Student Development in Higher Education:

A measure of the student perspective and its influence on the development of critical thinking.

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy.

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Abstract.

According to Dearing (1997), one of the main aims of Higher Education is to facilitate the development of critical thinking skills, however there has been little evidence to suggest that such development takes place (Keeley, Shemberg, Cowell & Zinnbauer (1995). This longitudinal study traced a cohort of Higher Education students over the period of their degree studies in order to explore what may impede, or facilitate this process. Taylor (1983) found that students had several different reasons for choosing to study, these which could broadly be distinguished between 'intrinsic' and 'extrinsic'. It was the main aim of this research to explore the impact that these reasons might have upon the developmental process. Also explored were the influences of students' conceptions of learning (Marton, Beatty & Dall'Alba, 1993) and finally, the more general perceptions of Higher Education that were held by this cohort.

In this study, an initial measure to assess conceptions of learning was found to be unable to distinguish between the qualitatively different conceptions. Following, in depth interviews were carried out with 12 Level 1 students in order to elicit what the students themselves understood learning to be. Also derived were reasons for choosing to study, and students' perceptions and expectations of the study period. A 76-item questionnaire was constructed from these data.

Using this instrument, a longitudinal analysis of 250 students sought to examine the extent to which both 'perceptions' and specific reasons for choosing to study influenced the development of critical thinking, (as measured by the Reasoning about Current Issues Test; King & Kitchener, 1994). Also explored were students' academic grades. Finding showed that extrinsically motivated students tended to attain higher

scores than intrinsically motivated students, although the differences were not significant. More importantly, it was found that both groups of students' scores declined over time, although again, not significantly. The grades of extrinsically motivated students were found to be consistent over time, whereas intrinsically motivated students' grades decreased by one degree category. A correlational analysis found no relationships between scores on the critical thinking measure and students grades. Whilst no evidence was found to suggest that students' reasons for choosing to study have a significant influence on the development of critical thinking, consideration is given to the finding that intrinsically motivated students (as categorised here) are appearing to do less well. More generally, this research also finds some support for the view that critical thinking does not develop in the ways that both academics and government policy intend it to. In light of these particular findings, some of the possible reasons for this are discussed.

Chapter 1.

Critical thinking in Higher Education students.

1.1 Introduction.

One of the main aims of Higher Education in the U.K. is to encourage and facilitate the development of critical thinking skills (Barnett, 1996; Brockbank & McGill, 1998; Harvey & Knight 1996; Ramsden 1992; Walker & Finney 1999; Jones, 2005). This has long been the case, but since the early 1980's the emphasis on this has become more prominent, and there is a growing pressure on Higher Education institutions to demonstrate that students are achieving these skills (see for example the Dearing Report, 1997). However, Keeley, Shemberg, Cowell & Zinnbauer (1995) have suggested that the evidence for this has been sparse. Research in this area has produced a range of findings, and in general, the picture is unclear (Jones, 2005). For example, it appears that the wider discourse, and terminologies within discourses are often confusing. For example, critical thinking is embedded in the 'key skills' outlines, and also transferable skills, generic skills and employability skills. In the main, these are largely indistinguishable from each other. Indeed in many cases, component terms are often used interchangeably, and also multiple terms may appear within a single agenda (Hofer & Pintrich, 1997, Whitston, 1998).

The Dearing Report (1997) also emphasises 'lifelong learning' which also includes critical thnking. Academics have discussed Reflexive Learning (Brockbank & McGill, 1998), also 'Capability' (Yorke, 2001). There are a range of expositions and descriptions of skills that it is said students need to attain under this broader rhetoric, yet the common thread which runs through them all is that students should become

employable graduates through successfully developing skills of critical thinking. This is summarised in a statement in the Dearing Report (1997):

> "The single most important capacity employers seek...is intellectual capabilities of a high order" (Dearing 1997).

1.2. Review.

This review will look at the development of critical thinking skills in Higher Education students. Given the range of expositions, it could be that it is not strictly the case that students are not developing these skills. Rather it may be that differences in definitions lead to differences in the compiling of measures and activities deemed to constitute them. This review will explore some of the more prominent schools of thought in the area of students' intellectual development. A second possibility is that students are perhaps *not* developing these skills, but this is only because they do not perceive they need to. It is important to consider the comment by Dearing (above) which suggests that it is not the development of critical thinking per se which is important, but that this skill is needed by employers – beyond, rather than within the educational setting. This suggests that there may be conflicts of interest in the goals of Higher Education, in government policy, and within the student body (Haggis, 2003, Makinen, Olkinuora, & Lonka, 2004). This is a real possibility given the findings that current cohorts of students are now entering Higher Education with the intention of finding employment (Tynjala, Valimaa & Saarja, 2003). Thirdly, whilst it seems that the Higher Education sector claim that this is one of their central aims, there may even be inconsistencies at this level. Research by Lea & Street (2000), also by Knight & Trowler (2000) have found that differences may exist in terms of what counts as critical thinking across academic subjects; also this can vary between individual tutors within a single department.

Another issue to consider is the fact that universities are no longer institutions which are separate from the wider society (Barnett, 1996), and that 'knowledge' is no longer a domain exclusive to those working within them. Some have argued that 'knowledge' itself is changing, and that we are currently living in an information society where this is created, shared and easily accessible by all (Tynjala et al, 2003, Bleiklie & Powell, 2005) and the student is now perceived as a 'consumer' rather than an apprentice learner. Therefore, it is a relevant question to ask if students are developing in the ways academics wish them to, as opposed to simply taking what they feel they need to from one context, to apply in another.

In this review of the literature, 'critical thinking' will firstly be explored in terms of how it has been, and is now currently understood. Next, an outline of where this can be located in the literature on student development will be provided. Also, attention will be given to some of the reasons why students may or may not go on to develop these skills over the duration of their Higher Education courses. For example, there may be other personal reasons or goals which students have which serve to direct their attention towards other facets of their courses. In their book, 'Situated Learning - Legitimate Peripheral Participation', Lave & Wenger (1991) have argued that individuals will learn what is relevant within any given social context; however there is an implicit assumption here that all individuals *wish* to be part of that context. If students view Higher Education as simply a means to an end, then it may be difficult to predict what they *do* learn from it.

However, it could also be possible that developing the ability to think critically is influenced by more stable cognitive processes. This will also be considered. Finally, if

there are links with more stable cognitive abilities, then it could also be the case that gains in critical thinking are related to gains in academic grades. This review will explore these potential relationships.

1.3. What Is Critical Thinking?

Given the current climate of urgency to have students become critical thinkers, there is still wide debate as to what this actually is, and what it entails (see for example Facione, 1990; Cheung, Kwan, Rudowicz &,Yue ,2002; Jones, 2005). Whilst this is viewed to be pivotal to students' intellectual development, and that this has been the case for many years, there is a growing concern that the entire concept needs to be explored and clarified in more precise terms. In 1981, Mc.Peck stated that the phrase 'critical thinking' was both overworked and under-analysed. Fourteen years later, Halonen (1995) again pointed out the 'mystified 'state of critical thinking. Whilst it is highly valued by educational institutions themselves (Browne & Litwin, 1987), there is still no clear consensus as to what it actually is. The wider transferable skills discourse which informs much of the current curriculum includes critical thinking and portrays it as a skill (Whitston, 1998), yet many who use this discourse do not know what behaviours or actions to look for (Strebler, Heron & Thompson, 1997), whether it is indeed what employers want (Hesketh 2002), or in some jobs, whether it is a skill that is required at all (Grugulis, 2000). In any case, a skills-based, vocationally orientated approach potentially mediates the aims of Higher Education which seeks to develop the individual rather than their practical capacities (Haggis, 2003).

Academics have criticised the simple 'skills-based' approach. Ennis & Norris (1990) contended that it is essential to extend this view of critical thinking as a 'cognitive skill' only. This was attempted in the United States in 1990, when a group of

academics and theoreticians put together the Delphi Report (Facione, 1990) which was said to provide a comprehensive definition of critical thinking. It was stated to be a cognitive process, a purposeful self-regulatory judgement that has two components: (1) cognitive skills, including interpretation, analysis, inference, evaluation, explanation and self- regulation, and (2) a motivational component; a disposition towards critical thinking. Facione, Facione & Giancarlo (1997) suggested that 'cognitive skills' could be broken down more precisely, and they added 'inductive' and 'deductive' skills.

Previously, Keeley & Browne (1986) had taken a similar broad perspective. They also claimed that the skills-based focus was ignoring several important components. Whilst they acknowledged motivational dispositions, they also argued that ideological beliefs and behavioural habits were necessary to consider, as these were influential in the educational setting, and also more stable. This could be seen as moving towards a personality-based approach, however there is some evidence to suggest otherwise. Soldz & Vaillant (1999) found that 'inquisitiveness' and truth-seeking', (both aspects of 'disposition' and central to critical thinking), are absent in major personality traits such as 'openness to experience', and 'concientiousness'. More recently, a study in the U.S. by Cheung, Rudowicz , Kwan & Yue (2002) found support for a 4-component view. In a study of 577 college students, results of a factor analysis confirmed four dimensions of critical thinking (cognitive, motivational, ideological and behavioural). It was also found that whilst students varied in the extent to which they scored highly in any given domain, the inventory was also capable of assessing a 'general' overall measure of critical thinking, as well as identifying specifics across individuals.

Barnett (1996) also has eschewed the 'skills-only' approach. Pointing out that the individual needs to become a 'critical being' rather than just a 'critical thinker', he has argued for a three-tiered model. At the first level is 'critical thinking' which refers to a set of cognitive skills. At the second level is 'critical thought' which describes the further skills required to understand and engage with debate in a particular field of study. At the third level is meta-criticism, which is said to be required to think critically outside of the immediate domain, and account for wider more fundamental issues, to the extent of challenging structural paradigms and political ideologies. He argues:

> "...critical thinking becomes just one aim among many. It has to fight its place among problem-solving, experiential learning, communications skills, groupwork, computer-aided learning, independent study, peer-tutoring, enterprise related tasks, and so on." (Barnett, 1996, p.117).

This view seems almost at odds with the wider agenda which seems to infer that critical thinking, to a greater or lesser extent, is embedded in all of these skills. But there are debates even at this level. For example, Barnett includes problem solving as part of the agenda, whereas Te Wiata (1996) has argued that problem-solving skills should not be considered to be the same thing as they do not require the individuals' personal values as a basis for judgement. Laurillard (1993) also contended that often, problem solving does not require thinking in depth, but rather applying a set of steps to find a solution. This has also been highlighted by King & Kitchener (1994). Given that Barnett himself argues that true critical thinking results from the individuals acceptance of the contingent nature of knowledge – and that there is no single, 'easy-to-find' solution (see also King & Kitchener 1994; Perry, 1970; Brockbank & McGill, 1998), these are valid criticisms. However this does not suggest that critical thinking and reflective judgement are not similar, rather that problem solving itself does not form the sole basis for critical thought.

This lack of consensus could have implications for teaching. Jones (2004) for example, interviewed 2 academic staff who had designed an undergraduate course. Using Barnetts' 3-tiered model as a framework, she compared their conceptions of critical thinking with those of 6 tutors who actually delivered the course. The former viewed critical thinking as a 'set of concrete cognitive skills', whilst the tutors' conception was much broader. Jones (2004) noted that the academics' conceptions did not go beyond Barnetts' level 1 (critical thinking). Both academics and tutors discussed this as evaluation and the balancing of viewpoints at this level, yet the tutors extended their conceptions to the higher levels. They commented on 'debate', and 'alternative theoretical positions' (p. 175), and also 'criticisms of others paradigms' (p. 176), which correspond with level 2 (critical thought). Also commented upon was the lack of opportunity to develop and transfer students' thinking skills beyond their courses, which is representative of level 3 (meta-critique).

This suggests that there may be different conceptions of critical thinking even within academic departments. Given that a course, or module can become a vehicle for the conception, this could mean that students' wider development of these skills is potentially at risk. In any case it seems there is the potential for some inconsistency.

Brown (1997) put forward a related point in a critique of transferable skills. He contended that such skills, especially the more cognitively based such as 'problem solving', and 'ability to make good judgements', may well have different meanings within any educational context in which they are taught. In a study of the language and discourse used in academic texts, Genovese (2003) also highlights the fact that disciplines are unique, and have their own unique discourses and vocabularies. These

concerns are highlighted in a study by Lea & Street (2000) who interviewed 47 students and 26 teaching staff from two British Universities. Findings showed that even when given strict guidelines and criteria for writing, students often had great difficulty writing well in different subject disciplines. It was found that across disciplines, staff often interpreted the criteria differently, for example 'Argument' and 'Structure', both of which require critical thinking. Students soon learned not how to write well, nor how to think critically, but to play the guessing game of what they thought staff wanted of them. Findings also showed students complaining that the same variability frequently occurred even within a single department.

This leads to a related problem. There has been some contention surrounding the assessment of key skills, and especially critical thinking. Yorke (2003) argued that criteria for measuring these skills are often lacking in clarity and detail, and interpretation is often difficult. Cann (1997) argued that it is virtually impossible to measure subjective skills of this type, such as judgement, and reasoning. This is further compounded when it is considered that students are often assessed via their written work, and their understanding and use of language may vary. When the Congress of the United States decreed critical thinking as a compulsory 'outcome' for Higher Education students, there were debates as to whether it could ever be defined clearly enough to assess it at all (Facione, Facione & Giancarlo, (1997).

In the main, evidence suggests that skills which require personal judgement are those which are the most nebulous and unspecified. This has been demonstrated by Strebler, Robinson & Heron (1997). They carried out research to evaluate the practices of employers who were currently using 'competency' frameworks to assess their employees. They carried out in depth interviews with 184 users of the frameworks in

8 British companies, and one main finding was that employers themselves were not always clear about what the skills or competencies were for. It was also found that there was much confusion in assessing tasks where an individuals' thinking and reasoning skills were required. A later study by Strebler, Thompson and Heron (1998) also found differing gender implications. In a further exploration of the effectiveness of key skills, it was found that men were far more often perceived as displaying the characteristics of 'good managers' than women. Women were found to be far better at assessing themselves – even though it was also found that they tended to undervalue their skills. In the event that managers are required to possess a higher level of critical thinking skills, this finding has political implications in terms of gender. Yet in a longitudinal study of college students, Astin & Antonio (2000) found that it was in fact women, who after 4 years of college showed a significantly higher level of critical thinking than men. Similar results were found by Giancarlo & Facione (2001).

It is perhaps important to note here that evidence in this review is being presented from both within and outside of the educational setting which may seem at odds. However, from an academic point of view, Barnett has argued that critical thinking should be able to transcend contexts; similarly, the vocational discourse states that critical thinking is indeed a 'transferable' skill. In light of these contentions, it is therefore deemed acceptable to use research evidence from both contexts.

In terms of 'transferability', and some of the wider debates around key skills, there have been questions raised as to whether critical thinking skills can be transferred across contexts. Research has shown that even when individuals are capable of thinking critically, this may not be the case when the situation changes. Knight and Trowler (2000) carried out a study to show that external constraints and pressures on

University teaching did not necessarily lead to poorer student learning. Whilst the authors were not exploring 'critical thinking' itself, findings from interviews with new staff (who it was argued would not be as acutely aware of the constraints as existing staff) showed that they were experiencing a good deal of difficulty with their transition. For example:

> 'I do need to get down to the writing, but it's not easy, and I'm not finding....its not flowing when I sit down with paper. I've got a desk filled with heaps and heaps of paper, and I still don't know how to file them, other than in the bin'. (p 84: male, Education dept).

According to the transferable skills view, this sense of confusion shown in the above quotation should not arise. It is especially interesting given that all 24 lecturers interviewed had been employed as lecturers previously. They were not graduating students with no experience of the workplace. Lecturers who are supposedly already equipped with the ability to think critically (and who are employed to 'teach' it), should in theory, be those who experience the least problems.

It seems then that there are a series of interlinked issues. Firstly, if critical thinking has no clear and universal definition, then multiple definitions may simply lead to multiple methods of assessment. Given also that subjective judgement is required, then this obscures the matter further. Next, it seems that thinking critically may be something that is successfully deployed within one situation, but not necessarily so in another. In terms of Barnett's model, the successful critical thinker should be able to take a global perspective which transcends the context. Whether this is truly possible, given that the specific interests and concerns of any particular individual will naturally vary, is unknown. To return to the first point made here, it is likely that this can perhaps never be known if there is no clear basis for assessing it. However this is

a wider issue, and beyond the scope of this research. The more specific interest is to look for evidence which may indicate that Higher Education can lead to gains in critical thinking. The following sections explore some of the research which has explored this.

1.4. Theories of Student Development.

Richardson (1987), has suggested that are probably three schools of thought which have accounted for much of the literature on student development over the past 30 years. These are firstly, from the work of Pask (1976) who found two distinctly different types of learners, these were 'serialists', and 'holists'. 'Serialist' learners focussed on details and took step-by-step approaches when working through subject materials, whilst 'holists' tended to try to gain an overall idea and then look at the component details. Second is the seminal work by William Perry (1970), who outlined a more comprehensive series of cognitive changes which are said to occur over the course of study. Finally, the theoretical framework of Marton & Saljo (1976) whose equally seminal work distinguished between 'deep' and 'surface' approaches to learning. This review will look at Perry's (1970) developmental scheme, and also the 'deep & surface' paradigm of Marton & Saljo (1976b). The work of Pask will not be addressed directly as there is considerable overlap in terms of making a broad distinction (i.e. deep & surface v serialist & holist), and many of the details are indeed apparent in the later Marton & Saljo framework. What will be mentioned however, are the schemes which immediately followed Perry's work, and also the more recent studies by King & Kitchener (1994) who have looked at student development in terms of their epistemological beliefs, and how these reflect cognitive changes. These models are similar to Perry's, in that they provide a set of stages

which students are said to move through in order to become capable of critical thought. The deep & surface paradigm, whilst not providing a strict 'course' of development, does however provide a dichotomy of qualitatively different ways of thinking. In all three models, it is the higher stages or levels, which are said to be representative of the individual who thinks in a critical way. King & Kitchener (1994) describe this as 'reflexive' thinking, whilst proponents of the deep & surface framework often describe it as 'transformative'. This will be highlighted as the individual models are discussed.

1.5. Perry's Model of Intellectual Development.

Much of the research which has looked at the development of critical thinking has stemmed from the pioneering work of William Perry (1970). Taking a phenomenographic approach, he studied a cohort of college students over the 4-year period of their degrees. He traced 109 students in order to examine how their patterns of thinking and reasoning changed, and some of the triggers that brought the changes about. He carried out extensive interviews with the students, and in an analysis of their views and responses to their educational context, he developed a 9-stage scheme based on their comments. In this particular exposition, the term 'intellectual and ethical' development is used to describe cognitive and emotional change. Students are said to reach a stage in development whereby they are 'ready to catch on to the skills of critical thought' (p.106). The focus on 'ethics' refers to reasoned judgement in what was viewed at the time to be a pluralistic society that required a new social mind. The notion of 'critical' refers more indirectly to a students growing appreciation of multiple viewpoints and perspectives within that society, and the emotional strength required to tackle and resolve them. The more general 'critical' tends to appear in most expositions, and means much the same thing. What tends to

differ however, in such schemes is what the 'judgement' is being applied to. In Perry's case, it appears that the 'successful' critical thinker is one who is capable of reasoning through, and finding personal solutions to social and moral issues. This particular emphasis on 'character-building' forms a core part of many higher education development schemes in the United States (see for example Astin & Antonio, 2000; Sax, 2006).

