting from both my student perspective and my researcher perspective.

I would like my examiners to think about how they would visualise my viva and to bring their visual representations to the viva so that our two perspectives can be compared.

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Appendices

Appendix 2.1 – Coding matrix

CODING MATRIX

CODE	
Student depiction	
Student seated at desk, writing	
Student seated at desk, not writing	
Student standing	
Student outside of school	
Student, face only	
Other students in picture	
Teacher	
No people in drawing	
Facing Away	
Student facial expression	
Positive	
Negative	
Neutral	
No facial features	
Testing "equipment" /trappings	
Test booklet	
Pencils	
--Student holding pencil	
--Pencil laid on desk or test booklet	
--Extra pencil(s) available	
--No pencil shown	

Eraser	
Food and/or drink	
Other	
Classroom features: Functional	
Clock	
Telephone	
Computer	
Door	
Window/outside view	
Table	
Teacher's desk	
Blackboard	
Student desk alone	
Student desks in rows	
Student desks clustered	
Other	
Classroom features:	
Instructional posters	
Motivational posters	
MCAS-related posters	
Other	
Test difficulty	
Hard	
Not too hard, not too easy	
Easy	
Tricky	

Can't discern	
Other	
Test content/format	
Math/Science	
Writing	
Reading/literature	
History/social studies	
Bubbles to fill in (multiple choice)	
Blank space on test booklet	
Unfamiliar content	
Response to testing/test	
Thinking/problem-solving	
Using test-taking skills	
Feeling confidence	
Help needed/asking question	
Anxiety/stress/nervousness	
Boredom	
Anger	
Tiredness/sleeping (while testing)	
Sadness	
Being overwhelmed/too long	
Disappointment	
Diligent, Motivated	
Not serious	
Anticipating a grade	
Anticipating a good grade	

Anticipating a bad grade	
Question marks	
Thinking about other things/post-test	
-- Sleeping	
-- Relaxing	
-- Friends/fun	
Feeling relief	
Other postivie	
Other negative	

Appendix 4.1 – Examples of previous layout design
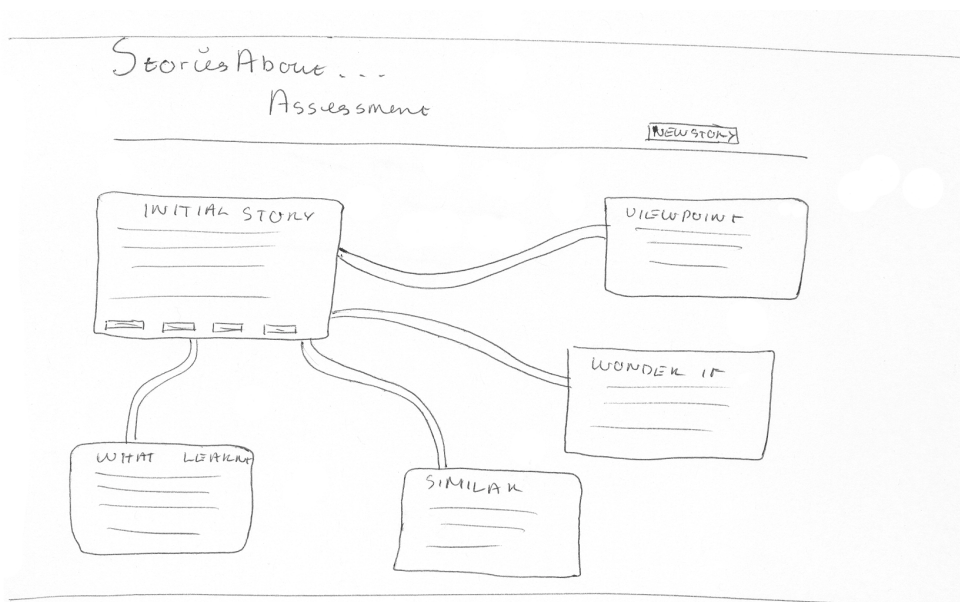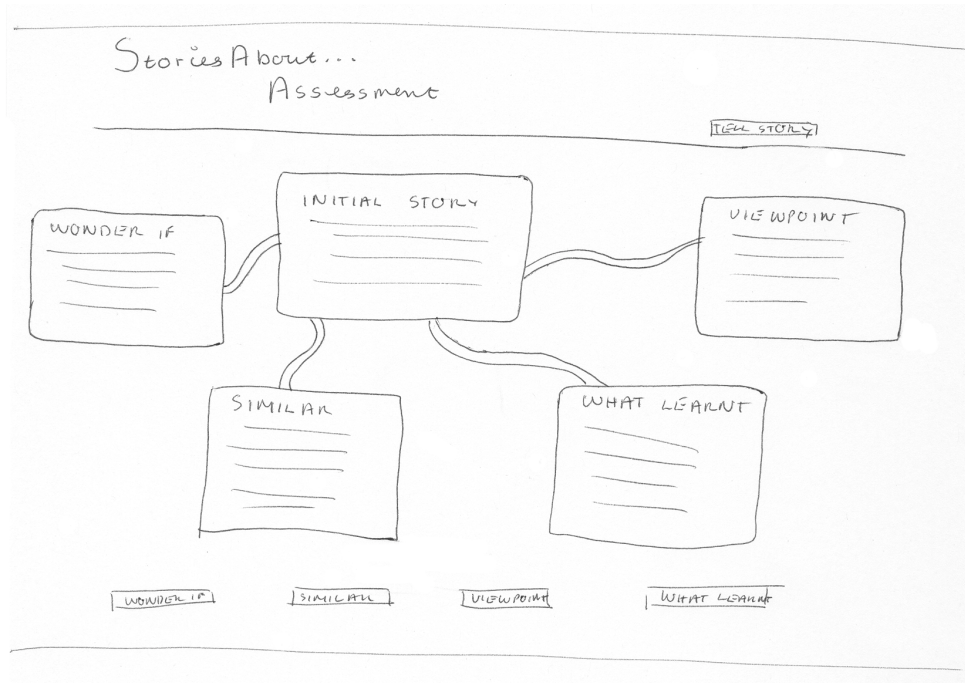
Appendix 4.2 – Cognitive walkthrough