In terms of the scheme itself, the nine positions were said to be relatively distinct, however the scheme could more generally be understood in terms of three qualitatively different 'positions' of reasoning. Perry distinguished between the three positions in each of the three sections, as he viewed development as a continually moving process. Transition from one of the three main positions to the next was not simple and immediate; change was gradual. The stages within each position were said to show how the individual came to realise that their mode of reasoning was insufficient, and the need to change their way of interpreting the world around them, that is, the 'forms' of thinking changed.

The first position was 'Dualism' (Stages 1-3). This was the most naïve method of reasoning, and was said to describe the individual whose views of knowledge was that it was 'absolute', and that it was something that was either right or wrong. Those in authority were seen to be legitimate owners of the truth, and they possessed the 'answers'. Absolute certainty was attainable. This finding was derived from students' comments such as:

(Position 1, Basic duality).

> "A certain amount of theory is good, but it should not be dominant in a course. I mean, theory might be convenient for them, but it's nonetheless – the facts

are what's there. And I think that *should* be, that should be the main thing". (p.75).

(Position 2, Multiplicity pre-legitimate).

> "...I suppose it's more immature, but I like it better when they give you something concrete, exactly what happened – not go off on a tangent on some phase that appears on the surface not to have anything to do with the subject. I don't particularly care for that...that's the way they give them, so they must be right and I'm wrong". (p.84).

(Position 3, Multiplicity subordinate).

> "If I present it in the right manner, it is well-received. Or is it received?...I don't know, I still haven't caught on to what they want". (p. 100).

The second position was 'Multiplicity' (stages 4-6). This was representative of the individual who viewed knowledge as something relatively less certain. Individuals in these stages believed that although certainty may not yet be established, this was only a temporary matter. In time, authority would find the right way to establish it. Until then it was acceptable to allow all individuals to draw their own conclusions. For example:

Position 4. (Multiplicity correlate, or relativism subordinate).

> "I mean if you read them [the critics], that's the great thing about Moby Dick. [Laughs]. *Nobody* understands it! (p. 108).

Position 5. (Relativism correlate, competing, or diffuse)

> "I could take one side of an argument one day, and then three days later, I might take the other side with as much conviction or a lack of conviction" (p. 134).

Position 6. (Commitment foreseen).

> "There was one other thing I expected- I expected that when I got to Harvard...I was slightly ahead of my time in that I was atheist before I got here – I came up here expecting that Harvard would teach me one universal truth...[pause]. Took me quite a while to figure out...that if I was going for a universal truth or something to believe in, it had to come from within me, and I don't know whether Harvard taught me that or not". (p. 153).

The third position was 'Commitment' (stages 7, 8 & 9) and this described the most sophisticated level of reasoning. Individuals at these stages recognised that certainty could not be established, and that knowledge was something that was relative to the individual and the information that was available at the time. That is, knowledge in and of itself was under continual development. More importantly, the individual developed a realisation that they must reach their own decisions, and be ready to 'commit' to these based on their own personal judgement.

Perry does not completely distinguish between these final three forms, pointing out that from his findings, there are no clear demarcations, and therefore this is more of a personal rather than cognitive change. He comments; "The development is more qualitative than structural". (p. 170). However, he broadly indicates that the individual at Position 8 (orientation in implications of commitment) reaches a personal decision, but does not yet know if they can deal with it in the longer term. At Position 9 (developing commitments) the individual accepts that their decision may well change in the face of further personal growth; "...an alternation of reflection and action".

Perry found that the majority of the students interviewed followed this pattern of development. However, there were others who appeared to resist what Perry viewed as the challenges of development. Three 'alternatives to growth' were found to exist, which were 'temporising', 'retreat' and 'escape'. 'Temporising' students were those whose reasoning was typical of position 3, and who had come to recognise the challenges of multiplistic reasoning but preferred the stability of their dualistic position. Movement from this position could be either 'retreat', out of either anger or fear at the challenge of 'otherness', and this period could last indefinitely. However in

most cases of 'temporising', this was found only to be a delay in development. In fewer instances, there was 'Escape', a position in which students completely disassociated themselves from the (negatively) perceived conflict and the ambiguities that accompanied higher levels of reasoning.

If Perry's model is accurate, then there could indeed be reasons which explain why at least some students do not go on to become critical thinkers. They may not wish to question their own beliefs. In this research it was found that there was an emotional rather than intellectual challenge when students were put in a position which led to them to change strategies that had been successful in the past. A more recent study by Atherton (1999) found some support for this view. He interviewed 124 students in order to explore reasons for what he termed to be 'resistance to learning'. It was found that a distinction could be made between 'additive' and 'supplantive' learning; that is students were less resistant to learn when the information they received built upon what they already knew (additive). Resistance was more likely to occur when the information was supplantive – that is some kind of 'loss' was experienced when students found that they had to change previously held beliefs and successful learning strategies in order to develop further.

Much research has followed in the light of Perry's work, some of which has been claimed to provide support for the structure (e.g. Knefelkamp & Slepitza 1978, Knefelkamp, Widdick & Parker, 1978). However, critics pointed out that this model was limited because of the narrowness of the sample used. Perry interviewed traditional-aged, white, middle class males. Yet the research began in the late 1950's, in the U.S.A., at a period when this may well have been reflective of the student population and culture. The more important question to ask is if the model can still

describe a picture of development in 21st century students. Yet some of the criticisms that followed are useful to account for in view of the current levels of diversity in today's students.

A wave of feminist critique appeared in the 1970's & 80's, which challenged Perry's model for its exclusion of women. Gilligan (1982) for example, compared these findings to those of Kohlberg (1958, 1981) whose own 6-stage model of moral development followed a similar pattern to that of Perry's. Whilst Kohlberg was seen to claim universality for his own model, Gilligan noted that women never developed beyond the 3rd stage which focuses on moral reasoning about helping and pleasing others. Yet women were not included in the original sample from which the model was derived. In her own interviews with women she asked how they had resolved moral dilemmas in their lives. It was found that that they did follow a similar pattern of growth. They moved from an acceptance of authority, to a recognition of relativism and finally towards a commitment to one's own personal position. The main difference however was that women simply had different learning experiences and priorities, hence the title of her book, 'In A Different Voice'. The males in both Perry's and Kohlberg's research were concerned with the reasoning and resolve of externally based social issues such as protecting the rights of others, whilst women's moral imperative was to care for others. This distinction was said to be reflective of the male world of science and objectivity, and the more subjective, relationship-orientated life-world of women (Chodorow, 1974, Gilligan, 1982). Characteristic of women's highest level of moral reasoning was when they committed to becoming a person in their own right, at the expense of neglecting others. At this position, there is a realisation that someone may suffer to a greater or lesser degree, but responsibility is accepted for this (Perry, positions 7-9: commitment). The notion of 'critical' is

apparent here as women come to appreciate multiple and competing roles for themselves which is at odds with their primary goals of helping and caring for others (Perry, positions 4-6: multiplicity). They must find a way of reasoning through and justifying their choices to themselves. However, similar to Perry's findings, some were found not reach this stage, and remained in a position of accepting authority and subservience to others (Perry, positions 1-3: dualism). Although similar to Perry, this research was carried out in the 1970's when cultural constraints required that women were relatively more subservient in their roles as wives and mothers for example. Whilst enlightening, this still cannot rule out the possibility that many women did reach higher levels of reasoning, yet this could not be acted upon in their speech or behaviour.

Following this critique, Belenky, Clinchy, Goldberg & Tarule, (1986) carried out research along similar lines. They interviewed 135 women, 90 of whom were college students, and 45 who worked in information agencies for women. 25 of the students were interviewed several times over a 5-year period. They were asked to talk about what they felt was important in life and about learning, and they were also presented with hypothetical dilemmas in order to see how these were reasoned through and resolved. Again it was found that women moved through similar stages and were capable of higher level, critical reasoning. They simply articulated it in different ways, based around themes of relationships to others. In their interviews, Belenky et al presented women with a series of both real and hypothetical dilemmas and looked at the ways women reasoned through, and resolved them. They point out that Perry's scheme can accommodate the path of women's development, however it does not

include sufficient and appropriate stimuli and perspectives with which to draw out themes relevant and expressive of women's experiences.

Belenky et al (1986) extended Gilligan's work and produced a taxonomy of five different types of 'knowing'. Outlined here, it is shown how this relates to Perry's scheme. Interestingly, they also found that women used a metaphor of 'voice', as opposed to a male metaphor of 'vision'. For example, women described their experiences as 'speaking out', 'being silenced', and feeling 'deaf and dumb'; terms which were compared to masculine expressions of knowledge as 'illumination', knowing as 'seeing', and truth as 'light', (p. 18) as were used by scientists and philosophers of the time.

The five types of 'knowing' from which women perceived their world were as follows. Firstly 'silence', which described women who blindly followed authority and had a poorly developed sense of self. Second was 'received knowing', which described women who were still dependent on authority for truth, but were capable of collecting and absorbing (though not creating) knowledge. These can be likened to Perry's 'dualist' positions, especially positions 1 & 2. Thirdly, 'subjective knowing' had two stages. The 'inner voice' saw women moving away from the perception of knowledge as being externally constructed, and listening to their own inner voice, their intuition, and becoming their own authorities (p.54). However there was still a dependence on authorities to provide the 'truth', yet this could now be negated by ones own views. Next, 'the quest for self' saw women whose emerging self reacted to external authority, and often attempted to isolate themselves from others who they perceived as defining their lives (e.g. external authorities, and their own personal relationships). Whilst these women often experienced new 'strength, optimism, and

self-value' (p83), they often felt confused at the multiple opposing viewpoints. Typical of this stage was that women still held on to the notion of temporary uncertainty. This can be related to Perry's positions of multiplicity. Fourthly was Procedural Knowledge, again a two-stage position. 'The voice of reason' saw women realising that some viewpoints held more truth than others and that intuition may be wrong. The inner voice now becomes 'critical' (p 94), and viewpoints must be compared. The authors noted that at this stage, women sometimes retreat into silence (p.94), however this is not the passive silence of earlier stages, it is more a case of 'thought before speech'. Next, came 'separated & connected knowing'. Separated knowing, write the authors, "are at the heart of critical thinking" (p.104). These women recognised doubt, and the infallibility of authority, but they still clung to the notion of objectivity as the means to finding truth. Many women experienced doubt negatively, perceiving this as a challenge between persons rather than positions and presented by others, and the perspective of the individual who was presenting them. The final type was 'constructed knowing'. These women had come to accept the responsibility for evaluating and continually re-evaluating their assumptions about knowledge (p. 139). Typical also of this mode of thinking was that the women also evaluated the positions of those in authority. Knowledge was seen as contextual and solutions context-dependent. This contextualism and acceptance of responsibility is highly similar to Perry's 'positions of Commitment', and can also be related to Gilligan's descriptions of higher levels of reasoning.

These models can be viewed as similar. They all see critical thinking as something which arises through a realisation that knowledge is not absolute, and the individual must make a personal decision based on the best available evidence. Both have used

participants from academia, and also women in the workplace, but do they adequately describe how students come to develop critical thinking in today's Higher Education students? Both models were derived from populations from at least two decades ago, so it could be that in view of continuing changes in cultural trends, that they may not be so readily applicable.

Knefelkamp & Slepitza (1978) also Knefelkamp, Widick & Parker (1978) developed the Measure of Intellectual Development (M.I.D) from Perry's findings. This required students to respond to a series of essays which asked how they perceived their learning environments, how they viewed their progress, and how they might respond in the face of difficult decisions. Findings showed that most students tended to fall either at the beginning of a particular stage, or at the end. That is, students always seemed to be in a period of transition, from one stage of thinking to another. This does not render the models invalid, although measuring where an individual is at may be less simple. At least, it could be that some of the intermediate stages in Perry's model are at this later time, somewhat redundant. In any event, data from the Perry interviews were used to develop the Learning Environment Preferences questionnaire (Moore, 1989), which is a paper-and-pencil version of Perry's scheme. Knefelkamp (1999) reports that the most success is derived when two or more of the above methods are used. She has used these findings to help develop student characteristics and outlooks in more depth. For example, students moving through the 'multiplicity' stage still reported learning as being 'complex', and 'challenging', though they also report it as being 'more fun'. This is interesting and contrasts with the 'temporising' and 'retreat' positions found by Perry. What this suggests however, is that there may be a difference in the internal and external motivations of students when faced with the challenge to 'grow'. That is, do students wish to develop personally, or do they

wish to 'imitate' what is perceived to be a set of requirements needed for other reasons? The current social climate provides a different set of stimulants than those of two to three decades ago, and students may not perceive Higher Education as having the same roles and purposes as previous cohorts may have.

However, Knefelkamp (1999) reports that the Perry model can account for development in more recent and more diverse student populations. It is claimed that the above methods are capable of detecting 'culture cues'. That is, first generation Asian-American students often evidence the higher-level stages of complex thinking whilst also verbally responding outside of the testing situation, in manners more consistent with basic dualism. This observed deference to authority is argued to represent different cultural perspectives, rather than a lower stage of development. This could well be the case, but this explanation does not give any real insight into which one of the stages the student is actually at. This finding also gives some support for the idea that critical thinking is not a transferable skill. Knefelkamp does go on to suggest that students tend to switch between styles and stages according to different learning environments. Therefore it is equally likely that the testing situation itself could be perceived by students as a specific type of environment, and similar switching occurs here too. Interestingly, this could be a skill of 'transferability' at some level, however it confuses any attempt to say for certain whether students are capable of critical thinking. Similarly, it begs the question of how far individuals *can* be deemed to be successful critical thinkers if they do not actually exercise the skills in certain situations.

Knefelkamp (1999) does say that no claims can be made for the universality of the model, and that no single taxonomy can account for the assessment of all students.

This seems a little confusing in the light of her earlier claims, however the more important messages here are that if students do switch their strategies according to perceived demands of the environment, then it is not easy to confidently assess if they are really thinking critically as opposed to merely performing or reacting. Secondly, this suggests that the reliability of any measure is open to question as the 'testing' duration itself may constitute its own separate environment.

In the main, these findings may well be representative as a description of what critical thinking constitutes, but they do suggest that this can be transient, a context-dependent phenomenon, and perhaps problematic to assess.

1.6. The 'deep & surface' paradigm: 'conceptions of learning'.

In a European context, there has been much emphasis on the 'deep & surface' paradigm. This has been used to explore and explain how students' beliefs about learning influence the ways in which they approach their studies (Marton & Saljo, 1976a, Marton, 1976b, Saljo 1997). In his 1976 research, Saljo found five (later six; Marton, Dall Alba & Beatty 1993) qualitatively different conceptions of learning which were said to be aligned to the conceptual stages of Perry (p.4; see also Entwistle, 2000). A student having a lower conception would view knowledge as simplistic and absolute, whilst a student at the higher levels would take a more relativistic or transformative view. The terms 'deep' and 'surface' are metaphorical, in the sense that they describe the extent to which an individual understands, is involved with, and cognitively interacts with knowledge, information, or ideas. Thus the first three conceptions describe 'surface' beliefs; that is, quantitative and somewhat passive views of learning, with a focus on collecting information, whilst the final three describe 'deep' conceptions, these which view learning as more active

and transformative (see table1). In this sense then, individuals with a deep conception should be those more inclined towards critical thinking. Indeed, in a recent defence of the 'Deep & Surface' dichotomy, Entwistle (1997) wrote:

> "When academic staff are asked about the main purposes of higher education, they say that they seek to encourage critical thinking, or what Perry described as 'relativistic reasoning...education should be about the contest of ideas and means by which judgement is challenged" (p214).

Table 1. Conceptions of Learning & dichotomy between deep & surface (Saljo, 1979).

1	A quantitative increase in knowledge	surface
2	Memorising	surface
3	Acquisition, for further utilisation, of facts.	surface
4	The abstraction of meaning	deep
5	An interpretative process, aimed at understanding reality	deep
6	Developing as a person. (*added by Marton et al, 1993*)	deep

This body of research expanded on Perry's, in that it assumed that conceptions of learning would affect not only how individuals may approach a given task, but also what they managed to gain from it. One of the main assumptions underpinning this strand of research is that if the outcome of learning differs, then the underlying processes must also differ accordingly (Marton & Saljo, 1984). Although this body of research does not directly try to prescribe a specific course of development, the importance of it is that firstly, it describes important differences that should reflect at least two qualitatively different ways of thinking (which can be related to either 'dualism', or 'relativism)', and secondly, a measure of students' conceptions, or approaches to learning should provide a good indication of whether they are critical thinkers or not.

Early research supported the 'deep' & 'surface' distinction, and studies seemed to support this inter-relationship between conceptions and approaches. For example Van Rossum & Schenk (1984) found that when students were asked to carry out a specific research task, the ways in which they approached the task and the resulting outcomes were strongly related to their conceptions. This suggests then that assessing conceptions of learning might be a useful indicator of student's propensity towards critical thinking. However other research suggests that this may not be the case.

Laurillard (1978) carried out a study to explore how students went about tackling a problem-solving exercise. When they had finished, they were then asked to complete a short open-ended questionnaire asking them how they had gone about solving it. It was found that some students reported the use of sophisticated techniques suggestive of a deep approach, however it was also found that other students had simply 'collected' the procedures from their lectures as responding to tutor's demands. Laurillard points out that the 'use' of a conceptually sophisticated solution does not necessarily mirror a deep approach, rather this is adopted by students taking a surface approach. This is because they are responding not to the problem itself, but to the 'problem in context'. This is especially important in problem solving tasks where often, deep learning takes place through the actual process of solving the problem, rather than measuring the 'outcome'. However this could perhaps pertain more directly to the closed-ended, mathematically-based problems that the students were studying, in which there would be only one correct answer. This could likely invite the search for a set of procedures.

A similar problem of 'demand structure' was also found by Marton (1976a). He tried to manipulate the context in order to steer students towards taking a deep approach.

Two groups of students were given a different kind of problem, that is, a passage of text to read, whilst subsequently being told to focus on specific questions which they would be asked later. An experimental group were given 'deep' questions (focussing on the meaning of the text). It was found that students given the 'deep' questions actually remembered less than those in a control group who were given no prompts at all. These findings could be problematic in that no baseline measure was initially taken of students' conceptions. However a second, delayed task revealed a similar pattern of scores. What is more interesting about these findings is that not only did those in the 'deep' condition score less, it was also found that they adopted an extreme form of 'surface' approach in the responses they provided.

Findings which have shown that the educational context can influence students' approaches to learning and studying have been well documented. For example, Ramsden (1981), Entwistle & Ramsden, (1983) found that heavy workloads, or at least, workloads that students perceive to be heavy (Kember 2004), are likely to induce surface approaches and lead to poorer understanding of course material. Ramsden's (1984) concern is that such assessment will prevent students from taking a deep approach. However, more relevant to this study is that this could also mask the degree to which students are capable of, or have become critical thinkers. Ramsden (1984) also found that different subject areas are more or less likely to encourage students to think critically – or at least they may go about learning in very different ways. A broad distinction was found between Science and Art subjects; in Science, students were more likely to be presented with formal rules and logical procedures, whereas in Arts, students were much more likely to be presented with material and asked to understand it for themselves. Thus in Science subjects, the problem of

students needing to learn rules and follow procedures in rote fashion, again does not necessarily indicate that they are not trying to think critically, nor that they do not have more sophisticated views of what learning or knowledge is.

Entwistle & Ramsden (1981) also found that students tended to have more general 'orientations' to studying. These orientations are said to describe a set of traits and approaches that students possess, based not only on their perceptions of the academic context and their beliefs about learning, but also on what may be motivating them to study. This research showed that students who took a deep approach were intrinsically motivated, and tended to look for meaning in activities. On the other hand, students who took surface approaches were extrinsically motivated, focussed on assessment demands, and were orientated towards reproducing materials. In this study, a third approach was identified. This was 'Strategic'; an orientation of extrinsically motivated students whose main concern was to succeed by fulfilling assessment demands in any way they could. Such students were found to adopt both deep and surface practices, and these could vary across different subjects and different types of assessment. This strategy-switching was also found by Taylor (1983). His study showed that students may not always live up to their purported beliefs and intentions, as they often change their behaviour according to the perceived demands of the learning situation. In his own study of learning orientations, he found that students often juggled strategies, and quite often used more than one. For example, one student reported:

"My attitude is both instrumental and interest really because you are assessed, so you've got to do a certain amount of coursework, and eh, I copy as many essays as I can, and do the minimum amount of work in Psychology and Philosophy. And in Sociology I try to do as much reading as I can, and then when I do write essays, I always bring in much more but hardly ever answer

> the question. I'm always more concerned with things that are of interest to me". (Taylor, 1983, *in Hounsell, Marton & Entwistle, 1997. p.84*).

What these findings seem to be suggesting is that there is a distinction between deep and surface approaches to learning, however whether this model can be used to assess critical thinking is another matter. Again it seems that the situation is influential, and the educational context seems to have the power to lead students into taking a specific approach. Also, this may not necessarily mirror what is going on beneath the surface. Clearly students are driven by assessment to a greater or lesser extent, otherwise they would not be in Higher Education at all, so taking a strategic approach appears perfectly rational (Laurillard, 1984). What might also be learned from this body of research is that it may also be useful to shift perspectives from what students actually do, to why they are actually doing it.

Taylors' (1983) study is interesting in that it highlights how students' personal reasons for choosing to study can influence their experience of the learning environment and their study habits. Beatty, Gibbs & Morgan (1984) describe this relationship as a 'study' contract – something the student negotiates within themselves and which directs what they perceive and how they tackle their studies. Using material from in-depth interviews, this longitudinal study found 4 distinct orientations; these were academic, vocational, personal and social. Apart from 'Social', each of these could be divided by the subcategory of intrinsic and extrinsic (see table 2). For example the academic-intrinsically orientated student would be interested in the subject itself and would chose challenging lectures in order to fulfil this interest. Alternatively, an academic-extrinsically motivated student would be concerned with academic progress and focus on their marks and grades. This research

also found that there were consistencies over time in the relationship between students' approaches to their work and their overall intentions. More importantly the above quotation suggests that it is the student's personal goals which direct the approach they take, and that these are important to consider alongside any teaching strategy that attempts to encourage critical thinking.

Table 2. Students' Learning Orientations (Taylor, 1983)

Orientation	**Interest**	**Aim**	**Concerns**
Vocational	Intrinsic	Training	Relevance of course to future career
	Extrinsic	Qualification	Recognition of qualifications' worth
Academic	Intrinsic	Intellectual Interest	Choose stimulating lectures
	Extrinsic	Educational programme	Grades and academic progress
Personal	Intrinsic	Broadening/Self-Improvement	Challenging/ Interesting material
	Extrinsic	Compensation, or proof of capability	Feedback & passing the course
Social	Extrinsic	Having a good time	Facilities for sport and social activities

Since 1995, Meyer and his colleagues have carried out extensive research in this field, which has to some extent highlighted some of these issues. Using an instrument which was based upon the Approaches to Learning Inventory (ASI; Entwistle & Ramsden, 1983) it was found that student's reasons for choosing to study (or life history; for example parental expectations) had important bearings on how they perceived and approached their learning. A comparison of Javanese and Indonesian students did show that such expectations strongly influenced conceptions of learning. Factor analysis of the data revealed that a strong sense of moral duty, and a cultural belief in authority was linked to a belief that learning had taken place if it could be 'recalled' (Meyer & Kiley, 1996). Other research has also suggested that there may be differences in what surface processing actually constitutes, and students underlying

intentions behind adopting it. A study by Marton, Watkins & Tang (1997) found that Chinese students tended much more towards a surface approach in terms of trying to memorise material, yet they tended to gain 'deep' outcomes. This is at odds with the originally supposed relationship, and it also suggests that there is more to 'surface' approaches than was initially thought.

Further research by Meyer & Shanahan (2001) found some overlap between deep and surface approaches, in that students may use rote learning as a step towards taking a deep approach. Two distinct approaches were found; 'memorising for recall' (passive memoristation of facts), and 'memorising for understanding'(active). Whilst this greater clarification is helpful in demonstrating links between intentions, strategies and outcomes, it also suggests that whilst approaches and outcomes may be relatively less difficult to pin down, underlying conceptions may not always be related in the way that was originally supposed.

More recently, Meyer (2000) has developed a revised measure, the Reflections on Learning Inventory (RoLI) which has thrown more light on the complex nature of the relationships. In particular, it has been found that not only is there variation in different intentions behind memorising strategies, but also that individual students may vary in the extent to which they adopt these. That is, there is variation within as well as between categories. This research has also found that there is a gender distinction on certain dimensions, and this can be partially explained by student's study histories. For example whilst prior learning habits can influence the degree to which students may adopt a deep approach, this may be greater for males than for females.

The relationship between these conceptions, and how students do go about the learning task seems more complex than originally posited. But there are also more fundamental issues relating to the ways in which conceptions of learning are derived. In the first instance, these were found from phenomenographical studies which analysed interview data from students. In a follow-up study to that of Marton (1976b), Marton, Dall Alba & Beatty (1993) point out that conceptions themselves are not entities which exist in a vacuum. By their nature as psychological constructs, they must necessarily have a set of external referents to which the conception itself is related. Further, conceptions and their referents may be related in different ways across individuals – therefore the ways in which participants describe their beliefs and conceptions may differ. A distinction is made in this article between concepts themselves and their categories of description. The latter are not truly phenomenographical as they are derived from the researchers' own personal understanding. That is, no categorisation can be made unless the researchers themselves have some pre-existing belief about what a particular category entails. In this case then, there could be perceived similarities in meanings of conceptions where these do not exist, similarly, there may be perceived differences – again where they do not exist.

There are many examples of this in the literature which suggest that conceptions can vary across a variety of contexts. This could explain the phenomena of the Chinese paradox mentioned earlier. A study by Dahlin & Regmi (1997) found that Nepalese students did not conform to Marton et al's conceptions of learning model in terms of the meaning of 'memorisation'. Although they did hold a conception of this as being rote memorisation (which was looked upon as an inferior way of learning), they also talked about 'meaning -as- knowing'. These students mentioned that memorising was

not possible without full understanding, and that rote memorisation involved no knowledge at all. Dahlin & Regmi (1997) highlight the ambiguous nature of these conceptions, in that knowledge, memorisation and understanding are inextricably linked. Boulton-Lewis, Wilss & Lewis (2003) also found that indigenous Australian students viewed 'learning as understanding ' in quantitative terms. 'Understanding' was expressed by the acquisition and use of information and of making sense of words and concepts (p. 86). Further, Gravaso, Pasa & Mori (2002) found just three conceptions of learning. These were (1) 'intake of information', which corresponded to memorisation and regurgitation, (2) learning as collaboration, which saw learning as something taking place through group-work and sharing study tasks, and (3) Learning as development of perspective; changing beliefs, opinions and behaviour as a result of understanding. Whilst conceptions 1 and 3 correspond to the lower and higher conceptions in Marton et al's model, conception 2 here, does not appear at all. This suggests that concepts may not only vary within themselves, but also they may vary in type.

Again, whilst there do not appear to be any other instances of relatively new 'conceptions', evidence suggests that conceptions are closely linked to the context in which they are measured at any given time (Byrne, Flood & Willis, 2002; Eley & Meyer, 2004; Marton, Dall Alba & Beatty, 1993). In a study of Level 1 Economics students, Meyer & Shanahan (2001) found that students often held dissonant study patterns, and that these resulted not from their conceptions of learning, but from erroneous conceptions of the subject itself. Eklund-Myrskog (1998) found differences in conceptions of student nurses and car mechanics. Student nurses identified 'learning as knowledge application' in terms of understanding. That is, rules and procedures had to be understood so that they could be could be retained and applied in

new settings. The views of car mechanics had a temporal difference; 'knowledge application' was simply memorising procedures to apply to specific situations, hence there was a clear difference in terms of 'deep' and 'surface'. Interestingly, no conception of learning as 'an increase in knowledge' was found in this study; which is the first, lowest conception in the Marton & Saljo hierarchy. This was also found by Marshall, Summers & Woolnough (1999) in a study of learning conceptions in engineering students. Both of these studies looked at more vocationally orientated courses, in which case it seems logical to suggest that students are collecting information in the knowledge that they will need to apply it – inherent in the nature of the course itself.

From this evidence, it appears that conceptions of knowledge are contextually dependent, influenced by the educational setting, cultural belief systems, and the language which is used by both researchers and respondents. It also seems that conceptions of learning- at least as measured in these ways – may be distinct from conceptions of knowledge as a broader phenomenon, as outlined by Barnett (1996). In any case it also appears that the assessment of either of these is crucial (Meyer & Eley, 2004, King & Kitchener, 1994). Much may depend on the task set. Similarly, it may be that the deep and surface paradigm is too narrow to encompass many other factors which are crucial when trying to explore student development.

1.7. Conceptions of Knowledge: Epistemological Beliefs.

In terms of positing a difference between conceptions of learning and of knowledge, the work of King & Kitchener is important. They have explored intellectual development in terms of epistemological assumptions; a series of qualitatively different ways of knowing, which influence the ways in which an individual will

reason. This work is also comparable to Perry's (1970) stage model in that there are said to be seven sequential stages of development in their Reflective Judgement model which can more broadly be grouped into three. Corresponding closely to previous models, there is firstly; 'pre-reflective' (stages 1,2,& 3) in which individuals perceive as knowledge as absolute. This corresponds to the 'dualist' positions of Perry, and also the 'surface' conceptions in Marton et al's (1979, 1993) hierarchy.

Next is 'quasi-reflective' (positions 4 & 5) a stage at which knowledge is seen as uncertain, and that multiple viewpoints exist; this corresponds to Perrys (1970) 'relativism' and to a good extent, the 'deep' conceptions in Marton et al's model. Finally, 'reflective', knowledge is actively constructed, and decisions are subject to revision. This is similar to Perry's 'commitment', and again, to the 'deep' conceptions in Marton et al's hierarchy.

However underpinning this particular model is the view that critical thinking is not identical to reflective reasoning. The authors point out that critical thinking has been commonly assessed using instruments consisting of well-structured problems, (such as the Watson-Glaser Critical Thinking Appraisal (WGCTA); Watson and Glaser, 1964, also the Cornell Critical Thinking Test; (Ennis & Millman, 1971). These problems require a qualitatively different type of reasoning which is based on logic – therefore there is always a single correct answer to the problem that can be found if reasoned through correctly. This issue was also raised earlier by Laurillard (1978, 1993). Participants in Laurillard's study were also attempting to solve a well-structured problem, whilst King & Kitcheners' model is based on the solving of ill-structured problems. Participants are given one (or two) such problems, (i.e., the Reflective Judgement Interview (RJI) and the Reasoning about Current Issues test (RCI)) which is comprised of real world dilemmas or situations to which there is no

single correct answer. In this instance it is not the 'answer' which is eventually provided that is important – rather it is the way in which individuals reason their way towards it, that is.

Research has demonstrated some support for this claim. Brabeck & Wood (1990) have found that gains in critical thinking scores are not always matched with gains in Reflective Judgement. King, Wood & Mines (1990) have found that graduates score more highly on measures of both critical thinking and RJI. However, in this study it was found that partial correlations showed that academic aptitude could better account for educational level differences than could scores on critical thinking measures, whereas RJI scores continued to show effects with educational level when aptitude was partialled out. Yet in a further analysis of these data, Wood (1990) found that there were some similarities with scoring patterns across the CCTI, the WGCTA and the RJI, but that these were 'insufficient'. From these mixed though important findings, King & Kitchener (1994) concluded that critical thinking and reflective judgement are 'related, but different constructs' (p.193), and that critical thinking may be the basis for development of higher levels of reflective judgement. In this case then, it seems that whilst there is no widely accepted definition of critical thinking, it is safe to assume that individuals who are at the higher stages within this model can be deemed to be critical thinkers, whilst those at the lower stages cannot.

This model has been widely applied (see for example King & Kitchener, 1994; King, Taylor & Ottinger, 1993, King, Wood & Mines 1990, Kitchener, Lynch, Fisher & Wood, 1993, Mines, King, Hood & Wood 1990, Strange & King, 1981). This research has suggested that college students at the first year of study tend to average a score of 3.5. This 'pre-reflexive' stage is comparable to Perry's position 3 which sees

reasoning based around the assumption of knowledge as being temporarily uncertain, and all views are valid until the 'right' answer is found. Senior students have been found to show an average score of 4, evidencing a shift to the higher level 'quasi-reflexive' thinking stage. Although King & Kitchener (1994) point out that this is ostensibly a very small gain, it does show a qualitative shift in stages towards an assumption of knowledge as uncertain, evidence based, and contextually dependent.

1.8. Can Critical Thinking Be Taught?

Whilst King & Kitchener have shown that intellectual gains can take place over the course of study, other research in this area has produced inconsistent findings. Again, much of this may depend on the type of measures being used, and the assumptions about critical thinking which underpin them. There have been questions raised as to whether age is a crucial factor, and this is especially important given the greater numbers of mature students now taking degrees. In a meta-analysis of longitudinal studies, King & Mayhew (2002) have considered this potential confound, however they suggest that change is more likely to occur within traditional age student groups. However, Rest & Thoma (1985) traced the development of 56 high school student leavers for six years. They found that increases in the development of moral judgment for the 38 who attended college, was greater than for the 18 who did not. In 1985, they regrouped the students who had attended college into those who had attended for two years and those who had attended for four. Students who had attended for four years were still showing gains, whilst the two-year group were not. Using the same longitudinal approach, similar results were also found by Rest (1988), King, Kitchener & Wood (1985), Gfellner (1986), Paradice & Dejoie ((1991) and

Cummings, Dyas & Maddux (1991). This suggests two things – firstly that Higher Education can lead to changes, and secondly, this influence is independent of age.

Giancarlo & Facione (2001) produced more complex findings. They used the California Critical Thinking Disposition Inventory (CCDTI; Facione & Facione, 1992; Giancarlo, 1993) to explore gains in critical thinking of 1117 students (438 male, and 647 female). The CCDTI is a 75-item, 7 sub-scale inventory which assesses the following dimensions of critical thinking. Listed below, it can be seen how these dimensions relate to Perry's model, for example recognition of divergent viewpoints (open-mindedness), the complexity of problems and the use of evidence to solve problems (analycity) – typical of the individual at stages of multiplicity and therefore appreciative of relativism. Here, the dimension introduced in the Delphi Report (a motivational component; dimension 4; systematicity) is also included.

1.Truthseeking. (a desire for the best knowledge in any situation, ask challenging questions, and to follow evidence).

2.Open-mindedness. (tolerance for new ideas and divergent views)

3.Analyticity. (alertness to the need to intervene by the use of evidence in order to solve problems).

4. Systematicity. (inclination to be organised, focused, diligent and persevering).

5.Critical Thinking Self-Confidence. (e.g. trust in ones own reasoning).

6.Inquisitiveness. (curiosity and desire to learn, even when no immediate application is perceived)

7.Maturity of Judgement (recognition of the complexity of problems, and timely decision making in uncertain conditions).

Post-testing after 4 years revealed that the overall CCTDI scores had increased significantly ($t = 3.12 : p = 0.002$). Along the 7 dimensions, scores were either consistent, or had shown gains. Statistically significant increases were found for 'Truthseeking' ($t = 5.60: p = 0.001$) and CT Self Confidence ($t = 4.13: p = 0.001$). However when these results were looked at in terms of the percentages of students who had shown gains, it was found that whilst many had increased, there were others who had maintained their original positions. Yet others had shown decreases. The highest gains were found in Truthseeking and Systematicity (38.8%, and 27.3%), yet these subscales also observed the largest decreases (10.9%, and 19%). This can be compared to Inquisitiveness which showed the largest percentage of maintenance (91%), the smallest increase (4.1%) and the smallest decrease (3.4%). Gender differences were also found. The overall score of the CCDTI showed significantly higher increases for females ($t = 1.92: p = 0.05$), as well as for Open-Mindedness ($t = 6.54: p = 000$) and Maturity of Judgment ($t = 4.14 : p = 0.000$). No other significant differences were found. The authors also wished to investigate whether these increases would be reflected in grade point averages. Whilst the overall score of the CCDTI was significantly related to grade point average($r = 0.107: p = 0.003$), further analysis found that only four out of the seven scales showed significant positive relationships; Open-Mindedness ($r = 0.153 : p = 0.000$), Analyticity ($r = 0.102 : p = 0.05$), Systematicity ($r = 0.093 : p = 0.011$) and Maturity of Judgement ($r = 0.090 ; p = 0.014$). This suggest a more complex pattern.

The influence of ethnicity has also been explored. Gongre (1981) tested for differences in moral judgment in 15 black American, 46 native American, and 53 white students and found no significant differences. Gadzella, Masten & Huand (1999) found that African American students scored significantly lower than their

caucasian counterparts on the Watson-Glaser Critical Thinking Appraisal. Locke & Tucker (1988) tested groups of both black and white students using the Defining Issues Test. This requires students to reason through open-ended dilemmas and form a conclusion. They produced two versions of the dilemma, using a white person as the central character in one version, and a black person in the other. Effects were found only when the central character was of the same ethnicity as the participant. These differing results could well be the result of the different methods and definitions applied. However, Flowers & Pascarella (2003) carried out longitudinal research over a period of four years with 3,331 students, and across 18 colleges. Students were presented with a comprehensive battery of tests, including critical thinking, science reasoning, and reading and writing skills. It was found that on all measures, the African-American students scored lower. The authors suggested that poorer pre-college education, and possibly the tendency for African-Americans to perceive the educational environment as hostile could be responsible for these negative effects.