The Task

To read an initial story and to submit a response to it.

Actions required to achieve task

Action 1: Click the 'Assessment' button
Action 2: Log in with user name and password
Action 3: Click on one of the stories
Action 4: Select one of the response buttons
Action 5: Fill in the form
Action 6: Submit the story

Questions to be asked at each step

1. Will users be trying to produce whatever effect the action has?
2. Will users see the control (button, menu, switch, etc) for the action?
3. Once users find the control, will they recognise that it produces the effect they want?
4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.

Cognitive Walkthrough Results

Action 1: Click the 'Assessment' button

1. Will users be trying to produce whatever effect the action has?
Users will be expecting to log into the assessment group as this is the action they have been told to do and it is stated on the home page.

2. Will users see the control (button, menu, switch, etc) for the action?
The button is relatively easy to see and labelled 'Assessment'.

3. Once users find the control, will they recognise that it produces the effect they want?
They should be expecting to log in to the assessment group. They may expect to go straight to the group, although they have been told the log in details

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
They have been given a username and password so should know to input these details.

Action 2: Log in with user name and password

1. Will users be trying to produce whatever effect the action has?
The log in dialogue prompts for username and password - they should be expecting to log in.

2. Will users see the control (button, menu, switch, etc) for the action?
The log in dialogue box is already there.

3. Once users find the control, will they recognise that it produces the effect they want?
Users should be familiar with log in dialogues.

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
Users will be taken to a list of stories so they should understand.

Action 3: Click on one of the stories

1. Will users be trying to produce whatever effect the action has?
Users have been asked to read and tell stories so will be looking for stories to read. They may not initially realise they need to click to view a story.

2. Will users see the control (button, menu, switch, etc) for the action?
The stories are underlined (i.e. are clickable links) so users should be familiar with this. If not, they may have to move the mouse over to realise they are links.

3. Once users find the control, will they recognise that it produces the effect they want?
See point 2.

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
Clicking on a story takes the user to a page displaying the whole story.

Action 4: Select one of the response buttons

1. Will users be trying to produce whatever effect the action has?
The user may or may not wish to respond to a story.

2. Will users see the control (button, menu, switch, etc) for the action?
The response buttons are below the main story.

3. Once users find the control, will they recognise that it produces the effect they want?
They may not realise what the buttons are for, but if they move their mouse over them, a roll over text explains it.

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
Yes, a form appears prompting them to fill in the information

Action 5: Fill in the form

1. Will users be trying to produce whatever effect the action has?
The form prompts the user to fill in the form and explains what the type of response story is.

2. Will users see the control (button, menu, switch, etc) for the action?
The form is already present on the screen.

3. Once users find the control, will they recognise that it produces the effect they want?
It is a standard form with instructions so should be clear.

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
As they fill in the form there is a submit button at the bottom.

Action 6: Submit the story

1. Will users be trying to produce whatever effect the action has?
The users should be looking for some way to submit the form.

2. Will users see the control (button, menu, switch, etc) for the action?
The submit button is underneath the form

3. Once users find the control, will they recognise that it produces the effect they want?
Although there are no instructions informing the user to submit the button, it is a standard method so it should be clear.

4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence.
After submitting the story, the user is taken back to the initial story with the summary list of responses, their response is there is summary form so they know their response has been submitted.

Appendix 5.1 – Postgraduate handout

StoriesAbout... Assessment

Chris McKillop
PhD Research Student
prs.mckillop@rgu.ac.uk
Tel: 01224 263646

What is the research about?
My research is about students' experiences of learning. In particular, I am interested in your experiences of assessment, whether peer, self, tutor assessment, exams, essays, crits, the feedback you have been given, how you have used feedback and the assessment process, etc. I am investigating the effectiveness of a particular model of storytelling as a way of supporting discussions about these experiences and have developed an on-line storytelling tool to explore this. I am interested in how telling a story to your peers can be a reflective process and what can be learnt from reading and responding to other students' stories. Telling stories can be a useful way of revealing underlying tacit knowledge which is important in the context of art and design.

What would you like me to do?
I would like you to use this tool to tell each other stories about your experiences of assessment, whether they be good, bad or indifferent, and for you to respond to other students' stories within the framework of the storytelling model I am using. I would then like to follow up the study by asking you to fill in a short questionnaire and conduct short interviews with some of you.

I would also be interested in how you might visually represent those experiences and this will be explained more in the seminar.