More recently, Cantwell & Scevak (2004) explored the development of adult students returning to study an educational course after a period of employment. It was found that despite demonstrating a deep approach, students did not develop skills of critical thinking. Neither were their conceptions of knowledge changed over their 2-year courses. They still retained a view of knowledge as fixed, and as a set of facts. Trowler (1996) contended that what these students are effectively being asked to do is convert practical knowledge into prepositional, which is conceptual, explicit, and organised along disciplinary lines. Given that these students may well have internalised appropriate strategies for dealing with practical problems, they may not have perceived a need to change.

1.9. Learning Styles

There is one more area of importance to consider in this literature review, and that is the influence of learning styles on student development. This is an extensive field, and similar to the literature on critical thinking, there are many different types of learning styles (Mc.Keachie, 1995, Mc.Loughlin, 1999, Rayner & Riding, 1997). Even more confusingly, many use 'learning styles' as an umbrella term to refer to a range of constructs which have different theoretical underpinnings, and which do not always mean the same thing (Entwistle & McCune , 2001, Haggis, 2003). McKeachie (1995) for example, refers to 'deep & surface' approaches as different learning styles. To the extent that these approaches have been accounted for in some of the measures designed to assess 'styles', and that the deep & surface approaches are not totally dissimilar to specific dimensions of thinking contained within other measures, McKeachie is not totally incorrect. However learning styles have several different types of focus, which can often distinguish them clearly from 'approaches'. There have been many criticisms of learning styles (Felder & Brent, 2005), in the extent to which they often have no sound theoretical basis (p59), and that often, validation of instruments used to assess them is questionable. Nonetheless, they can be viewed as a source of student differentiation at some level, and there are aspects of this research body which do appear to consider aspects of diversity which are not covered in the models and paradigms discussed previously.

The main difference is in the theoretical underpinnings. In a review of learning styles, Curry, (1983) points out that there are broadly three strands to the theory, in the sense that they differ in the extent to which they are susceptible to variation. She uses the analogy of an onion to portray this. The inner layers represent the more 'fixed'

attributes which influence learning, and the closer to the surface, the more likely these attributes or tendencies are prone to vary. Most of the early work on learning styles came from psychologists and educationalists working within the field of individual differences (Grigorenko & Sternberg, 1995, Rayner & Riding, 1997). Thus there was an emphasis on the cognitively based aspects of style, and these were said to be relatively fixed and consistent over time, and therefore less amenable to contextual influences. This has featured strongly in other models of development. Researchers in this tradition have looked at field-dependency & field-independence (e.g. Witkin & Goodenough 1981). This work came from studies of differences in perception, where it was found that certain individuals were more able to 'dis-embed' a figure from its background. There were said to be a range of other characteristics associated with these two 'types', for example field dependent individuals were more likely to prefer learning in groups, to rely on teachers for instruction, and require more extrinsic motivation. On the other hand, field independent individuals were more likely to be more intrinsically orientated and plan their own activities. The work of Pask & Scott (1972) also followed this tradition, and they proposed the 'serialist' and the 'holist' types. Serialists were said to be step-by-step learners (data-led), whilst holists were said to be less procedural, preferring to take a wider view of the material-to-be-learned (hypothesis led). A distinction was made also between 'verbalisers' and 'visualisers'. This was heavily based on the work of Paivio's (1971) dual –coding theory, and described the extent to which individuals preferred to process information pictorially or linguistically. More recently, this has been incorporated into the Cognitive Styles Analysis (Riding, 1998). The key feature of this approach is that there are broadly two dimensions in perception which influence the ways in which students learn, that is, the 'Wholist – Analytic style dimension, and the Visual-Verbal

dimension. These dimensions are included in the 'Cognitive Styles Analysis' instrument.

Other types of learning styles take a 'learner-centred approach (Grigorenko & Sternberg, 1995). These encompass Entwistle & Ramsdens' (1983) 'Orientations to learning model', and Honey & Mumfords (1986) classification of Pragmatists, Reflectors, Activists & Theorists. These differ to the extent that they expand upon the previous 'dimensions', and include other factors which are said to more fully describe the learner and their characteristics (Rayner & Riding, 1997). In this view, there is more scope for environmental influence in the ways learners may change their strategies in predictable ways.

Finally, there are 'preference-based' learning style models, these which expand further to incorporate factors such as an individuals' preference for specific environmental factors in the learning space, such as preference for time of day, and amount of light and temperature for example. The factors are considered alongside the more cognitively based characteristics. Such constructs are more comprehensive and try to provide a 'learning repertoire', rather than a style (Rayner & Riding, 1997, p.20). For example, Dunn, Dunn & Price (1990) outline a model which consists of five categories, or 'stimuli'. Within these five major categories are 21 different elements that are said to influence learning. These are 'environmental' (including light, sound, temperature, and room design), 'emotional' (including structured planning, persistence, motivation, and responsibility), 'sociological' (including working with peers, adults, alone, within a group), 'physical' (including perceptual strengths, and time of day) and finally, 'psychological' (including global/analytic tendencies, impulsive/reflective tendencies, and right- or left-brain dominance.

It is not the aim of this review to discuss the reliability and validity of all these learning style models, nor the relative contributions of them to the literature. This is not least with respect to a recent review of styles by Coffield, Moseley, Hall & Ecclestone (2004) who found that often, many existing style taxonomies do not stand up to scrutiny. What is important is that it may be useful to consider some of the more 'stable' attributes which are not accounted for in previous models discussed, in order to examine how far they may impact on the course of development. Indeed, Gadzella, Stacks, Stephens & Masten (2005) cite Ennis, who in 1983 referred to the College Board (U.S.) and found that 'reasoning' was listed as a basic competence. Wagner & Harvey (2003) also suggest that critical thinking can be viewed as an indicator of the general cognitive ability (*g*), which is applicable to individuals in the upper range of the ability distribution. Therefore one of the more recent classifications of 'style' will be looked at, which has been supported by research evidence, and which does have more cognitively based theoretical underpinnings. This is Sternbergs' (1984) Triarchic Theory of Intelligence. This theory was derived from Sternbergs' own meta-analysis of theories of intelligence that were around in the late 1970's. Whilst many viewed these as 'competing' theories, Sternberg argued that they could all be viewed as complimentary, and his work attempted to provide a more comprehensive model of intelligence. However, he was concerned that many of these theories were not accurately describing what he himself was witnessing in his own students at Yale. He argued that measures of intelligence represented only one aspect of thought/action, this which was the more academically based 'critical 'and 'analytical' intelligence. He observed that other students were also intelligent, but in different ways. For example, whilst some excelled in work that required critical thought, they performed less well in tasks that required either 'creative' thinking, or 'adaptive' thinking. His model thus

accounts for the 'internal' world of the individual (as in critical/analytical intelligence), the 'external' world (i.e. creative intelligence) and the 'experiential' world (i.e., adaptive, practical intelligence.).

Recent factor analysis has found support for the three dimensions (Sternberg & Clinkenbeard, 1995; Sternberg, Grigorenko, Ferrari & Clinkenbeard, 1999; Sternberg, Castejon, Prieto, Hautamaki & Grigorenko, 2001). The model has also found to be reliable when adapted for use with Spanish students (Garcia, 1997), and Finnish students (Hautamaki, Arinen, Hautamaki & Scheinen (1998).

Sternberg (1984) posits that individuals possess all three dimensions, but they can often be found to be stronger in one dimension than others. Similarly, an individual may be strong in two, or even three dimensions, or perhaps none at all. Also, he points out, no real-world task is ever likely to be purely dependent on either analytical, creative or practical capabilities alone (Sternberg, 1998). For the purpose of this research however, it is important to point out that many activities in Higher Education *are* looking to assess critical, analytical thought, so it could be hypothesised that students scoring highly on the Analytical dimension are those who will score more highly on tests of critical thinking or reasoning.

So far, this theory has been discussed in terms of intelligence. However, Sternberg does relate it closely to 'style', in that he claims it is 'a preferred way of using ones abilities' (Sternberg, 1994), and that 'we can vary them to suit different tasks and situations' (p.36). However to the extent that the academic environment is relatively self-contained, then it can still be hypothesised that the 'style' or 'dimension' will also be relatively stable within it. This is opposed to the more 'preference-based' models

(for example Dunn, Dunn & Price, 1990) whose model takes account of a wider range of environmental factors which are more susceptible to change.

1.10. Student Motivation.

As briefly mentioned earlier, research has demonstrated that there are two broad categories of study orientation in students; these can be described as intrinsically motivated, and extrinsically motivated (Taylor, 1983). Intrinsically motivated students are those who tend to engage in tasks with the desire to understand in the absence of external rewards and to enjoy learning for learning's sake. On the other hand, extrinsically motivated students tend to carry out tasks with the aim of satisfying some external criteria, for example, grades, or praise. (Aldermann, 1999; Biggs, 1985; Pintrich, 2000). Biggs (1985) has suggested that whilst the ways in which students study are governed by a complex interaction of strategies and motives (and there may often be more than one), their tactics do largely tend to be reflective of their motives. He also identified a further 'achievement motivation' which corresponds with the 'strategic' approach (Entwistle, 1997). Such students tend to be motivated by a desire to complete assessments, and as such, they continually monitor the environment in order to seek cues that will help them get the best results.

Cognitive theories of motivation have examined the nature of intrinsic and extrinsic motivation in more depth (Deci, Koestner,& Ryan 1999, Ryan, Mims & Koestner, 1983). These theories are underpinned by the principle that behaviour is a goal-directed action (Deci, 1971), and the individual will behave in ways which they perceive the action will satisfy their own personal needs and desires. Thus, if a task or situation is perceived to do this, the individual will be intrinsically motivated to engage in it. That is, performing the task is in itself the 'reward'. In terms of exploring

how intrinsic motivation can be increased, research has considered the effects of different types of rewards and their effects on intrinsic motivation. Deci et al (1999) argue that rewards may be perceived by the individual as either 'controlling' of their behaviour, or as indicators of their competence' (p628). Tasks perceived to be controlling, tend to violate the feeling of autonomy and satisfaction, whereas tasks perceived to be indices of competence tend to increase this (Findley & Cooper, 1993, Tang & Hall, 1995). These theories can be viewed as broadly similar to the work on students' approaches to learning, in that they both agree that it is the individuals' perception of the task and the environment which can create changes in strategy. This is also influenced to the extent a student may be intrinsically or extrinsically motivated in the first instance.

What these theories tend to account for less well, is the type of long-term goal a student may have, and how dedicated they are to pursuing and reaching it. A recent study by Simons, Vansteenkiste, Lens & Lacante (2004) have pointed out a further dimension of motivation, which is that of an individual's future time perspective (FTP). They argue that the extent to which individuals are motivated by attaining immediate, as opposed to future goals can influence their strategies further. For example, students motivated by long-term goals will be more inclined to view smaller, less rewarding tasks as more meaningful, as this is viewed as contributory to the eventual goal. What these theories also do not account for is the nature of the eventual goal a student may have. Whilst it is acknowledged that intrinsically motivated students tend to take a deep approach, this may not always be reflected in their marks and grades. However they themselves may feel that they have achieved what they set out to achieve, despite gaining relatively low marks and grades.

Paradoxically, intrinsically motivated students are those who tend to score highly on measures of critical thinking (Pintrich 2000). It has been suggested that extrinsically motivated students are those who tend to take a surface approach, adopt surface strategies, and achieve lower grades (Hodgson, 1984), yet this does not take into account what their own long term, personal goals may be.

Taylor (1983) in his taxonomy of Orientations to Studying, classifies vocationally orientated students as either intrinsic (wanting to gain a set of skills and knowledge relevant to their future career) or extrinsic (perceiving the relevance of the qualification towards their future career). This is also evident in the ASSIST (Tait, Entwistle & McCune 1998). Whilst the two are viewed as distinct, this still does not account sufficiently for how motivated (or determined) a student might be to achieve their vocational goal. In any event, given the preponderance of current cohorts of students whose predominant goal *is* to get a job/career, then this just suggests that the vocational orientation 'category' has likely become more complex and broader in scope than it has been in the past. Therefore, the extent to which such students are intrinsically or extrinsically motivated, the extent to which their conceptions of learning may be deep or surface, and the extent to which they may become critical thinkers or not, is still unclear.

1.11. Summary.

The above review suggests several things. Firstly, that it is unclear how confidently it can be said that Higher Education does facilitate the development of critical thinking in students. Secondly, given the rising numbers of students who enrol in order to get a job at the end of their course, how far the rest of the developmental theories presented here are open to question. Meacham (2003) urges lecturers to recognise

students' courage, and support them as they strive to grow intellectually, but there is no real evidence to suggest that this is what all students are striving to do in the same ways that lecturers are intending. Contextualist theorists such as Rogoff & Lave (1999), also Lave & Wenger (1992) contend that individuals learn by legitimate peripheral participation. This means that they enter a given social situation or context initially as 'apprentices', and gradually (from the periphery) come to acquire the norms and rules appropriate to that context, until they eventually become 'masters'. However, this does not account for the extent to which an individual is motivated to become a part of that context – especially in a Higher Education setting where in many cases, Higher Education is the means to entering a different context, after graduation.

Some of the evidence presented here suggests that if students are vocationally orientated (in the broader sense), then they will focus on aspects of the teaching and of the environment that will help them realise their goals. Whether they go on to become critical thinkers is another matter, as is the degree to which they may take a deep or surface approach, and the extent to which they may be intrinsically or extrinsically motivated. Finally, there is some suggestion in the research presented in this review, that the conceptions of learning held by students in vocationally orientated courses could be different to those in academically based courses. Thus the picture is unclear. Given the greater numbers of students currently attending Higher Education courses, and the recognised diversity of the student population, this area needs further investigation.

Finally, the above evidence presented strongly suggests that whilst there may be links between conceptions of learning, the development of critical thinking and students'

long term goals (or absence of these), these are not always consistent over time and are prone to variation depending on a variety of environmental influences. Therefore, this research is often exploratory, and whilst relationships may be found, there can be no guarantee that the same might hold for another, different cohort of students.

1.12. Research Aims.

It is the aim of the longitudinal research reported in this thesis, to explore the extent to which students' personal reasons for choosing to study may influence their conceptions of learning, and how both these phenomena may impact upon the development of critical thinking.

1.13. Intended Procedure.

1. Incoming Level students will first be given a baseline measure to assess their Conceptions of Learning. Following, they will be presented with Sternbergs' (1996) Triarchic Abilites Test. They will also be given one dilemma from the Reasoning about Current Issues test to measure how far they have developed the propensity to think critically. These three measures will provide an initial baseline. Following, their marks and grades will be collected at the end of the academic year. These will be compared according to which conception a student holds, which learning style they posses, and relationships will be looked for across marks and grades, and critical thinking scores.

2. Towards the end of their degree courses (Level 3), the same students will be given a further dilemma from the Reasoning about Current Issues Test in order to assess any gains in critical thinking. Conceptions of Knowledge will also be measured to look for

any changes. Relationships between the two measures will be assessed. Finally their end-of-term grades will be collected, which again will be compared with Conceptions of Learning, and Learning styles.

3. All measures will be examined and compared with those collected at the first wave of testing.

Chapter 2.

Construction of a Measure to assess 'Conceptions of Learning'.

2.1. Introduction.

In the previous chapter, evidence was presented to show that conceptions of learning may be difficult to measure and assess accurately. To summarise briefly here, the work of Marton & Saljo (1976, 1979) inspired the development of measures to assess Conceptions of Learning. These are all primarily based on the original observation of a distinction between 'deep' and 'surface' conceptions, however further research has found evidence to suggest a 'strategic' approach to studying (Entwistle & Ramsden, 1983) in which the underlying conception itself is not always directly mirrored. Such students are observed to switch strategies according to the demands of assessment at any given time, and their intention is mainly to complete set tasks (Taylor, 1983; Laurillard, 1997; Scouller, 1998). A more recent study by Chan (2003) also found that whilst surface and deep conceptions were relatively stable over time, and were significantly correlated with the predicted approaches and learning strategies, this did not hold for students who showed strategic approaches to learning. Such students typically adopted approaches that could vary from surface to strategic depending on the task set. Whilst this may support the notion that this is not a conception of learning in and of itself, it also shows how problems can arise with detecting which conception a student really holds.

More recently, Meyer (2000) has expanded on the conceptions of learning 'descriptors', and has developed a more inclusive instrument, the Reflections on Learning Inventory (RoLI). This instrument explores students' propensity to 'reflect', and also explores the extent to which students' study history may influence their

approaches to studying. However the underlying theory remains similar, and the original 'deep and surface' conceptions of learning model is still identifiable within it.

The research field continues to develop and become more complex. Whilst early findings tended to report strong relationships between approaches to learning and conceptions of learning (e.g. Van Rossum & Schenk, 1984), later findings have shown that the relationship is much more complex and that conceptions of learning do not always manifest themselves in performance (King & Kitchener, 1994, also Taylor, 1983). At the wider level then, this means that student learning outcomes, as measured by marks and grades, may be influenced differentially by either of the two measures, and that there may be a difference in how well either may be used as predictors. However it is not the intention of this research to explore the general range and reliability of the correlates of conceptions of learning. The point is that it may make a difference in terms of how questionnaires are presented; for example, if an individual is asked about their beliefs about learning (in the current or past sense), there may be a qualitatively different response if they are asked what they actually intend to do whilst they are actually learning (in the future sense, i.e. the learning process). That is, a difference is hypothesised in terms of what students *believe* knowledge and learning to be, and what they actually *intend to do* in their studies. Many existing instruments do not appear to make this distinction clearly. Items are presented and respondents are simply asked to "please rate the extent to which each of these statements apply to you". This could possibly account for the lack of consistent findings in demonstrating a relationship between conceptions and approaches. Therefore it seems reasonable to assume that students' actual intentions, in terms of describing what they intend to do, and how important they rate such practices, may be a more stable way of measuring what they really see 'learning' to be. Put more

simply, it is hypothesised here that conceptions (or current beliefs) about learning may be more clearly demonstrated by looking at what students intend to do (in the future), in order to succeed at their studies. The relationship may be elucidated by presenting and rewording items which differentiate between the present and the future.

This study will therefore compare two questionnaires (Revised Questionnaires 1 and 2: RQ1 and RQ2). Both will contain essentially the same items which are taken from the original hierarchy of conceptions outlined by Marton & Saljo (1976b), and both will also include items from the RoLI (Meyer 2000). The instructions provided for RQ1 items however, will be rephrased in order to try to assess what students actually *intend to do*, rather than assess what they believe. Participating students will be asked to rate the extent to which they feel it is important to carry out such practices in their own learning in order to succeed at their studies. Individual items will be slightly reworded to accommodate this.

The second (Revised Questionnaire 2) will be constructed using the original hierarchy of items as outlined by Marton & Saljo (1976), and includes the later, 6th conception which was added to the model by Marton, (1993). Items will correspond more closely to those found in the original questionnaires. Both questionnaires can be found on pages 68 & 69 (Tables 4 & 5) as they were presented to students.

The questionnaires will then be correlated, using the responses from all participating students. High correlations could suggest that there is in fact a relationship between beliefs and intentions (as measured by these instruments), although it is predicted that this will not occur. What will be predicted is that there will be significant differences

between student's responses to both measures. Also, it is expected that the first measure (Revised Questionnaire 1; assessing practices) will be more useful as a measure of conceptions of learning than the second. That is, it will be more capable of discriminating between students who are at either the lower (surface) end of the scale than at the higher (deep).

2.2. Method.

The responses of one group of students to both questionnaires will be analysed using a correlational design.

2.3. Participants.

65 Higher Education students were presented with both of the measures. They were selected on the basis of availability at the time of testing, and lecturers' willingness to participate. 24 students were studying Psychology at Level 3, whilst 41 were American Studies students at Level 2. As combined honours students, it is not known what their other subject areas were. Although these may have varied considerably, this is was not easy to control for. Around two-thirds were traditional age students, and one-third mature.

2.4. Materials.

Below are the items from the original measures, and the revised & corresponding items. Brief explanations are provided where appropriate. For reference, both questionnaires can be found in tables 4 & 5 (p. 68 & 69). One of the main aims behind these revisions was to re-word items in a way which would lend themselves more directly to asking students what they actually intend to do, as opposed to what they might have done in the past, or what they think or believe. A second aim was to re-

word items in a way which would avoid the possibility of students selecting responses because they appeared conceptually sophisticated. Every attempt was made not to lose the meaning of any original item, however, more of an emphasis was placed on the lower conceptual levels, for example, such items were presented in a positive light (see for example items 4, 6, 7 & 8). This was done so as not to present students with conceptions that they had not yet progressed beyond. In this way, students who had not progressed to the higher levels should just tend to disagree.

2.5. Revised & Original Items.

1. RQ1: "Collecting as much information as possible".

RQ2: "Learning is a quantitative increase in knowledge". (From Saljo (1979, also ASSIST, 1998c).

Students scoring highly on this item are measuring at the lower levels of the conceptual scale.

2. RQ1: "Looking for ways to get my own arguments across".

RQ2: "I know I have learned something when I can form counter arguments of my own". (from the RoLI, (Meyer, 2000), sub-section 'Independent Learning'; item 62.)

Students scoring highly on this item are measuring at the higher levels of the conceptual scale.

3. RQ1: "Learning material I don't understand by rehearsing it (reading, speaking or writing it out consistently) until I am sure I have grasped it.

RQ2: "I learn things whose meanings are not clear by a process of repetition or rehearsal" (from the RoLI, (Meyer, 2000): sub-section 'Memorising as Rehearsal', items 33 & 63).

(33. "I learn things whose meanings are not clear to me by a process of repetition or rehearsal')

(36. 'I remember things that don't make sense to me by writing them out over and over).

Students scoring highly on this item are at the lower levels of the conceptual scale.

4. RQ1: "Sticking closely to the views of other theorists/writers whose views are prominent in my chosen field of study".

RQ2: "I believe that learning is about discovering new ways of seeing things". (From the RoLI, (Meyer, 2000), from subsection 'Seeing Things Differently'; item 49: Also ASSIST (1999c), 'Conceptions of Learning', item 5: "[Learning is] an interpretative process, aimed at the understanding of reality".

This item has been worded to present a directly opposing view. Therefore, students scoring highly on this item are measuring on the lower conceptual levels.

5. RQ1 "Seeing how far new ideas/theories could perhaps fit in with what I already know".

RQ2: "In learning new concepts and ideas, I relate them to what I already know"

(From the RoLI, (Meyer 2000), item 6., subsection, 'Relating Ideas'.

Students scoring highly on this item are at the higher levels of the conceptual scale.

6. RQ1. "Working really hard in looking for the correct viewpoint/solution".

RQ2: "When re-reading a text, I start afresh with an open mind"

(based on items from the RoLI (Meyer, 2000), subsection 'Re-reading a Text'.

Section contains items designed to assess students' propensity towards open-mindedness. The revised item is also based around the work of King & Kitchener

(1994), whose lower conceptual levels outline an individual who is inclined towards the views of authorities, and less inclined towards critical, evaluative thought.

This item has been reworded to suggest that the notion of there being a single correct viewpoint is acceptable. Students who work hard and yet are at the higher conceptual levels should tend to disagree with this.

7. RQ1: "Not being too concerned with what other students might have to say in areas that I already know well myself".

RQ2: "I develop my ideas about a new topic or concept by talking to friends or other people". (From the RoLI (Meyer, 2000). Subsection 'Relating Ideas', item 36). This is also somewhat similar to item 5 (*this instrument*) as it measures an open-ness to new ideas. However it goes further in that it presents a possibility to measure an individuals' propensity to multiple viewpoints and the perspective of others.

Whilst the item has again been re-worded in an alternative way, the meaning is diametrically opposite, therefore students scoring highly on this item are at the lower levels of the conceptual scale.

8. RQ1: "Concentrating on passing the course, rather than wondering about other, different things I could possibly get out of it".

RQ2: "Learning is about developing as a person" (From ASSIST, (1998c) 'Conceptions of Learning."

Students scoring highly on this are at the higher end of the conceptual scale.

2.6. Scoring Procedure.

The revised questionnaire comprises of 9 items. Seven of these are presented as 'Surface' measures (1, 3, 4, 6, 7, 8, 9) and two 'Deep' (2 & 5). The questionnaire

containing the original items has 8 items. This is because item 8 will be repeated in the analysis and correlated with both items 3 & 7 on the revised instrument. These items, both 'surface', make a distinction between rehearsing for remembering and rehearsing for understanding. Item 8 is an accurate alternative for both of these. However, students tending towards the 'Deep' conceptual levels should distinguish between the two and score more highly on item 3 than item 7.

Next, mean scores will be examined in order to see how far each instrument is capable of detecting differences in conceptions. For both instruments, 'Deep' items will be scored as:-

'A' = 5: 'E' = 0, and 'Surface' items will be scored in reverse. For the revised measure, items 4, 6, 7,& 9 which have been worded in reverse to the original, will score as 'Surface'. These items should also correlate negatively with their correspondents.

Students will also be provided with an opportunity to comment on any instances where they respond 'not sure'. This information will be used where appropriate to make any necessary refinements to the instrument.

The overall intention is to produce a measure capable of detecting students'conceptions. This will then be used to compare with scores in Reflective Judgment, students' goals, and their reasons for choosing to study.

2.7. General Procedure.

The measures were given out to the students in lecture theatres, prior to the lecture itself. They were asked to complete both measures. They were also reminded that if

they did not wish to participate, then they should pass the forms back to the researcher.

2.8. Results.

A Spearman's Rho test was used to assess correlations between individual items and their corresponding items. Table 3 shows these results, including means and standard deviations.

Scoring keys.

Questionnaire 1. (Revised). 1 = very important; 2 = quite important; 3 = not sure; 4 = rarely; 5 = never.

Questionnaire 2. (Original items). 1 = strongly agree; 2 = tend to agree; 3 = not sure; 4 = tend to disagree; 5 = strongly disagree. In each cell there are two items. The first is the revised item, the second is the original.

Corresponding items paired for correlation: 1 – 5; 2 – 8; 3 – 7; 4 – 4; 5 – 1; 6 – 6; 7 – 2; 8 – 7; 9 – 3.

Table 3. Results of Correlational analysis of Revised & Original Conceptions of Learning Measures (N = 65).

(Emboldened items from Revised Questionnaire 1).

Items	mean	s.d.	r	p
1. Collecting as much information as possible.	1.7	0.67		
5. 'Learning is a quantitative increase in knowledge.	2.2	1.1	0.26*	0.03*
2. Looking for ways to get my own arguments across.	2.1	0.96		
8. I know I have learned something when I can form counter arguments of my own.	1.6	0.97	0.19	0.1
3. Learning material I don't understand by rehearsing it (reading, speaking or writing it out consistently) until I am sure I have grasped it.	2.3	1.1		
7. I learn things whose meanings are not clear by a process of repetition or rehearsal.	2.5	1.1	0.39	0.001*
4. Sticking closely to the views of other theorists/writers whose views are prominent in my chosen field of study.	2.4	0.9		
4. I believe that learning is about discovering new ways of seeing things.	1.6	0.6	0.07	0.5
5. Seeing how far new ideas/theories could perhaps fit in with what I already know.	2.0	0.9		
1. In learning new concepts and ideas, I relate them to what I already know.	1.7	0.6	-0.00	0.9
6. Working really hard in looking for the correct viewpoint/solutions.	2.3	0.9		
6. When re-reading a text, I start afresh with an open mind.	2.9	1.1	0.14	0.2
7. Not being too concerned with what other students might have to say in areas that I already know well myself.	3.0	1.2		
2. I develop my ideas about anew topic or concept by talking to friends or other people.	2.1	1.0	-0.14	0.2
8. Writing things out over and over until I remember them.	3.2	1.3		
7. I learn things whose meanings are not clear by a process of repetition or rehearsal.	2.2	1.1	0.27	0.02*
9. Concentrating on passing the course, rather than wondering about other, different things I could possibly get out of it.	2.4	1.2		
3. Learning is about developing as a person.	1.7	0.8	-0.14	0.2

Results from the correlational analysis showed that only three of the item-pairs correlated significantly. Interestingly these were all on the 'Surface' measures. For items 4, 6, 7 and 9, which had been worded in the reverse, all but item 6 show trends in an expected negative direction. However the values are small and showed no trend towards significance. This gives some support for the hypothesis.

It had been expected that items 4 & 4 would have correlated negatively, in that individuals who believe that learning is about discovery and 'seeing things differently' would have been unlike individuals who chooses to stick to the existing views of prominent theorists. However in hindsight, the latter could have been the strategy taken by a 'strategic' learner as opposed to either a 'deep' or a 'surface' learner. Items 6 & 6 were also expected to have correlated negatively, in that individuals who work hard in looking for a 'correct solution' would not have been ones who re-read a text with an open mind. This lack of relationship could have been due to the researchers own idea that 'looking for a correct solution' would be directly applicable to the 'problem' of answering an essay question. Students may have been thinking about different problems, such as choosing the correct statistical formula to apply to datasets. Possibly the researchers own view here was too narrow, and the item should have indicated the desired 'problem' more clearly.

In terms of the mean scores, it can be seen that on the whole, students were tending to agree with everything, whether 'deep' or 'surface', and this pertains to both measures. This would suggest that neither measure is capable of detecting differences in conceptions, at least not for this particular cohort. One point to consider is that this sample comprised of students in their second semester at Levels 2 & 3, which is not

the population that this measure will eventually be used with. Possibly these students have become more familiar with the terms. Also possible is the likelihood that these students do place the same amount of importance on all of the practices. In terms of the predicted hypothesis, it could also be that beliefs and intentions are not related at all, though this should be treated with caution given the small sample size and the possibility that this revised measure is really measuring what it purports to. In retrospect, it would have been prudent to include more items, which could have provided an increased opportunity for variability and therefore discernment.

A further explanation could be that the re-wording of the revised questionnaire was unsuitable, and did not lend itself to elucidating intentions, as opposed to beliefs. However, it is also highly possible that these results occurred because of practice effects. Students completed both measures in sequence, with the revised instrument being presented first. This may have created a focus on one particular viewpoint which, given the similarity of the measures was given no real opportunity to diversify. The order of presentation was likely to have had little effect, however it may have been wiser to introduce a gap between testing. Whilst this would have been ideal, there would have been no guarantee that the same students would have been available for testing, especially as the semester was nearing the end.

Somewhat disappointingly, many of the students did not take the opportunity to provide qualitative comments. However, more insight was gained from those who did. One student, commenting on item 6 in the revised measure, reported that:

> "*In some cases, there are no right answers, only your own*".

Interestingly, this student also scored more highly on the 'surface' items in both measures. A comment such as this would possibly be found from someone at the higher levels of King & Kitchener's 'Conceptions of Knowledge', for example, someone who is capable of reasoning through evidence and forming their own conclusions. That the student did seem to identify conceptions of learning and conceptions of knowledge as similar, again demonstrates the difficulty in clearly disentangling the two. However, as pointed out by King & Kitchener (1994), this does provide more support for the idea that the two are not always directly related.

Other students commented that they gave responses of 'not sure', because they found they had more than one answer to the item. For example, one student reported:

> "*It depends on what I am trying to do. If I am doing a multi-choice exam then I would look for the correct solution, but not if I'm doing an essay*".

Others reported that they were having difficulty trying to relate things to their different subjects and different types of tasks when responding, and that it was impossible to give 'one' answer. This is supportive of Taylor's (1983) contention that students are aware of situational changes, and often re-negotiate their behaviour accordingly – whether their more global conceptions of learning are either deep or surface generally.

2.9. Summary & Conclusions.

To summarise, findings from this study suggested several things. Firstly, that there is either no relationship between beliefs and intentions, or that this is difficult to disentangle. Whilst supportive of the hypothesis, findings also suggest that it would be unwise to proceed with this revised measure, as there was no evidence that this

itself was capable of detecting differences in conceptions of learning. However it is also suggested that the original measure is similarly of limited use.

It is acknowledged that the sample used were possibly taking a range of different subjects, and that they may all have been expected to do different things across different subject areas. However this does not necessarily throw the findings into question. This may have been indicative of previous research evidence which has shown that there are a wide range of factors which can influence conceptions of, and approaches to learning such as differences across tasks and subject areas (Entwistle, Meyer & Tait, 1991; King & Kitchener 1994; Laurillard, 1997; Scouller, 1988; Taylor, 1983). For example, it is likely that at least some of the students were taking Information Technology or Business Studies as part of their degrees, as either their first or second choice to American Studies. In the case of Information Technology, there is less of an emphasis on essay-writing skills, and related foci such as producing clear written arguments. More emphasis is given to logical problem solving tasks, as pointed out by Laurillard (1978). In such cases, the particular education received (and performance expected of students) may well have led to different conceptions as to what learning really does consists of.

It is concluded from these findings that research needs to account for a more diverse body of students than either this, or previous research has accounted for. As pointed out by Marton, Dall Alba & Beatty (1993), 'conceptions' as derived and outlined in questionnaires are based upon the experience and beliefs of the researchers themselves; similarly they may not always be appropriate for what might have been perceived as a homogenous body of students. Therefore it seems that further research needs to account for students' own prior experiences and expectations of Higher

Education (Meyer, 2000) before constructing a measure that they can perhaps more realistically relate to.

Table 4. Example of Revised Questionnaire (RQ1).

Please rate the extent to which each of the following statements reflect your intentions and priorities towards learning and succeeding in your Higher Education studies.

Score: -

A = very important

B = quite important

C = not sure

D = rarely

E = never.

I intend to do well in my studies by: -

		A	B	C	D	E
1.	Collecting as much new information as possible.					
2	Looking for ways to get my own arguments across.					
3	Learning material I don't understand by rehearsing it (reading or writing it out) consistently until I am sure I have grasped it.					
4.	Sticking closely to the views of others whose ideas are prominent in my chosen field of study – especially when drawing conclusions.					
5	Seeing how far new ideas and theories fit in with things I already know.					
6.	Working really hard in looking for the correct viewpoint/solution.					
7.	Not being too concerned with what others might have to say, in areas I already know really well myself.					
8	Writing things out over and over until I remember them.					
9	Concentrate on passing the course, rather than wondering about other things I might be able to get out of it.					

If you have answered 'not sure' to any of these items, could you please state why you have found it difficult to respond. Any comments you have will be taken into account.

Table 5. Example of Revised Questionnaire (RQ2).

Please rate the extent to which you agree with the following statements about studying in higher Education.

Score: A = Strongly Agree.
B = Tend to Agree.
C = Not sure.
D = Tend to disagree.
E = Strongly disagree.

		A	B	C	D	E
1.	In learning new concepts and ideas I relate them to what I already know.					
2	I develop my ideas about a new topic or concept by talking to friends or other people.					
3	Learning is about developing as a person.					
4.	I believe that learning is about discovering new ways of seeing things.					
5	'Learning' is a quantitative increase in knowledge.					
6.	When re-reading a text, I start afresh with an open mind.					
7.	I learn things whose meanings are not clear by a process of repetition or rehearsal.					
8.	I know I have learned something when I can form counter-arguments of my own.					

If you have answered 'not sure' to any of these items, could you please state why you have found it difficult to respond. Any comments you have will be taken into account.

Chapter 3.

Exploring the Student Perspective: - Sample Selection, Interviews & Findings.

3.1. Introduction.

Previous research has found that the relationship between conceptions of learning and approaches to learning may be difficult to disentangle. Findings from the preceding chapter also demonstrated that not only may this be the case, but also that measuring conceptions of learning themselves may be difficult to assess. It was concluded that this could have resulted from a lack of attention to students' previous history, and therefore, their expectations of what learning might entail in any one particular subject area. In this event, it was decided to next proceed by collecting interview data from the same student cohort that would eventually be tested, thus a questionnaire could be constructed from data that students could themselves relate to.

3.2. Revised Methodology & Rationale.

The original intention had been to use a quantitative approach to this research. A quantitative approach is derived from the positivist paradigm. This particular paradigm is based on the assumption that to a greater extent, knowledge is objective; that there is a 'truth', or one reality that can be ascertained through the use of inductive logic (Rocco, Bliss, Gallagher & Perez-Prado, 2003). Collecting data from the social world in this way (through the use of questionnaires for example) allows the researcher to keep their own beliefs and values as far as possible outside of the research and analytical processes. Such an approach is said to be able to allow the researcher to collect large amounts of data, and thus is appropriate when the aim is to establish 'truths' and generalise to a large population.

Until relatively recently, this has been the dominant paradigm in the social sciences (Rocco et al, 2003). However there have been challenges to this tradition from those operating from a qualitative perspective (Denzin 1978; Patton, 1990). Researchers in this field operate under a different set of epistemological assumptions. They have argued against the notion of objectivity, claiming that the best way to understand and explain social phenomena is to become completely immersed in the research process and view the phenomena in context (Trochim, 2006). They have also been critical of the quantitative approach in that it fails to elicit the richer, more detailed aspects of phenomena that can be lost when exploring sets of statistical data. A chief strategy of the quantitative approach is to 'fit' the data into pre-existing categories rather than to provide a 'thick' descriptive account.

Both paradigms operate from opposing ontological assumptions. Quantitative researchers begin the process with a specific research hypothesis. The aim is to test this and then either accept or refute the premise. That is, the research is theory-led. On the other hand, qualitative researchers take a more exploratory approach, and are said to begin the process without any pre-held conceptions about the nature of the phenomena under investigation. They make no assumptions about 'reality', arguing that this does not exist independently outside of any individuals perception (Trochim, 2006), including the researchers own.

Whilst the debate still continues (Trochim, 2006), there are those who have attempted to combine the methodologies. Denzin (1989), also Patton (1990) developed the method of triangulation, this which uses both qualitative (linguistic) and quantitative (numerical) data to establish greater validation for research findings. However Patton

(2002) stated that the purpose of triangulation was to test for consistency rather than to use the different approaches to explore inconsistencies in findings.