How do I use' StoriesAbout…'?
You can access it at the following URL:-

http://jabber.comp.rgu.ac.uk/storiesabout/

This will take you to the front page. Click on the button on the top right called 'Assessment' and type in the username and password given to you.

Read other students' stories or tell a story of your own

This page shows the list of current stories, if empty then please tell a story! Click on a story to view it, or click on the person's name to view a list of all the stories they have written. Click on the 'Tell a new story' button to tell your story – remember to type in your full name. You can always select the 'FAQ' (Frequently Asked Questions) button for further information.

Responding to a story

When reading a story you can see the list of responses in the right hand pane. Clicking on one of these, shows the response in the pane below the initial story. At the end of the initial story are 4 buttons representing 4 different types of responses you can make. Roll the mouse over each button for a full description and click on the button to make a response. To tell a story or a response to a story, simply type into the text box and press the 'Submit' button – remember to type in your full name.

Finally…

If you have any problems using the tool or any queries about it or the study, then please contact me. If you have submitted a story and change your mind and would like it removed, please contact me as there are currently no editing facilities in the system.

Appendix 5.2 – Undergraduate handout

"StoriesAbout...
Assessment"

Chris McKillop
PhD Research Student
Gray's School of Art
prs.mckillop@rgu.ac.uk
Tel: 01224 263646

What is 'StoriesAbout...'?
'StoriesAbout...' is a prototype on-line learning environment which provides an opportunity for students to discuss their experiences of assessment in art and design. This is done by sharing stories about assessment and responding to other students' stories in order to lead to new insight and understanding. For example, stories could cover peer, self, or tutor assessment/feedback; or could be about formal or informal assessment; or perhaps about how you go about assessing, or reflecting on, your own learning on a day to day basis.

How can 'StoriesAbout...' help me with my studies?
'StoriesAbout...' supports reflection on your experiences of assessment and enables you to learn from other students' experiences. It gives you the opportunity to stop and think about your learning - how well you feel you have done, how this compares with assessment feedback, what you have done or might do with feedback from assignments or tutorials, what you can learn from how other students have dealt with assessment, and how you might improve your learning as a result.

How do I use' StoriesAbout…'?
You can access it at the following URL:-

http://jabber.comp.rgu.ac.uk/storiesabout/grays/

This will take you to the front page. Click on the button on the top right called 'Assessment' and log in using the following username and password:

Username: student
Password: grays

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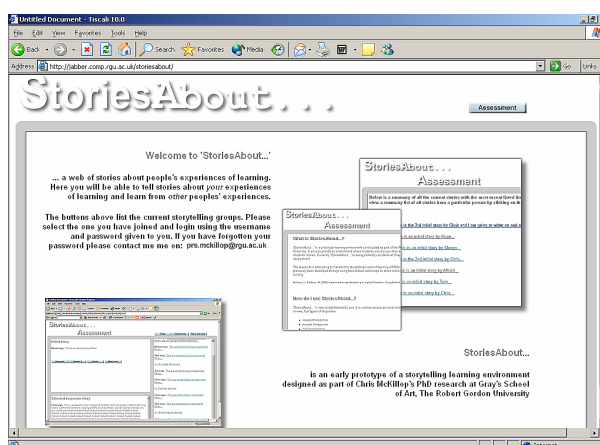
You can now read other students' stories or tell a story of your own
This page shows the list of current stories, if empty then please tell a story! Click on a story to view it, or click on the person's name to view a list of all the stories they have written. Click on the 'Tell a new story' button to tell your story – remember to type in your full name. You can always select the 'FAQ' (Frequently Asked Questions) button for further information.

Responding to a story
When reading a story you can see the list of responses in the right hand pane. Clicking on one of these, shows the response in the pane below the initial story. At the end of the initial story are 4 buttons representing 4 different types of responses you can make. Roll the mouse over each button for a full description and click on the button to make a response. To tell a story or a response to a story, simply type into the text box and press the 'Submit' button – remember to type in your full name.

Finally…
If you have any problems using the tool or any queries at all, then please contact me. If you have submitted a story and change your mind and would like it removed, please contact me as there are currently no editing facilities in the system.

Appendix 5.3 – Initial study questionnaire

'StoriesAbout... Assessment' Questionnaire

This questionnaire is about your views on telling stories about your experiences of the assessment process. It is in three parts: Part 1 is for everyone to fill in. Part 2 is for students who visited the 'StoriesAbout.... Assessment' web site. Part 3 is for students who did not visit the web site. Answer the questions as quickly as you can, it is best not to spend too much time thinking about each answer as your first impression is usually the most accurate. All the information gathered will be analysed anonymously by myself - no data gathered will be able to be attributed to any individual student. If you have any queries about this please contact me.

If you would like to visit the web site before completing this questionnaire, it can be accessed from:-

http://jabber.comp.rgu.ac.uk/storiesabout/

Click on the assessment button and log in using the following:-
Username: student
Password: assessment

Chris McKillop
PhD Research Student - Gray's School of Art
prs.mckillop@rgu.ac.uk
01224 263646

Part 1 - This section is for everyone to fill in

Background information

1. Name:

2. Age:

3. Are you...

Male?

Female?