Currently many researchers are using a 'mixed methods' approach (Cresswell, 1994; Rocco et al, (2003). Whilst there are still debates from a purist perspective (that is, those who subscribe strictly to either the qualitative or the quantitative approach), it is said that many researchers do, and have employed both qualitative and quantitative data within the same study (Miles & Huberman, 1994). Trochim (2006) for example, points out that those who use quantitatively-based questionnaires often ask for respondents to add anything to the survey that the questionnaire may have missed out. Consequently, these data are then codified for analysis. Alternatively, questionnaires are typically constructed using linguistic data primarily, before more quantitative analyses are carried out. Finally it has been pointed out that even numerical data are not analysed objectively (Miles & Huberman, 1994;Trochim 2006; Tashakkori & Teddlie, 1998). For example any numerical point on a likert scale contains a specific meaning and therefore a subjective judgement which is accounted for in the analysis. Thus the distinction, at least at the methodological level if not philosophical, is not always directly a clear cut one. It is argued that many researchers are in fact using a mixed-methods approach whether they are aware that they are doing so or not (Tashakkori, Aghanjanian & Mehryar, 1996).

Patton (2002) suggests that the debate as to which is the correct approach is less important than looking for ways to 'match research method and paradigm to the purpose, questions and issues raised' (in Rocco et al, 2003, p20). In view of the difficulties experienced and issues raised in the previous study (Chapter 2), it was

decided to proceed with this research using a mixed method. This can be done at any time during an investigation, using any number of quantitative and qualitative approaches, and this does not, as demonstrated above, dictate the overall analyses due to the fact that both linguistic and numerical data can be converted (Miles & Huberman, 1994). As Rocco et al., (2003) contend, the benefit of mixing allows for both the exploratory inductive processes and confirmatory deductive processes.

Findings from the previous study (Chapter 2) to some extent highlight the weaknesses of using a strictly quantitative approach. Questionnaires were constructed using items from pre-existing instruments, yet no clear distinction was found between deep and surface approaches to learning. Whilst some of the potential reasons for this finding have already been discussed, it is possible that students did not perceive and understand the items in the same way that others may have done when the questionnaires were first constructed in the 1970's. Attention is again drawn to the comments of Marton, Dall Alba & Beatty (1993) who pointed out that conceptions are not entities which exist in a vacuum; the ways in which individuals describe their beliefs and conceptions may differ. They distinguish between concepts themselves and their categories of description, arguing that such descriptions are derived from the researchers own particular understanding of a phenomena, and as such, are not truly phenomenographical. Therefore the need to adopt a more qualitative approach was required in order to gain a more richer understanding of students beliefs and perceptions, and explore the finer aspects of the students worldview that a quantitative questionnaire might be unable to elicit.

Secondly, with respect to the aim of the research, which was to collect a large amount of data, it was acknowledged that using a quantitative approach only would not fulfil this entirely. Rich descriptive accounts are useful and informative, but in themselves as phenomenographical accounts, they are specific to the individual and do not easily allow for generalisations to be made to a population. Therefore, this research uses both exploratory (qualitative) and confirmatory (quantitative) methods.

Amongst researchers who dismiss the extreme claims of the purist perspective, there are said to be two different positions in mixed methods research (Greene & Caracelli, 1999; Rocco et al, 2003). These are said to be the pragmatist position (Reichardt & Rallis 1994; Tashakkori & Teddlie, 1998) in which researchers employ whatever philosophical and/or methodological approach which will work best to meet the practical demands of a particular enquiry (in Rocco et al, 2003, p. 21). Next is the dialectical position (Greene & Caracelli , 1997) in which researchers specifically look for the benefits of using approaches from the two different paradigms, in recognition of the fact that these can compliment each other and draw out a clearer understanding of the phenomenon of interest. Whilst the pragmatist position is concerned with compatibility of methods, the pragmatist position seeks complimentarity (Rocco et al, 2003).

This research therefore adopts the pragmatist position. Firstly, from a qualitative perspective, a number of in-depth interviews are carried out to explore at a phenomenographical level, the current student perceptions of Higher Education (this chapter). From these data, a questionnaire is constructed (Chapter 4) which

incorporates and reflects this perspective, allowing the further collection of quantitative data from a larger sample so that generalisations may be made.

3.3. Sample selection.

The first issue was that of deciding which students to select for interviews, as there would be no prior knowledge of their conceptions of learning at any level. Random selection may have produced a sample biased towards either end of the deep –surface hierarchy, meaning that a range of appropriate data could not be collected for questionnaire compilation. Asking students to volunteer may have also led to a sample biased on specific characteristics. For example, those who have done well in the past may have wished to take advantage of an opportunity to discuss how to maintain their standards. In any case, as it would have been impossible to interview an entire Level 1 cohort, a way had to be found to derive a representative sample. It was decided that one useful way to proceed would be to first administer the Triarchic Abilities Test (Sternberg 1993), and from these data, select an appropriate number of students from each of the three categories (see section 3.2 for outline of this test). This chapter will outline the research undertaken to explore students' expectations and perceptions of Higher Education. Recruitment of participants is outlined, and following, the results of a thematic analysis of the interview data.

3.4. Recruitment of Participants.

The aim was to collect a minimum of at least 21 in-depth interviews from students, who were selected on the basis of their Triarchic Ability scores[1]. This test is used to explore three different types of learning style in an individual. The intention was to explore the perspectives of ten randomly selected students scoring highly on the

[1] Triarchic Ability Test scores: see chapter 5, General Discussion.

Analytical component, ten on the Creative, and ten on the Practical. Briefly, students scoring highly in the Analytical category are those who are said to be logistical, analytical thinkers. 'Creative' students are divergent thinkers who like to generate new ideas and excel in novel situations. 'Practical' students are those who like to apply knowledge to new situations, and are skilled at adapting their environments to suit their needs (Sternberg, 1998). It was felt that as this test could be this would be a useful way to group students in terms of their differing learning styles, in order to find a range of different outlooks and perspectives. This test can be administered to a number of students in paper form, and data collected quite quickly. This is opposed to a number of others which require the use of computers, and are logistically more difficult and time-consuming to administer.

The test was administered to 167 Level 1 students. Most students found the test somewhat difficult, and did not manage to complete it. Response sheets showed the majority of students had not completed the final 'Practical' section. It could therefore not be said for certain whether there had been insufficient time to attempt these items, or that students had simply found them more difficult than previous sections, and could not answer them at all. In any case, very few response sheets were completed, meaning that no true categorisations could be made. Neither could any realistic analyses be performed on these incomplete data.

Given that the results of the Triarchic Abilities Test was the only available data with which to provide some means of categorising students, the next step was to approach a set of students based on their high scores (10-12) in the Analytical or Creative components, and select the only two who had completed (and scored highly) on the Practical. Whilst not ideal, this was felt capable of providing at least some identifiable

variation in the sample. However, out of 167 students tested, there was only one high score of 10 on the Analytical component and scores tended generally to be lower overall within the Creative component. Therefore, 10 were selected on the basis of their mid-to-high (8-10) scores on the Analytical component, and similarly for the Creative.

These 22 students were all approached following the end of their second Psychology seminar of the semester. They had previously been informed about the nature of the research at the time of testing; in this instance they were told that they had been selected to take part in one-to-one interviews on the basis of their scores on the Triarchic Intelligence Test. Individual appointments were made for the following two weeks. Only five arrived to be interviewed over the course of the next three weeks, these included the two who had scored highly on the Practical component of the test, and 3 who had scored mid-to-high in the Analytical.

The selection criteria was therefore amended. The rest of the cohort were tending to score around the midpoint of 6 on the sections they had completed, and there was no evidence in the pattern of scores that suggested that there might be another way to distinguish between participants. There were several students in the sample who had scored extremely low in all components, and in view of these results, it had been considered to include some of these as a comparison. However, given the nature of the testing conditions, which required that the test be completed in a relatively short space of time, it cannot be concluded for certain that scores were low because of poor ability. There were also no real-life implications for achieving low scores, therefore these could have simply been reflecting a lack of willingness to participate. Findings

here are derived from a research exercise, in which case it is likely that there could have been relatively low levels of commitment from participants.

Next, all Level 1 students were approached during their weekly psychology seminars, and asked to make appointments after their sessions if they were willing to be participate. In all, twelve students agreed to be interviewed. These students and their Triarchic Ability profiles are shown in table 6. There were three mature students (participants 1, 6 & 7), and 9 traditional age. Their ages ranged from 18 – 39 and by chance, there were 6 males and 6 females.

Table 6. 12 participants & their Triarchic Ability Test scores.

			Triarchic Ability Scores		
N	Participant (m/f)	Primarily Selected.	Analytical	Creative	Practical
			(out of 12)	(out of 12)	(out of 12)
1	LH f		2	5	3
2	NH m	*	8	7	10
3	KB f		8	6	1
4	IW m		5	6	3
5	CL f		7	3	0
6	RC m	*	6	6	11
7	PW f	*	8	5	0
8	NH f		6	2	1
9	SD m	*	10	7	0
10	JM f	*	5	6	0
11	SMC m		5	6	0
12	MD m		5	3	0

The 12 participants had entered Higher Education from a variety of different socio-economic backgrounds. These ranged from 18 year olds who had progressed directly from Further Education studies, and who had never worked. Several were working part-time to support their current studies. Other students had given up their employment to seek new directions – some of these were well-paid managerial positions, whilst others were less professionally orientated. Some students were clear

on their reasons for entering Higher Education whilst others admitted to pressure from parents – in these cases, there were no clear aims. Whilst the numbers were relatively small, the sample was sufficiently diverse as to provide a range of useful information. No student had attended any previous Higher Education courses which would have rendered accounts of their early experiences invalid. One participant (M.D) had enrolled the previous year, but had temporarily withdrawn due to illness. This had occurred quite early in the year, and it seemed that very little time had actually been spent studying. Whilst this could have meant that M.D. was slightly less naïve, there was no evidence in the interview account to suggest that he had an outlook that was qualitatively different to the rest of the sample, and that he should be excluded from the analysis.

3.5. Procedure

All participants were interviewed individually in the researcher's office. Before the interviews began, they were briefed about the nature of the interviews (e.g. that the general aim of the research was to look at their expectations of Higher Education), and given a very general idea of the types of questions that they might be asked. They were told that they need not feel constrained by the questions, and they were free to speak about anything else that they felt had been an important part of their early Higher Education experience. Any questions that were experienced as awkward, difficult or distressing could be passed over. Students were encouraged to chat freely about anything they liked for several minutes prior to the interview itself, primarily to ease the tension of an unfamiliar situation, and to facilitate rapport with the interviewer. When the researcher was confident that the student was reasonably comfortable, the interview began.

The first step was to ask permission to record the interview. It was explained that the purpose of this was to aid transcription and that recordings would be erased immediately after this had taken place - unless the student wished to keep the recordings for themselves. They were also told that no other person would have access to the recordings except for the researcher, and that if any part of the transcript should be reproduced at a later date, then this would remain anonymous. No student refused permission to record the interview, and none requested that their recording be either returned to them, destroyed, or that their data be removed from the study. Tapes were erased when the students graduated.

All interviews took place between 16th October and 7th December 2001. This was a considerable duration, and it is recognised that the 'expectations' reported by those interviewed later may well have been less naïve than earlier accounts. This was unavoidable because of students' college timetables, and also the problems of recruiting. However, the majority of the accounts tended to report very similar issues and ask the same kinds of questions. No interview was considered to be sufficiently different from others as to warrant exclusion.

3.6. Interview Schedule.

Whilst the aim of the interview was to explore students' expectations of Higher Education, it was felt that some structure was necessary for several reasons. Firstly to give students an idea of what was being explored to avoid silent periods. Secondly, there were certain phenomena that the researcher wished to address directly, and it was felt that these areas may not have been generated if left to chance (see table 7). Specific areas of concern were students' perceptions of teaching practices, and their

perceived roles of tutors. It was hoped that these questions would go some way towards eliciting conceptions of learning (questions 2, 3, 4 & 5), and also to provide an indication of the students current propensity to think critically. Also the intention was to explore how far students might have realised that they would be expected to take a more independent stance to their learning. A second aim was to explore students' reasons for choosing to study, that is, did they have any long term-goals in mind, and if so, what might these be. This was asked in order to explore at a later point, how far such decisions may influence the development of critical thinking (questions 6 & 7). Questions 1, 8, & 9 were more exploratory in nature, and asked in order to uncover any other important aspects of the student perception which the interviewers own questions did not necessarily invite.

In instances where students had difficulty responding to questions, or it was apparent that they had no clear views, then the topic was changed. However, such instances rarely occurred. Students tended to ask for clarity in most cases, and all seemed keen to express their views. There were nine questions in all which formed the basis for the semi-structured interviews. The majority of interviews lasted for approximately 45 minutes with the longest lasting for 1 hour/10 minutes, and the shortest 23 minutes.

Table 7. Interview Schedule.

1	How are you finding Higher Education generally?
2	How are you finding the teaching?
3	What do you think is the role of tutors?
4	What do you think is the purpose of lectures?
5	What do you think is the purpose of seminars?
6	Where do you see yourself in three years time?
7	What are you expecting to gain from Higher Education?
8	What have you learned so far?
9	Has anything in particular stood out for you?

3.7. Results.

Students responded well to all of the questions. Sufficient material was generated to provide a broader picture than had been expected of student's experiences and expectations A thematic analysis was selected as the aim was to sort and categorise the data rather than to carry out an in-depth analysis of language or personal experience. A phenomenographical and interpretative approach would not have been appropriate given the need to extract clear and unambiguous items of information with which to provide a questionnaire.

3.8 i. Stage 1. Initial Categorisation of Data.

First of all, the interview texts were broken down into individual comments (a sentence or phrase consisting of a single meaning) and these were placed into appropriate categories in order to address and answer the researchers questions. In the first instance, the 9 questions were treated as pre-existing categories or themes and all direct responses to these were taken as support. None of the questions had to be abandoned through lack of support (i.e. non –responses from students). As lots of the interview time was spent talking about students' own personal views and experiences, not all the data fitted into existing categories and new ones were generated in the process. However, in most cases these areas or items were expansions of the researchers original question, so whilst they were not too difficult to categorise, many were arguably suited to more than one category. At this first stage of analysis, ambiguous comments were placed in all of the potential categories and explored further in Stage 2. On the following page, Table 8 shows a list of all the pre-defined questions-as-categories with example responses.

Table 8. Questions (Categories) with examples of Supporting Comments.

1	How are you finding Higher Education in general?	"Its all above my head" (IWm) "Self-conscious amongst other students – I shouldn't be here really" (PWf) "Worried about not making new friends". (NHm)
2	How are you finding the teaching methods?	"A-Level is real teaching – they give you handouts" (CLf) "They [lecturers] don't chase you up" (SMCm) "Here, you're on your own and you've got to do what you think". (PWf)
3	What do you think is the role of lecturers/tutors?	"Main thing is, they're trying to get you to go away, and learn for yourself" (NHm) "… role is to keep you doing your work" (CLf) "If they're bored, you're bored." (NHf)
4	How are you finding your lectures, and what do you think is the main purpose of them?	"They should be paced correctly" (RCm) "They outline what is important" (PWf) "You sit back and just take it in" (MDm)
5	What do you think is the purpose of seminars?	"Go in a little bit more, in more detail". (SMCm) "The tutor is trying to get at for all of us to do it". (MDm) " Expecting them to be more like A-level" (CLf)
6.	Where do you see yourself in 3 years time?	"Do another degree – at least I'd get a loan." (SMCm) "I want a job where I'm really keen to get out of the house" (PWf) "No idea to be honest." (IWm)
7	What are you expecting to gain from your Higher Education studies?	"To grow in confidence" (NHf) "I want to find something that I can get really involved in" (MD) "I'm waiting for that little light bulb" (KBf)
8	Has anything in particular stood out for you?	"Hard work, but expecting this". (CLf) "Living in halls, away from home" (IWm) "The differences between mature and traditional students"
9.	What do you think getting an education means?	"To have an awful lot of knowledge" (NHF) "Preparing for later life" (RCm) "Its better than getting a job". (IW)

3.8 ii. Stage 2. Newly Emerging Themes.

The second stage of the analysis was a re-examination of data which the above categories could not clearly account for. This process explored newly emerging themes, and also those comments which were isolated and would not support the creation of a new category.

There were 2 new themes which emerged. One was that of 'Academic Subjects'.

Several participants talked about the subjects they had chosen, e.g.:

> "Um...and I was going through, sort of Drama and American Studies, no interest. European Studies, no interest. Um...*very* surprised to see Psychology as something you could combine it with, 'cause although there was sort of a very embryonic interest, well, embryonic knowledge, the interest was there." (Lines 167-171: NHm)

> "Sometimes with the English, I don't understand it. So I don't find it interesting. Don't get it". (Lines 14-15: CLf).

In the main, the majority of references to academic subjects were framed in one of two ways. Most of them were similar to the above, in that there was an element of concern over whether the right subject had been chosen or not. Others were more positive, e.g.:-

> "Well I 'm really enjoying the course [...] I 've learned Psychology is a very interesting subject, that I would like to spend a lot of my life in it."(Lines 170 – 172: RCm).

The second theme to emerge was that of 'Anxieties'. This theme ran fairly consistently through many of the others, including expectations and experiences of the educational context itself, e.g.: -

> "I'm enjoying them I suppose [lectures]. It's not above my head yet, which I worry about". (Lines 43 – 44: IWm).

Yet the concerns expressed were not always located in this area. Many were far more practical, everyday issues related more to coping and dealing with a new lifestyle.

> "I'm using the phone a lot more which isn't too good. It isn't good because it costs a tenner every time you want to top up your phone".(Lines 18 – 19: SMCm).

> "It's going to take a lot of time to get used to, on my own [living in halls]".(Line 141 : KBf).

Participants were concerned with a whole range of issues, such as time management, feeling insecure amongst other students, and keeping sufficiently motivated to do the work set. Several also had work commitments which they were concerned about. After some consideration, it was decided that these themes could be merged into just one category of 'Anxieties', as all these matters were being addressed mainly in terms of the impact they might have on academic performance. In any case, any of these factors may have an important and insightful influence on how well, if at all, students are successful at developing their skills of critical thinking. They may also help in identifying others who do not.

Other potential categories to emerge were that of (a) Working in Groups, and (b) Unique Learning (this which is the compulsory 'key skills' component of the degree programme). Unique Learning was a strong, recurring theme mentioned by 6 out of the 12 participants. Many addressed this in negative terms, in that they were not expecting to have to do it, and also they felt there was no purpose to it. This was not included as a category for further analysis, as evidence suggested that it had not been anticipated at all, and was therefore not a part of the students prior perceptions. However because of the strong feelings about this, it was considered that any future questions which pertained to 'lectures' might suitably account for this. Again,

evidence from transcripts suggests that students were seeing it as such, to the extent that it was perceived as a 'seminar'. 'Working in Groups; was also excluded in and of itself for much the same reasons, as there was no real evidence to suggest that students had not been expecting this. When the topic was addressed, it was mainly in terms of perceived differences in performance of mature and traditional students, and the confidence to speak up in front of others. Interestingly, it was the mature students who appeared more willing to speak, yet they were the ones who were more lacking in confidence. These issues are covered in 'Anxieties'.

A final theme is included in the analysis which to some extent 'emerged', but in reality it was something that one participant flagged up during the course of the interview. In a discussion of 'the purpose of lectures', it was found that NHf viewed lectures as auxilliary to the learning process, and it was the process experienced and carried out by the learner that led to becoming educated. This was quite a surprising view, and one that had not been anticipated. In any case it led to the development of a further question: - 'What do you think it means to be educated? This was considered useful, in that it might provide a further insight into students conceptions of learning. As this emerged quite early in the interview process (Interview 2), it was considered appropriate to include and explore this in further interviews.

3.8 iii. Isolated Comments.

In a small number of cases, individual comments were mentioned only once, for example, there was only one student who reported anxieties about living away from home and parents. This was accepted and included for three reasons; (a) a good proportion of the student population commonly does live away from home; (b) a small sample size of 12 may have been slightly disproportionate, which in

conjunction with the previous point does not render it invalid, and (b) students who *were* living in halls at the time of the interviews were perhaps spending more time settling into a strange place than others, and could afford less of their time to interviews.

Finally, a further exploration of the data suggested that there were in fact a range of comments that an objective observer might reasonably place in more than one category. Given that this was the first stage of piloting a new instrument, it was decided that where the researcher could not clearly ascertain from the transcripts in which category a comment was located, then it should be placed in all categories of potential relevance. (In all instances this did not exceed 2). It was hoped that later statistical analysis would provide further clarification.

3.8.iv. Stage 3. Final Merging & Deletion of Categories.

7 categories were derived from the original 9. Following is an outline of the process.

Question 1. The Role of Lecturers/Tutors.

This category was retained, unchanged. There were no references to lecturers or tutors in any way other than their job, or perceived roles given here, and there was no overlap with any other category.

Question 2. The Purpose of Seminars.

This category was merged with Question 3: 'The Purpose of Lectures'. This was because the many of the students interviewed were unfamiliar or at least unsure about seminars as a method of instruction, having never experienced them in the past. Some required an explanation of what they were. However, even students from an 'A' level

background who claimed that these had been an important part of their curriculum, quite often tended to treat the two as interchangeable and discuss them under both terms. Therefore a seperation of the two could well have been meaningless to these students.

Question 3. The purpose of Lectures.

There were some differences in the ways that students responded to this and the previous question. However, whilst there had been some considerable vagueness about the concept of seminars, this was not the case with lectures. All students interviewed alluded to a traditional didactic, teacher-led view of lectures, even though several had not yet attended any. All held the view that these were very large affairs in terms of student numbers. Whilst students were already making comparisons about the differences in teaching methods in their previous courses, it was clear that they had only been expecting this difference in size. All other perceived differences and expectations tended to be judged in relation to previous courses, for better or for worse. The category was named 'The Purpose of Lectures' to include both this and the previous category 2.

Question 4. How Are You Finding Higher Education in General?

This question had originally aimed to explore the perceived differences between students' previous learning experiences, and their present courses. Whilst the question was not unsuccessful in eliciting the desired responses, it was observed that all tended to be framed in terms of anxieties. For example, there were reports of being overwhelmed by a much larger student population, and of feeling '*self-conscious*' about this. There were related issues of being '*worried*' about not making new friends. Also the course material was perceived to be different , in that it was '*all*

above my head'. This theme of anxiety also ran similarly through students responses to Question 9 (' What is the most prominent aspect of your experience so far?'), therefore the two categories were merged into one – 'Anxieties about Higher Education'. (see also Question 9, this section).

Question 5. Where Do You See Yourself In 3 Years Time?

The aim of this question was to explore students long term goals, but more directly, in terms of how they expected, or intended to progress through the course in view of these. It was hoped that this information would be able to provide a base for comparison when students were re-tested at the end of their courses, and to look at potential changes of direction. This category was renamed 'Future Directions'.

Question 6. What Are You Expecting To Gain From Your Higher Education Studies?

The aim of this question was again to explore goals, but more in terms of how students felt Higher Education might be able to benefit them in ways other than gaining an academic qualification. There tended to be much more insight into intrinsic reasons for wanting to study here, therefore the category was renamed 'Personal Aims'.

Question 7. What Do You Think Getting An Education Means?

This question saw students discussing what they thought it meant to be educated, and what they believed education itself actually was. This was distinct from other categories in which education had been considered, as it was more of a reflection on the idea rather than what students more practically, intended to do during their studies. No changes were made to this category.

Question 8. How Are You Finding The Teaching Methods?

Perhaps unexpectedly, this category was found to be distinct from categories 1, 2, & 3, which referred directly to teaching methods. Students tended here to discuss how they actually felt about the teaching methods rather than describing them, and they were also keen to discuss how they were coping. Interesting also was the finding that hardly any of these comments could realistically be placed into the new category of 'Anxieties'. Where students were anxious this tended to be blamed more on the amount of work and the level of it, rather than how it was being 'taught' to them. In the main, students tended to discuss how they perceived the new teaching methods would affect them and their progress, and for this reason, the category was renamed 'Expectations Of Higher Education'.

Question 9. What Has Been The Most Prominent Aspect of Your Experience So Far?

This category contained a range of experiences that had been prominent for students. Yet similar to category 4, these were all events that had had given students cause for concern. In some cases problems had actually occurred, whilst in others these were anticipated whether this had happened already. There was also a good deal of similarity in terms of the types of things students were highlighting, so for this reason, the category was merged with Question 4 under the new name of 'Anxieties'.

3.8 vi. Final list of Categories

Below is a list of the final seven categories, which appear in the order that they are given in the questionnaire itself.

1. (Section A) Expectaions Of Higher Education
2. (Section B) Personal Aims
3. (Section C) Lectures

4. (Section D) Lecturers/ Tutors

5. (Section E) Anxieties about Higher Education.

6. (Section F) Beliefs about Education

7. (Section G) Future Directions

3.9. Reflexive Account.

In the main, it was felt that the interviews went well. There had been some concerns that participants might hold back as the interviewer was a member of staff, but this did not appear to have been the case. It was circumstantial, and possibly beneficial that none were being taught by the researcher at the time, therefore there were no directly problematic power relations which could have distorted the accounts. Given that most of the participants felt anxious about many aspects of their early experiences and perceptions, the interviews could have provided a useful opportunity for students to air them. In retrospect it may have been somewhat more beneficial for participants if the researcher had provided more advice, but alternatively this could have re-directed the course of the interview itself. Advice was given in some instances, where it was thought this might not occur. On termination of individual interviews, most participants appeared to have gained something from the process. Only one left without having appeared to have done so, however she was rather more bored than distressed in any event. Her account was relatively short and sparse.

That most of the participants seemed willing to chat freely, leads to the potential issue of a biased sample. The initial aim to select on the basis of Triarchic Ability test scores would have got around this. However, 7 out of the 12 participants in this sample were self-selecting. In consideration, this is not likely to have influenced or

biased the accounts, as the issue under investigation was relatively self-contained, and the questions themselves were standardised throughout the process. Any diversion, or extra materials gained could only benefit rather than distort the results.

Chapter 4.

Compiling a Questionnaire from Interview Data.

4.1. Introduction.

This chapter outlines the procedure carried out to compile a questionnaire capable of measuring student's conceptions of learning. Thematic analysis of the interview data (previous chapter) produced seven distinct themes, therefore the questionnaire was organised around these. Items were compiled in each subcategory according to representative statements provided by students; these comprised of a single sentence containing one unique meaning. All were checked and reworded to remove grammatical errors and abbreviations. This process resulted in the production of a 156-item instrument.

The completed instrument was problematic in terms of its size. At this present stage, the aim had been to be over rather than under inclusive so that no potential 'perceptions' were lost. Nonetheless, problems were anticipated in terms of students remaining motivated to complete the questionnaire. Similarly, they may have become bored, thus losing concentration and producing meaningless data. Therefore the next step was to apply a data reduction technique. It was decided that in view of this, that the questionnaire be piloted, subjected to factor analysis, and refined for the next incoming cohort.

4.2. Participants.

The 156-item questionnaire was given out to a cohort of Level 1 Psychology students at the end of semester 2, in their Research Methods sessions. Students were recruited on the basis of their availability and willingness to participate. Data was collected

from 71 students. This was the same cohort of students from which the original sample of 12 were drawn. Whilst this did not appear to present any real issues, there could still have been some problems of response validity. The questionnaire aimed to assess expectations of Higher Education and in this instance it could have been measuring reflections of early experience. Nonetheless this sample was the only real possibility given the time of year. Levels 2 and 3, who would have been far less naïve anyway, were preparing for exams and not available for testing.

4.3. Results of a Principle Components Analysis on the 156-item Questionnaire.

It was decided that a Principle Components analysis should be carried out on the data as this does not test, or seek statistical support for pre-determined hypothetical structures. Rather it is more appropriate to use when exploring for structure where none is assumed to exist (Kline, 1996). In view of the criteria for carrying out this analysis, the data was analysed section by section, as the sample size of 71 did not meet the requirements of being at least twice the number of items (Kline, 1996). For each section, the original table is provided for ease of reference.

Results of the analysis shown here (sub-section by sub-section) give the revised items produced from the original statements which loaded together. It is common practice when using this kind of reduction technique to eliminate items which produce low loadings, or do not load on any identifiable factor. However for the purpose of this particular analysis, items which were found to be distinct and/or isolated from any calculated factor were retained. It is recognised that these items would normally be considered redundant or unreliable, however as the interview data was collected from a relatively small sample of twelve, and the questionnaire piloted on N=71, these

items may have been meaningful in a larger sample tested in future. It was felt important not to lose anything that may have been essential, even if this initial analysis suggested otherwise.

For each sub-section, the original items are firstly provided in tables. Following, the results of the factor analysis are shown, along with explanations and descriptions of which items were collapsed and why. At the end of each sub-section, a further table is provided to show the new items as they will be collated in the revised instrument.

Table 9. Sub-section A. Expectations of Higher Education. (11 items).

1	I'm expecting the course to introduce me to lots of issues and debates
2	I expect that the course will force me to question myself and my ideas
3	The course will be fairly easy once I have settled into a routine
4	In order to do well, all I really need to do is to find the right answer to set questions
5	As an undergraduate I will not be expected to question existing theories and literature
6	Most of my learning will be as a result of listening closely in lectures and seminars
7	Most of my learning will be the result of reading textbooks in my own time
8	Most of my learning will take place though talking to others on my course
9	Most of my learning will be the result of having completed set tasks
10	Most of my learning will take place whilst I'm working through the tasks I'm required to do
11	Most of my learning will come about through thinking about what I have done in previous tasks

4.4i. Results: Sub-section A.

From these 11 items, 3 factors were derived which explained 56% of the total variance. A varimax rotation gave the clearest factor structure.

Factor 1.

6 items loaded on this factor, which had an eigenvalue of 3.46, and explained 31% of the total variance (items 6, 7, 8, 9, 10, 11). The dominant theme here was that of students' expectations of learning in Higher Education; that is, how they actually imagined they would go about the process in order to complete set tasks. There were several different themes within this factor, all of which were considered to be distinct from each other as learning methods. Items 9 & 10 suggested a view of learning as a

'hands-on phenomena', which occurred via working through and completing tasks. Another view was that of learning as something which occurs via the collection of information from lectures and books (6, 7). A third view was that of learning as occurring through interacting with other students, possibly discussion (8). And finally, item 11 saw learning as taking place retrospectively - through reflection.

It did not seem appropriate to reduce all of these to a single item. Whilst the focus here is clearly on methods of learning, the question would produce no meaningful information by asking, for example "I expect that most of my learning will take place in a specific way". For this reason, 4 items, as distinguished above, are derived from this factor.

Factor 2.

It is recognised that factors with less than 3 loadings are not always reliable. However, as explained previously, the intention here was not to find evidence for the existence of hypothetical constructs, but simply to explore and reduce a large set of data. For this reason, items within factors are explored for commonality, and if meanings are distinct, this is also accounted for in order to give some breadth to a revised instrument. In these cases also, more attention is given to larger loadings of 0.6 and above.

2 items loaded on this factor which had an eigenvalue of 1.47 and explained 13% of the variance (items 1 & 2). This suggested that students expected their courses to be challenging and thought provoking. A slight difference could be detected between the two; there may be a difference between simply becoming involved with issues and debates, and changing personal views and ideas in the light of doing this. Both items are therefore retained, but reworded to make the distinction clearer.

Factor 3.

3 items loaded on this factor, which had an eigenvalue of 1.25, and explained 11% of the total variance. The broader theme here was that students expected their courses to be easy after the initial induction, and that all they would need to do would be to find the 'right' answer. Item (5) supports this by indicating that literature should not be challenged, maybe simply re-iterated. It was felt that this could be summarised into 1 item.

Table 10. New items derived from the 3-factor solution (Sub-section A).

Item no.	Factor	New Item
(9, 10)	1	I expect most of my learning will take place whilst working through and completing set tasks.
(6,7)	1	I expect that most of my learning will take place through collecting information from lectures and textbooks
(8)	1	I expect that I will learn best by talking to others on my course
(11)	1	I expect I will learn best by looking back and thinking about tasks and problems I have experienced in the past
(1)	2	I'm expecting the course to introduce me to lots of interesting issues and debates.
(2)	2	I imagine the course will force me to question my personal ideas and beliefs
(3,4,5)	3	I expect that the course will be easy, as long as I just keep finding the right answers to set questions.

Table 11. Sub-section B. Personal Goals and Aims (10 items)

During my Higher Education studies, one of my main goals is to: -

12	Build upon the skills and knowledge that I already have
13	Pick up new skills and knowledge that I didn't previously have
14	Become less reliant on others for my learning
15	Collect all the skills and knowledge I will need for my chosen career
16	Make lots of new friends and build up my social life
17	Become more confident in myself and with others
18	Learn all I possibly can about my chosen subject
19	Learn how to apply my new found skills in useful ways
20	To learn more about myself
21	To really understand what writers and theorists in my subject are trying to say

4.4ii. Results: Sub-section B.

3 factors were derived which explained 66% of the total variance. An oblique rotation gave the clearest factor structure.

Factor 1.

Factor 1 explained 41% of the total variance. Six items loaded on this factor (14, 15, 18, 19, 20, 21) which generally indicated that students personal goals and aims were those of knowledge and skill-gathering (see table 11 for original items). However, interpretation of this factor was not straightforward, and careful scrutiny of individual items revealed that further sub-divisions were possible.

For example, items 15 and 19 fit the wider interpretation, yet there is further indication that the gathering of skills and knowledge have a purpose – that is for

future careers outside of the academic environment itself. This suggested that an independent item should be created.

Items 14 and 20 seem to indicate that although learning is a goal, this has more to do with learning in a much broader sense, about the self, and an exploration of the capacities of the self. This has a much more personal element. A second independent item was created from this.

Items 18 and 21, again fitting the broader interpretation, seem to suggest that the learning is focussed more directly within the subject discipline itself. A further distinction could also be made, which is that of a 'deep approach' to the subject matter (item 21) and a 'surface approach (item 18). Because of this, it was decided that both items should remain, in terms of their meaning, for inclusion in the refined instrument.

Factor 2.

Two items loaded on this factor which explained 13% of the total variance. These were items 16, and also 20 which also loaded on Factor 1. Item 16 gave the highest loading, and item 20 was slightly lower than its loading on the previous factor. This factor suggested that students had aims to improve their social life and as item 20 ('To learn more about myself') was not contradictory to this in a social capacity, it was decided to merge the 2 items.

Factor 3.

Three items loaded on this factor which explained 11.33% of the total variance (items 12, 13, 17). Although there was lots of emphasis here again on the acquisition and

development of skills, item 17 indicted that these were personal, in terms of 'confidence' rather than social or academic. It could be said that 'personal' and 'social' (as in the previous factor) are similar in many respects, at least in terms of confidence development, yet there is no indication there that students are concerned about their social skills, as they do appear to be here. There is also a heavy emphasis here on 'skill development' as in Factor 1, however there is no evidence that this has a bearing on academic performance. Therefore, it was decided that these 3 items could be collapsed into 1 new item.

Table 12. New items derived from the 3-factor solution (Subsection B).

Item No.	Factor	Revised Item
15, 19	1	To collect the appropriate skills and knowledge that I will need for my future career
14, 20	1	To learn more about myself and my capacities.
18	1	To gain as much knowledge as I possibly can about my chosen subject
21	1	To really understand what writers and theorists in my subject are trying to say
16, 20	2	Make lots of new friends and build up my social life.
12, 13, 17	3	Become more confident in myself and with others

Table 13. Sub-section C. The Purpose of Lectures (23 items).

The main purpose of lectures is: -

22	To get students interested in the subject/topic
23	To motivate students into going away and learning more about the subject/topic in their own time
24	To give students some idea of how difficult the subject really is, and how hard they will have to work
25	To present information in an interesting way so that students have a better chance of learning it.
26	To outline key points that students really need to know about the subject/topic.
27	To give students just enough information so that they can go and direct their own research into a subject/topic for themselves.
28	To get students together so that they all get the same information at the same time
29	To enable students to take in whole blocks of knowledge
30	To give students a chance to take notes about things that they may need to know at a later stage
31	To explain things in a way that students can quickly and easily understand them
32	To support seminars by giving students something to talk about in them
33	To give students a whole lot of information so that they can select out the parts that they think are important
34	To give students selected information, but usually not enough, or appropriate for them to get a really good grasp of the topic
35	To give students the chance to find out what the lecturer thinks is important about the topic
36	To give students the relevant information that that they will need to include in their assignments and exams
37	To bombard students with as much information as possible; often far too much for them to remember
38	To get students to think about ideas and viewpoints
39	To show students the flaws in others' ideas, and encourage the them to form their own solutions to these
40	The purpose of lectures is not clear - students could just as easily go and read about a topic for themselves
41	To make learning easy and pleasant for students, by presenting them with properly paced, clearly structured information
42	To present information in an interesting and amusing way so that students will stay motivated to listen.
43	To criticise theories and literature and try to encourage students to do the same
44	The purpose of lectures is not clear – most of the time they simply repeat what is written on . handouts

4.4iii. Results: Sub-section C.

Eight factors were derived which accounted for 73% of the total variance. An oblique rotation gave the clearest solution, though this was not perfect with 5 items loading on more than one factor. For further clarification it was decided that where this occurred, relatively less importance should be awarded to loadings which were marginally above 0.4 (Field, 2001).

Factor 1.

Four items loaded on this factor, accounting for 21% of the total variance (25, 30, 31, 36) (see table 13). This factor indicated that students saw the main purpose of lectures as being to disseminate information. However, there is also an indication that the information should be only that which is required for future assessment, which does indicate a 'quick-and-easy' element (item 31). Item 25 appears slightly different to this interpretation, with an emphasis on 'how' that information should best be presented, rather than 'which'. As this item had a low loading (0.43), and as it loaded much higher on Factor 3 (-0.72), it was not accounted for in this interpretation. Following, the relevent 3 items were collapsed into 1. It was felt that item 36 could summarise this interpretation, so it remains unchanged.

Factor 2.

Four items loaded on this factor which had an eigenvalue of 3.612, and explained 15.70% of the total variance (30, 37, 40, 44). Again, there was a strong view here of the purpose of lectures being to disseminate knowledge and information, but more in terms of this being a somewhat negative, perhaps pointless activity. Here, as the information can be read also in books, and on handouts, there is still the idea of simple information gathering. Supporting this is also the view of 'too much'

information to remember, which again suggests a basic quantitative view of knowledge, and the need to collect only that which is relevant or 'useable'. Information appears to be perceived as a currency, something that can be exchanged for marks, so there is no need to acquire anything more than is necessary. There is no evidence of anything other than the collecting, storing and recalling of information, and the problems surrounding this.