4. Which course are/were you doing?

5. How confident do you feel using computers?

Very confident: Quite confident: Not very confident: Not confident at all:

☐   ☐   ☐   ☐

6. Did you tell a story on the 'StoriesAbout... Assessment' site?

I told a story: I thought about telling a story, but   No, I did not tell a

☐   didn't: ☐   story: ☐

On-line experience

7. How *did* you feel, or how *would* you feel, about telling your experiences of assessment on-line?

For each of the following statements, please tick the box which most closely matches how you feel.

	Strongly agree	Agree	Disagree	Strongly disagree
It would be OK if I knew the stories would be seen just by my fellow students	☐	☐	☐	☐
I am not bothered who would see my stories	☐	☐	☐	☐
I have no problem with telling my stories on-line	☐	☐	☐	☐
I am worried about what other people might think about my story	☐	☐	☐	☐

Areas of assessment you would like to tell a story about, or would like to read other students' experiences on

8. For each of the following areas, please tick the box which most closely matches...

a) the extent to which you would want to **tell** a story
and
b) the extent to which you would want to **read** a story

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	a) Telling a Story			b) Reading a Story		
	Don't have a story	**Probably have a story**	**Definitely have a story**	**Wouldn't want to read**	**Probably want to read**	**Definitely want to read**
Feedback	☐	☐	☐	☐	☐	☐
Exams	☐	☐	☐	☐	☐	☐
Essays	☐	☐	☐	☐	☐	☐
Crits	☐	☐	☐	☐	☐	☐
Individual tutorial	☐	☐	☐	☐	☐	☐
How you feel about your work being assessed	☐	☐	☐	☐	☐	☐
Students assessing/commenting on your work	☐	☐	☐	☐	☐	☐
Assessing your own work	☐	☐	☐	☐	☐	☐
Other people assessing/commenting on your work	☐	☐	☐	☐	☐	☐
Planning for an assessment	☐	☐	☐	☐	☐	☐
Things that helped you with an assessment	☐	☐	☐	☐	☐	☐
What you've learnt from assessments	☐	☐	☐	☐	☐	☐
How assessment has helped you	☐	☐	☐	☐	☐	☐
How assessment has hindered you	☐	☐	☐	☐	☐	☐

9. What other areas of assessment would you want to **tell** a story about?

10. What other areas of assessment would you want to **read** a story about?

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11. To what extent would you want the following features to be included?
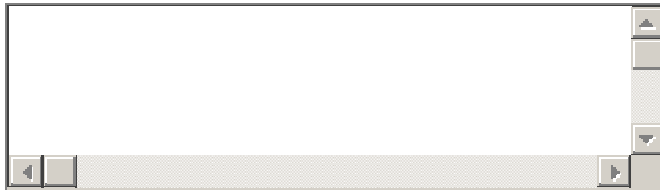
For each of the following statements, please tick the box which most closely matches what you think.

	Definitely	Possibly	Possibly not	Definitely not
See drawings etc that illustrate/are relevant to the story	◉	◉	◉	◉
Hear an audio version of the story	◉	◉	◉	◉
See a picture of the person whose story it is	◉	◉	◉	◉
Ask the person telling the story a specific question on the site	◉	◉	◉	◉
Be able to privately email the person who told the story	◉	◉	◉	◉
Be able to change the look and feel of the site	◉	◉	◉	◉

12. Please write down up to five words which you would use to describe your experiences of assessment?

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13. Please give an example of how you use assessment to help you learn?

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14. Please write down up to five words which you would use to describe your experiences of learning?

[text input box]

Now, please fill in Part 2 if you visited the site, or Part 3 if you did not visit the site (click here to go to Part 3)

Part 2 - This section is about your experiences of visiting the 'StoriesAbout... Assessment' site

If you did not visit the site, then please go to Part 3

Using the 'StoriesAbout... Assessment' site

1. Overall, how easy was the site to use?

Very easy: ☐   Quite easy: ☐   Difficult: ☐   Very difficult: ☐

2. Did you have any problems using it?

Yes: ☐   No: ☐

If *yes*, what were these problems?

[text input box]

3. Did you have any problems actually writing the story?

Yes: ☐   No: ☐

If *yes*, what were these problems?

Telling stories about your experiences of the assessment process

4. Whether you told a story or not, please read the following statements and tick the box which most closely matches how you feel.

	Strongly agree	Agree	Disagree	Strongly Disagree
I understood the reason I was being asked to tell a story	☐	☐	☐	☐
I was reluctant to tell a story as there were not many stories there	☐	☐	☐	☐
I wanted to share my story with others	☐	☐	☐	☐
I wanted some feedback on my story	☐	☐	☐	☐
I told a story because I was being asked to tell one	☐	☐	☐	☐
Being told about this site made me think about my own assessment experiences	☐	☐	☐	☐
I didn't want to tell a story as it was a personal experience	☐	☐	☐	☐
I didn't know if my experience was the type of story that was wanted	☐	☐	☐	☐
I had a recent experience of assessment which made me want to tell a story	☐	☐	☐	☐
I was reluctant to put my name to my story	☐	☐	☐	☐
I wanted to tell my story to 'get it off my chest'	☐	☐	☐	☐
I felt unsure about telling my story on-line	☐	☐	☐	☐
I would have preferred to tell my story face to face	☐	☐	☐	☐
I thought about telling a story, but never got round to it	☐	☐	☐	☐

	Strongly agree	Agree	Disagree	Strongly disagree
The stories there made me think about my own experiences	☐	☐	☐	☐
I wasn't sure what was meant by 'story'	☐	☐	☐	☐
I wasn't sure what was meant by 'assessment'	☐	☐	☐	☐

5. How did you feel about reading other students' stories?

For each of the following statements, please tick the box which most closely matches how you feel.

	Strongly agree	Agree	Disagree	Strongly disagree
I found it helpful to know about other students' stories	☐	☐	☐	☐
I wasn't really that interested in other students' stories	☐	☐	☐	☐
I wanted to see if other students' experiences were the same as mine	☐	☐	☐	☐
I was hoping to learn something specific from reading the stories	☐	☐	☐	☐
I was curious about what other students' experiences were	☐	☐	☐	☐

6. Please use the space below if you would like to add anything further about telling stories about your experiences of assessment?

7. Having filled in this questionnaire, please use the space below if you would like to tell a story about your experiences of the assessment process.

Now please go to the very end of this questionnaire to submit your responses. (Click here to go to the end.)

Part 3 - This section is for students who did not visit the 'StoriesAbout... Assessment' site

1. If you did not go the site, please read the following statements and tick the box which most closely matches how you feel.

	Strongly agree	Agree	Disagree	Strongly disagree
I thought about telling a story, but never got round to it	☐	☐	☐	☐
I didn't know if my experience was the type of story that was wanted	☐	☐	☐	☐
I would have preferred to tell my story face to face	☐	☐	☐	☐
Since it was not part of my course I didn't want to participate	☐	☐	☐	☐
Being told about this site made me think about my own assessment experiences	☐	☐	☐	☐
I didn't want to participate as it was research	☐	☐	☐	☐
I felt unsure about telling my story on-line	☐	☐	☐	☐
I didn't want to tell a story as it was a personal experience	☐	☐	☐	☐
I didn't know about the site	☐	☐	☐	☐
I wasn't sure what was meant by 'story'	☐	☐	☐	☐
I wasn't sure what was meant by 'assessment'	☐	☐	☐	☐

2. Please use the space below if you would like to add anything further about telling stories about your experiences of assessment?

3. Having filled in this questionnaire, please use the space below if you would like to tell a story about your experiences of the assessment process.

Submit responses

Now please submit your responses by clicking on the submit button below and wait for a page confirming your responses have been received.

All responses will be analysed anonymously and cannot be attributed to any individual student. If you have any queries about this questionnaire please contact me (contact details are at the top of this questionnaire).

Submit

Appendix 7.1 – Assessment experiences survey

StoriesAbout...
Assessment

Assessment Experiences Questionnaire

Chris McKillop
PhD Research Student
Gray's School of Art (Research)
Garthdee Road
Aberdeen
AB10 7QD

prs.mckillop@rgu.ac.uk

This questionnaire is about your personal experiences of the assessment process in art and design. It is in 2 parts: Part 1 asks about your own assessment experiences and then asks you to comment on a student's experience of assessment. Part 2 asks one question about how you would visually represent assessment. All responses are anonymous. If you are currently a staff member, please respond to the questions from your experiences when you were a student. The research is part of my PhD, please contact me if you have any questions.

Part 1

Your assessment experiences

1. a) Are you currently...

☐ an undergraduate?   ☐ a postgraduate?   ☐ a staff member?
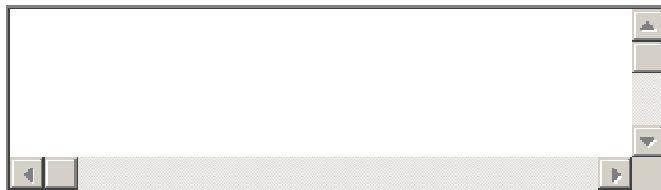
b) Are you in an art and design discipline?

☐ Yes ☐ No
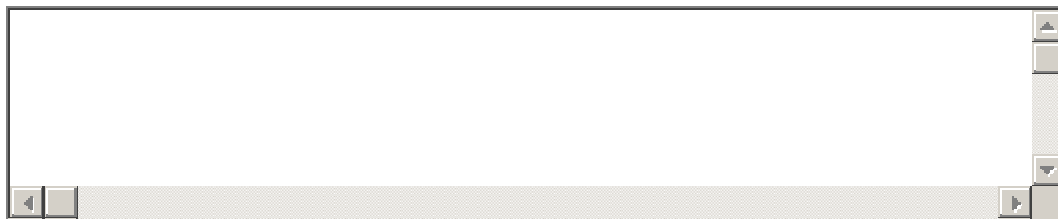
If no,

What discipline *are* you in (e.g. computing, engineering, HCI)

[   ]
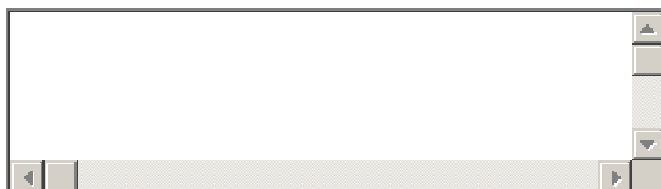
2. Write down up to five words which you would use to describe your experiences of assessment?

[   ]

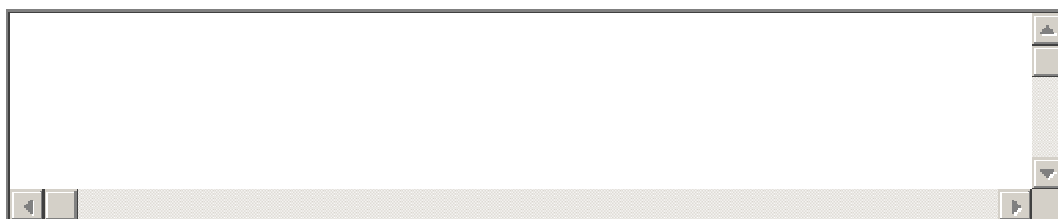3. Give an example of how you use assessment to help you learn?

[   ]

4. Write down up to five words which you would use to describe your experiences of learning?

[   ]

5. a) Tell a story about your experiences of assessment - image you are telling it to another student.

This could be about a good or bad experience, about feedback, an exam, peer assessment or perhaps just generally about how you feel about assessment.

[   ]

b) Would you be happy to give permission for this story to be uploaded to a site where everyone can share their experiences of assessment? (You can view this site at www.storiesabout.com if you are unsure)

☐ Yes ☐ No

If yes,

Please write your name (or initials, username, nickname etc if you wish to be anonymous) that you wish to be put next to your story.

[ ]

6. Please read the student's story below and then respond to it as requested. In your responses, imagine you are responding directly to the student. You may not have a response to all 4 questions, but please have a go - there is no right or wrong way to respond.

The Student's Story

"I produced a print through using a variety of digital media techniques which I felt addressed the brief given in a creative manner and which produced an art work that was also stunning too. I put a lot of effort into it and at the end, although I felt I addressed the brief and got a good mark (5 out of 6), I kept looking at it and thinking – is this really good, is it creative, is it only me that thinks it is good. I worried about handing it in for assessment in case it got slated. Even with the good mark, I am not sure – I only have the mark, no comments – was I just going through the motions of addressing the brief or was I being truly creative in the methods I was applied, I'm not sure."

a) Similar story

Please respond to this story replying to the student with a similar experience, perhaps the story reminds you of a similar experience that you or a friend has gone through.

[ ]

b) Viewpoint story

Please respond to this story by giving a reply to the student which looks at their story from a different viewpoint, e.g. tutor, peer, examiner.

```



```

c) Wonder if story

Please respond to this story by giving a reply to the student which considers different possibilities: imagine reading the story and then saying, 'I wonder if...'

```



```

d) What learnt story

Please respond to this story by telling the student what you have learnt from reading their experience. This could be anything which you thought of whilst reading the story.

```



```

Now, please press the Submit button to submit your responses to Part 1 and to take you to Part 2.

```
Submit
```

StoriesAbout... Assessment

Part 2

Visualising Assessment

For the final part of this questionnaire, I would like you to visually represent assessment. You can do this in any way you like, for example, from representing an actual experience of assessment to how you feel generally about assessment. Just think about assessment and draw what comes to mind - abstract, diagram, doodle, text, picture etc.

You can do this digitally or just draw something on a piece of paper, scan it and then upload it. Please use the upload facility below to upload your file. Your file will remain anonymous and will not be visible on the Internet. Or you can send it to me by post (or email) at the address below. Any questions then please contact me on the email address below.

Chris McKillop
PhD Research Student

prs.mckillop@rgu.ac.uk

a) Upload electronically

Click on 'browse', select the file for upload, then click 'submit'.

Submit

b) Send by post or email

If you wish to submit your visual representation by post or email, please use the following addresses. Please state whether you are currently an undergraduate, a postgraduate or staff member:-

Chris McKillop
PhD Research Student
Gray's School of Art (Research)
Garthdee Road
Aberdeen
AB10 7QD

prs.mckillop@rgu.ac.uk

This is the end of the questionnaire. Thank you for you submission.

Please click on the link below to be taken to more stories about students' assessment experiences:-

www.storiesabout.com

Appendix 7.2 – Words describing assessment and learning

Abstract
Accidental

Active
Ad hoc
Adrenalin
Advice
Affecting

Aha - moment
Ambiguous
Analysis of assessment criteria
Analytical/analyzing
Annoying
Anticipating/anticipation
Anxiety/anxious
Applicable/applying
Apprehensive
Arbitrary
Assuring
Autonomy
Awarding
Awe-inspiring
Bad
Barley concealed sarcasm
Bell-curve distribution
Beneficial
Boring
Broadening
Busy
Buzz/buzzing
Challenge/challenging
Changing
Clarify
Clear
Closing previous door that led wrong way
Collaborative
Competitive
Complicated
Concentrate
Confidence/confident
Confidence destroyer
Conflicting feedback
Conform
Confusing
Connections
Constructive
Content
Context
Continual/continuous
Creative
Criteria biased

Focus/focussed/focussing
Formative
Framework/foundation for further knowledge
Friendly
Frustrating/frustration
Fulfilling/fulfilment
Fun

Funny
Future
Good
Good outcomes
Grading
Great
Growth
Hands-on
Happiness/happy
Happy accidents
Hard
Hard attempt
Hard work
Headaches
Help
Helpful
Hope
Hungry
Impractical
Improvement
Inadequate
Informative
Infrequent
Innovative
Insightful
Inspiring

Intense
Intensive
Inter/cross disciplinary
Interactive
Interest/interesting
Intimidating
Introspective
Joyful/joyous
Judgment
Knowledge
Lack of Time
Lack of useful feedback
Learning
Learning many things
Lecture
Life
Life changing

Qualitative
Questions remain

Rapid
Read/ing
Reasonable
Reassuring
Redirect
Refining terms/processes through tests
Reflective
Reinforcement
Relaxed
Relief
Remote
Repeat/repetition/repetitive
Respect for tutor
Responsibility
Responsive
Reviewed
Revolutionary
Rewarding
Right moment
Right setting
Roleplay
Rote
Rules
Rushed
Satisfaction
Scared/scary
Self directed
Self interest
Self-consciousness
Self-development
Self-driven

Self-knowledge
Sharing
Short
Short-lived
Skills
Sleep
Slow
Snapshot
Social
Soft sector
Solitary
Some positive remarks
Sparse
Status
Steady
Stimulating
Strength/strengthening

Critical

Critical-thinking

Criticised

Critiquing

Crossovers

Cross-referenced

Curious/curiousity

Cycle

Daunting

Deadline/s

Degrading

Demanding

Demonstrate

Demoralising

Destabilising

Detailed

Determination

Developing

Different

Difficult

Difficult at times

Disagreement

Disappoint/disappointed/disappointing

Discovery

Discursive

Dogged

Dominated by one lecturer

Down to myself

Drive related

Dynamic

Eager to know

Easy

Educational

Effort

Emotional

Empowering

Enabling

Encouraging

Energising

Engagement/engaging

Enjoyable/enjoyment

Enlightening

Enthusiastic

Essential

Establishment

Excited/excitement/exciting

Exhausting

Exhilarating

Expected

Expensive

Lifelong

Light

Limited

Lose track of time

Lot of writing!!!

Manipulable

Marginal

Meeting expectations!

Memorising/memory

Messy

Metric

Mind-opening

Mistake/s

Misunderstanding

More

Mostly individual

Mostly written grades for papers

Motivating

Mutual

Mysterious

Naive

Necessary

Need help all the time

Negative

Nerve-wracking

Nervous/nervousness

Networking

Never-ending

Night

Non-linear

Non-motivational

Nourishing

Numbers

Ongoing

Opening a door

Opinion

Opportunities

Oral feedback on assessment from head of school

Oral presentation of work to examiner

Organised

Over complicated

Overwhelmed/overwhelming

Painful

Panel review

Panic

Patchy

Peer review

Personal and specific

Pleasure

Pointless

Stress/stressful

Stretching

Struggle

Subjective

Subjectivity causes some anxiety

Summative

Summative assessment

Supportive

Surprise/surprising

Taxing

Tense

Terrific

Terrifying

Testing

Thirst for knowledge, yet lack of time

Thorough

Thought provoking

Time-consuming

Tiring

Too seldom

Too subjective when it needs to be objective

Tough

Trembling

Trial & error

Uncertain

Unclear

Underprepared

Understand/understandable, understanding

Uneven

Unfair

Unhealthy

Uninformative

Uninspired

Unnatural

Unorganised

Unpredictable

Unprofessional

Unsatisfactory

Uplifting

Useful/useful information

Useless

Utilising

Valuable/value

Varied

Visual

Viva: oral presentation of masters thesis

When negative – extremely upsetting

Wide

Wondering

Work hard

Experiential	Policy	Worrying
Experimental	Positive/positive outcome	Worthwhile
Facilitate	Potentially vulnerable	Writing
Fair	Practical	
Fatalism	Practice	
Fattening	Pressure	
	Pressure to keep to a	
Fearful	standard	
Feedback	Process/es	
Feeding forward	Professional	
Feeling exposed	Purpose	

Appendix 7.3 – Words classified as positive or negative

Term	Valence
Anticipating/anticipation	positive
Applicable/applying	positive
Beneficial	positive
Boring	negative
Challenge/challenging	positive
Confidence/confident	positive
Continual/continuous	positive
Curious/curiousity	positive
Demoralising	negative
Determination	positive
Disappoint/disappointed/disappointing	negative
Empowering	positive
Enabling	positive
Enjoyable/enjoyment	positive
Enlightening	positive
Excited/excitement/exciting	positive
Exhilarating	positive
Focus/focussed/focussing	positive
Frustrating/frustration	negative
Fulfilling/fulfilment	positive
Fun	positive
Good	positive
Growth	positive
Happiness/happy	positive
Helpful	positive
Inspiring	positive
Interest/interesting	positive
Necessary	negative
Organised	positive
Painful	negative
Practice	positive
Process/es	positive
Positive/positive outcome	positive
Read/ing	positive
Reflective	positive
Relief	positive
Rewarding	positive
Sharing	positive
Strength/strengthening	positive
Stimulating	positive
Stress/stressful	negative
Subjective	positive

Surprise/surprising	positive
Testing	positive
Thorough	positive
Thought provoking	positive
Tough	positive
Underprepared	negative
Understand/understandable, understanding	positive
Useful/useful information	positive
Valuable/value	positive
Varied	positive

Appendix 7.4 – 'StoriesAbout... Assessment' evaluation survey

'StoriesAbout...' Evaluation Survey

Please complete this survey when you have looked at the 'StoriesAbout...' site - www.storiesabout.com

Please fill in whether you have told a story or just looked at the site.

Chris McKillop
prs.mckillop@rgu.ac.uk
01224 263646

1. Are you...

Undergraduate? Postgraduate?
☐   ☐   Staff? ☐

2. How did you feel about reading other students' stories?
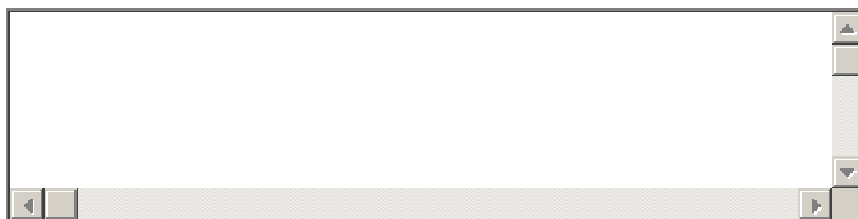
Please rate the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
I enjoyed reading the stories	☐	☐	☐	☐
I found it helpful to know about other students' stories	☐	☐	☐	☐
I wasn't really that interested in other students' stories	☐	☐	☐	☐
I wanted to see if other students' experiences were the same as mine	☐	☐	☐	☐
I was hoping to learn something from reading the stories	☐	☐	☐	☐
I found that my experiences were similar to others	☐	☐	☐	☐
I was curious about what other students' experiences were	☐	☐	☐	☐
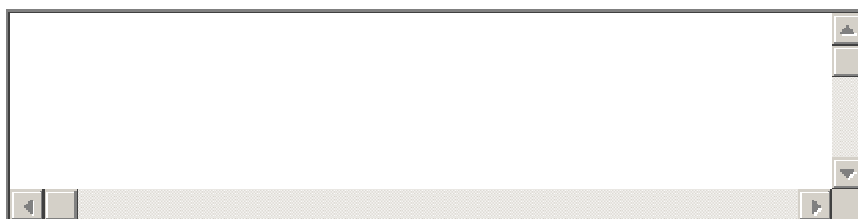
3. Did reading about other students' experiences of assessment make you think about your own experiences?

Yes, a lot ☐   Yes, a little ☐   No, not really ☐   No, not at all ☐
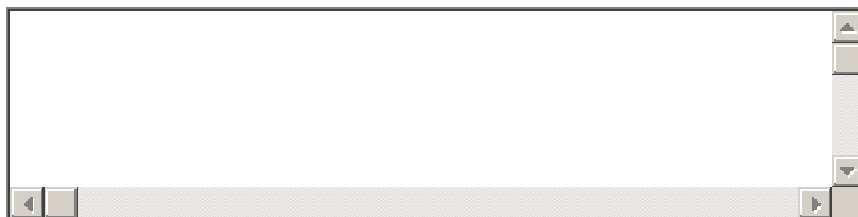
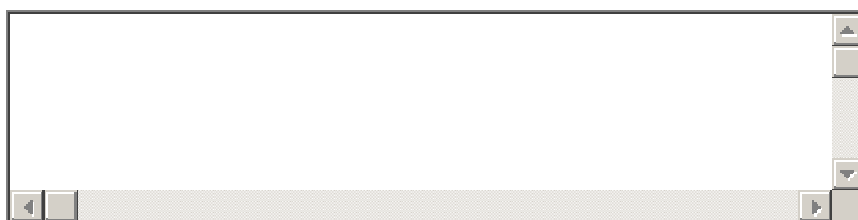What sort of things did you think about?

```
[text box]
```

4. What did you learn from reading other students' stories (for example, about your own experiences or how they were the same/differed from other students)?

```
[text box]
```
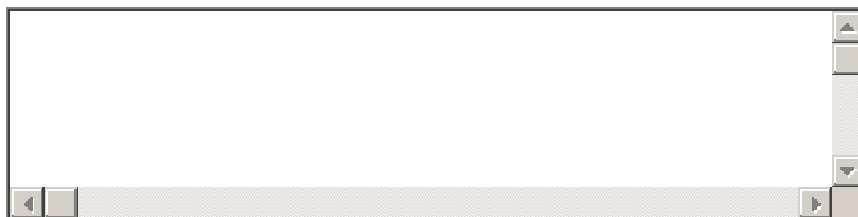
5. Is there anything you may do differently now, or want to do, having read these stories (for example, to do with your own learning experience, practice etc)? Please give an example.

```
[text box]
```

6. What would you change about the site to make it more useful/interesting for you?

```
[text box]
```
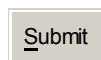
7. Please use the space below for any other comments you would like to make.

Submit responses

Now please submit your responses by clicking on the submit button below and wait for a page confirming your responses have been received.

All responses will be analysed anonymously and cannot be attributed to any individual student. If you have any queries about this questionnaire please contact me (contact details are at the top of this questionnaire).

Submit

Appendix 8.1 – Comment form

Please have a look at these drawings of students' experiences of assessment in art and design and put your comments in the space provided below.

Are you (please circle):

Undergraduate Student   Postgraduate Student   Staff

What do you think are the key issues raised by these drawings that could be used to improve the learning experience of students? (write down up to 3 issues)

1.

2.

3.

Please leave any other comments you may have following viewing these drawings in the space below.

Thank you! Now put your comments in the 'Comments Box'