Item 30 also loaded on this factor, as well as factor 1. The meaning is similar, in terms of information gathering, however, it appears to have more positive connotations than other items here. As the loading was still only marginally higher in this case (0.47), the item was not accounted for further. The remaining 3 items were collapsed into 1.

Factor 3.

Two items loaded on this factor which accounted for 7% of the variance (items 25, 26) Remaining with lectures as disseminating knowledge, these items suggest that the information should be presented in ways which will maximise the chance of students remembering the more important chunks – they should be structured and interesting. However, this also appears to be indicating that the purpose of lectures is to facilitate learning, even though learning is simply viewed as the recall of important facts. These 2 items can be collapsed into 1.

Factor 4.

Three items loaded on this factor, accounting for 7% of the total variance (41, 42 & 43). Items 41 & 42 appeared to be very similar in meaning to the previous item 25, that is, lectures should aim to present information in ways to make learning easy,

however, there is more of an emphasis here on students actually enjoying the lectures as well as collecting the facts. All indications here are that students have at least some desire to engage with lectures. Item 43 is slightly different, although there is still the intention to get something more than basic information out of lectures, there is an added dimension of wanting to be motivated into doing something for themselves. Therefore there are elements of lectures as pleasurable and interesting, and also inspiring and motivational. However as 'inspiring' here, is simply a device to prevent distraction from fact-collection, it is understood separately from 'motivation'. 2 items can therefore be derived from the original 3.

Factor 5.

Three items loaded on this factor, accounting for 6.% of the total variance (33, 34, 35). There is a strong emphasis here on the purpose of lectures as being to give out 'important' information. Students here could be viewed as looking to receive 'the answers', as opposed to earlier factors (eg. Factor 1) where any information was desired as long as it would be that required in order to 'pass'. There is no evidence of 'information-as-currency' here. Item 33 is slightly different to the others, as it sees students wanting to sift through the information for themselves, rather than being told what's important. Therefore, 2 items are derived from this factor.

Factor 6.

Five items loaded on this factor, accounting for 5.36% of the total variance (22, 23, 27, 28, 38). With the exception of item 28, this factor indicated that students saw the purpose of lectures as being to generate interest and motivation, and to inspire them to learn more about the subject/topic for themselves. Items 22 and 38 can be grouped in

terms of the focus on interest, whilst items 23 and 37 are slightly different with a focus on motivation towards self-directed study.

Item 28 bore little similarity with the others, and had a loading of only -4.80, so this was not accounted for in the wider interpretation. However, it did appear to embody a conception of lectures that was not accounted for in other factors, so it was explored further. There were 2 possible interpretations of this item. Firstly it could be a view of lectures-as-fair', in the sense that all students received the same information, and thus were provided with an equal chance to learn. Yet it could also be viewed as lectures as 'information for the masses', in the sense that this was a quick and easy way for lecturers to do their jobs. As both interpretations seemed viable, it was decided that 2 new items should be constructed to account for both possibilities.

Factor 7.

Two items loaded on this factor which accounted for 4% of the total variance (23, 39). Again there was an emphasis here on lectures-as-motivators. Item 23 also loaded on the previous factor, however the much higher loading of item 39 at 9.09 gave more information about exactly what students felt lectures should motivate them to do. This factor suggests that students see the purpose of lectures as stimulating them into critical and independent thinking. These 2 items were collapsed into 1, using item 39.

Factor 8.

This factor also accounted for 4% of the total variance. Inspection of the 3 comprising items (22, 24, 40) showed that there was nothing clearly common to them. Items 28 and 40 had low loadings (0.49 & -0.41 respectively), and it was decided to reject both

of these. In any case, the essential meanings of both items are captured in previous factors.

The third item (24) had a much higher loading of 0.83, so it was decided to retain it as an individual item, especially as this particular perception of the purpose of lectures had not appeared at all in other factors. Interpreting this, it could be that students see the purpose of lectures as being a warning, in the positive sense, that they need to know exactly how much effort to put into their work. On the other hand, it could be that lectures are designed to worry students. In both cases, it could perhaps be seen that the fundamental purpose here is for lectures to act as a stimulants for students to keep on top of their work, whether this is perceived by them as a positive thing or not. To avoid this ambiguity, the item is re-worded, using more positive descriptors.

Remaining Items.

Items 29 and 32 did not load on any of the 8 factors. This was not a problem in the case of item 29, as the meaning had been captured in previous factors. However it seemed surprising that item 32 had showed to be unreliable. The sample of level 1 students had completed the questionnaire at the end of their year, and would have been likely to have had experience of lectures being a source of discussion in their seminars. However, for the purpose of the revised instrument, this item will be omitted. This is because the instrument will next be completed by level 1 students at the beginning of their studies, who will likely have no conception of seminars at all. Therefore, it may well prove to be unreliable again in the next wave of testing. (See table 14 for revised items)

Table 14. New items derived from the 8-factor solution (Sub-section C).

Item no.	Factor	Item
25, 30, 31, 36.	1	To give students the relevant information that that they will need to include in their assignments and exams
37, 40, 44.	2	The purpose of lectures is not clear – all the relevant information can easily be accessed in textbooks and handouts
25, 26	3	To present the facts in ways that students can pick them up easily and remember them when they need to
41, 42	4	To present information in an interesting way so that students find learning easy and pleasurable
43.	4	To criticise theories and literature, and try to encourage students to do the same
33.	5	To give students as much information as possible so that they can select out the parts they think are important
34, 35.	5	To give out information that is important to know about in a particular subject
22, 38	6	To generate interest and thought about a subject/topic
23, 27.	6	To motivate students into going away and learning more about the subject/topic in their own time
28a.	6	To make sure that all students get the same information
28b.	6	To enable lecturers to deliver information to a whole lot of students quickly and easily
23, 29	7	To show students the flaws in others ideas, and encourage them to form their own solutions to these
24	8	To try to keep students on top of their work by showing them just how difficult a subject/topic can be

Table 15. Subsection D . Perceptions of Lecturers. (24 items).

The main role of a lecturer is:

44	To get students interested in the subject/topic
45	To motivate students into going away and learning more about the subject/topic in their own time
46	To give students some idea of how difficult the subject really is, and how hard they will have to work.
47	To make information interesting so that students have a better chance of learning it.
48	To outline key points that students really need to know about the subject/topic.
49	To give students just enough information so that they can go and direct their own research into a subject/topic for themselves.
50	To get students together so that they all get the same information at the same time
51	To enable students to take in whole blocks of knowledge
52	To give students a chance to take notes about things that they may need to know at a later stage
53	To explain things in a way that students can quickly and easily understand them
54	To support seminars by giving students something to talk about in them
55	To give students a whole lot of information so that they can select out the parts that they think are important
56	To give students selected information, but usually not enough, or appropriate for them to get a really good grasp of the topic
57	To give students the chance to find out what the lecturer thinks is important about the topic
58	To give students the relevant information that that they will need to include in their assignments and exams
59	To bombard students with as much information as possible; often far too much for them to remember
60	To get students to think about ideas and viewpoints
61	To show students the flaws in others' ideas, and encourage the them to form their own solutions to these
62	The main role of lecturers is not clear - students could just as easily go and read about a topic for themselves
63	To make learning easy and pleasant for students, by presenting them with properly paced, clearly structured information
64	To present information in an interesting and amusing way so that students will stay motivated to listen.
65	To criticise theories and literature and try to encourage students to do the same
66	The main role of lecturers is not clear – most of the time they simply repeat what is written on their handouts

4.4iv. Results: Sub-section D.

Seven factors were derived, which accounted for 72% of the total variance. A varimax rotation gave the clearest solution, however as with the previous factor, this was not perfect. Seven items loaded on more than one factor – in most instances just two, but one item (63) loaded on three factors. Therefore loadings of and around 0.4 are either discarded, or afforded less attention than higher loadings.

Factor 1.

There were 7 loadings on this factor which accounted for 25.79 of the total variance. (48, 55, 56, 57, 59, 62, 66) (see table 15 for original items). This clearly saw the main role of lecturers as being disseminators of information. Sometimes this was viewed by students as being inappropriate or inadequate, and even too much. Items 62 and 66 to some extent seem to be at odds with this interpretation. The role of a lecturer is perceived in both cases to be unclear, as the same information can be gleaned from textbooks and handouts. Therefore, it is arguably still a lecturer's role to provide information, and the only reason for the confusion is that lecturers are doing the same thing, unnecessarily.

This could perhaps be explained further. There is evidence here that this information should be only that which is important to know about (48, 55, 57). This is also apparent when looking at the loadings which have a clear division of high (59, 52, 66) and low (48, 55, 56, 57). The highest loadings represent the above 'role is unclear', and 'too much information' interpretation, whilst the lower grouping clearly indicate that the information should be only that which is important.

However, item 55 suggests that the students themselves rather than the lecturer, will make that decision. Therefore three new items are derived from this factor, relating to dissemination of information, important information, and selection of important information by students.

Factor 2.

Four items loaded on this factor, accounting for 15% of the total variance (44, 45, 47, 64). With the exception of item 45, the indications here are that a lecturer's main role is arguably that of an 'entertainer' who must work hard to engage and maintain the interest of the students, and make learning pleasant. Item 45 is slightly different, as the view is towards getting the student to work independently rather than just listen. 2 items are derived from this factor.

Factor 3.

Six items loaded on this factor which accounted for 9% of the total variance (items 52, 53, 57, 58, 63, 65). There was no clear overriding interpretation here, so the next step was to explore the groupings within the factor. Items 52, 53, & 63 all had loadings within 0.5. This grouping again suggested that the role of lecturers was to simplify the learning process for students, by making things easy and pleasant, and to minimise the effort that students would have to make (via passing on notes, selecting out relevant information for exams). This is very similar to the previous factor, however in this case there does seem to be more of an emphasis on what the lecturer actually needs to do to achieve this. One item can be created to summarise this.

loaded quite highly, there was still no discernable meaning. Therefore it was decided to omit items 49 and 60, as these meanings had been expressed within earlier factors, and to retain item 50, which had not.

This item, or at least the interpretation of it has been discussed in the previous section (Section 3, Factor 6). There were 2 possible interpretations of this in the previous context of 'lectures' (ie lectures as 'fair', and lectures as 'economical' for tutors in the delivery of information. However the second notion appears irrelevant in the context of lecturers themselves, so the decision is to interpret this in the former. One item is derived from this factor.

Factor 6.

Three items loaded on this factor which accounted for 5% of the total variance (46, 63, 64). This factor, even though two of its item loadings were acceptably high, and did share similar meaning, this meaning had been extracted in previous factors (items 63, 64). This was the role of a lecturer as being to make learning easy and pleasant for students. Both factors loaded on previous ones. Therefore, they were not considered further.

Item 46 is different in that it sees the role of a lecturer as arguably 'scaring' the students into keeping on top of their work. As in the previous section, (see Section 3, Factor 8) this could have more than one interpretation – it could be a positive or negative thing. Some students may see this as 'support', whilst others view it as 'pressurising'. As in the previous section, the item is reworded to avoid ambiguity, using positive rather than negative descriptors. One item is derived from this factor.

Factor 7.

Two items loaded on this factor, which accounted for 4% of the total variance (56, 61). Due to a low eigenvalue which borders on acceptability for the existence of a factor, and also given just two loadings, no attempt is made to extract meaning and support for it. The items bear no similarity to each other in any case, and item 56 has already been accounted for in Factor 1. Therefore, as item 61 has a high loading (0.817), and loads on no other factors, it is retained for its unique meaning. The role of a lecturer here is to encourage and promote critical thinking amongst students. The item is included without rewording (see table 15).

Items 58 & 65 had higher loadings of 0.75. However there still appeared to be no commonality of meaning, and neither item loaded on any other factor. Item 58 saw the role of lecturers as giving out relevant information for exams and assignments, whilst 65 saw the role as that of motivating students into critical thinking. Therefore it was decided to include both items. As the notion of the lecturer as providing relevant information is already included, item 58 is re-worded to put more of an emphasis on the passing of exams and assignments. Item 65 remains unchanged. Three items are derived from this factor.

Factor 4.

Five items loaded on this factor, which and accounted for 6% of the total variance (51, 52, 53, 54, 55). This again was a very unclear pattern, with virtually no obvious commonality of meaning between items. Attempting to group the items in terms of their high and low loadings did not make things clearer. Looking at the items, it was observed that only 51 and 54 had loadings unique to this factor, however, there was still no obvious shared meaning. Further observation also revealed that with the exception of item 54, the fundamental meanings of each had been accounted for in previous factors. It was decided to retain this item, however it was reworded to avoid potential confusion for new students with the term 'seminar'. One item is derived from this factor.

Factor 5.

Four items loaded on this factor, accounting for 5% of the total variance (49, 50, 60, 63). Once again there was no clear thread to this factor. Item 63 was discarded as this had a low loading on this as well as two other factors. Although the remaining factors

Table 16. New items derived from Subsection D.

Item no.	Factor	Item
59.	1	To provide students with as much information as possible about a subject/topic
48, 56, 57.	1	To outline key points that students really need to know about the subject/topic
55.	1	To give students the basic information, so that they can select out for themselves the parts that they think are most important
44, 47, 64	2	To make information interesting so that students find learning easy and pleasant
45.	2	To motivate students into going away and learning more about the subject/topic in their own time
52, 53, 63	3	To simplify the learning process for students by structuring things clearly
58.	3	To provide students with the information and help that they need in order to pass their exams and assignments
65.	3	To criticise theories and literature and try to encourage students to do the same
54.	4	To stimulate and facilitate discussion amongst students
50.	5	To ensure that all students receive the same information about the subject/topic
46.	6	To encourage students to keep on top of their work by reminding them how difficult the subject/topic can be
61.	7	To show students the flaws in others ideas, and encourage them to form their own solutions to these

4.4.v. Section E. Anxieties about Higher Education.

The original version of this section contained 40 items. This meant that factor analysis could not be carried out as the sample comprised only 70 participants; at least 80 would have been needed to meet statistical requirements.. Because of this, the section was explored and within-categories were created, according to the specific nature of the anxiety. The original table is shown firstly (table 16), and then a re-categorised version (table 17), showing the 4 component sub-categories which were subject to analysis.

Table 17. Original version of Section E – Anxieties about Higher Education (40 items).

67	My revision strategies will not be good enough at this level of study
68	After previously doing well, I tend to worry that I wont be able to maintain this standard
69	After not putting enough effort into my previous studies, I will find it difficult to be able to keep up with the work at this level.
70	I tend not to perform well in exams
71	I tend to perform poorly at written tasks (eg. essays, reports etc.)
72	I tend to perform poorly at practical tasks
73	I will have difficulty keeping up with other students; they always seem to understand things much quicker than I do
74	I will not be able to produce the level of work that I would like to unless I have access to a computer
75	Intellectually, the course will be too difficult for me to follow and complete.
76	The subjects I have chosen to study will not be as interesting as I'd thought
77	I tend to blame anyone and anything else for my failure to do the work.
78	It is extremely difficult to keep focussed on my work
79	I find it difficult to motivate myself to actually get down to the work
80	I find it difficult to organise my time so that I can get all my work done
81	I will have a whole range of new situations to cope with, as well as my work
82	I need to make new friends and establish my social circle quite early on in the course
83	As a student, I will have to pay out much more on necessities than I will be able to afford
84	Travelling to and from College will be overly time-consuming
85	I need to be much more self-disciplined in my work
86	I don't know how much time or effort I should be putting in my studies
87	I am always looking for ways to justify taking a break from my studies
88	I am far too careless when completing assignments
89	I'm always rushing to complete work at the last minute
90	Other students always seem to be better at organising themselves than me
91	I haven't made the right decision to study for a degree
92	Living in a new and unfamiliar area will be hard to get used to
93	Living away from my parents/family will be really hard to get used to
94	I am very self conscious and often feel inferior amongst the other students
95	I'm not sure how easy it will be to work alongside mature (or) younger students
96	I cant keep asking questions as people will think I'm stupid
97	I'm really not interested in one of my subjects, so I'll probably not do well in it.
98	I'm not happy about having to do a degree in subjects that I didn't select, and don't want to do
99	I am intimidated by the intelligence and experience of lecturers

100	I will be the only one who has problems trying to understand anything
101	Aside from problems I may/may not be having outside of the course, I worry that I will not be able to cope with the workload
102	I don't know if I will manage to finish the course, as I tend to get bored with most things very quickly
103	I don't know if I will manage to finish the course, I never seem to be able to stick with things that I feel are demanding of my time and patience
104	My parents/relatives will be disappointed in me if I don't finish the course.
105	Lecturers/tutors will expect me to do just as well as other students in a subject/topic I have never done before
106	I don't know if I will manage to finish the course if I find it prevents me having any leisure time for myself

Table 18. Section E. (Re-categorised for analysis: 4 sub-categories).

	1. Concerns about Abilities and Performance.
67	My revision strategies will not be good enough at this level of study
68	After previously doing well, I tend to worry that I wont be able to maintain this standard
69	After not putting enough effort into my previous studies, I will find it difficult to be able to keep up with the work at this level.
70	I tend not to perform well in exams
71	I tend to perform poorly at written tasks (eg. essays, reports etc.)
72	I tend to perform poorly at practical tasks
73	I will have difficulty keeping up with other students; they always seem to understand things much quicker than I do
74	I will not be able to produce the level of work that I would like to unless I have access to a computer
75	Intellectually, the course will be too difficult for me to follow and complete.
86	I don't know how much time or effort I should be putting in my studies
90	Other students always seem to be better at organising themselves than me
101	Aside from problems I may/may not be having outside of the course, I worry that I will not be able to cope with the workload
105	Lecturers/tutors will expect me to do just as well as other students in a subject/topic I have never done before
	2. Approaches to Studying
77	I tend to blame anyone and anything else for my failure to do the work.
78	It is extremely difficult to keep focussed on my work
79	I find it difficult to motivate myself to actually get down to the work
80	I find it difficult to organise my time so that I can get all my work done
85	I need to be much more self-disciplined in my work
87	I am always looking for ways to justify taking a break from my studies
88	I am far too careless when completing assignments
89	I'm always rushing to complete work at the last minute
102	I don't know if I will manage to finish the course, as I tend to get bored with most things very quickly
103	I don't know if I will manage to finish the course, I never seem to be able to stick with things that I feel are demanding of my time and patience
106	I don't know if I will manage to finish the course if I find it prevents me having any leisure time for myself

Table 18. Section E. (Re-categorised for analysis: 4 sub-categories - continued.)

	3. Confidence
94	I am very self conscious and often feel inferior amongst the other students
95	I'm not sure how easy it will be to work alongside mature (or) younger students
96	I cant keep asking questions as people will think I'm stupid
99	I am intimidated by the intelligence and experience of lecturers
100	I will be the only one who has problems trying to understand anything
	4. Other
76	The subjects I have chosen to study will not be as interesting as I'd thought
81	I will have a whole range of new situations to cope with, as well as my work
82	I need to make new friends and establish my social circle quite early on in the course
83	As a student, I will have to pay out much more on necessities than I will be able to afford
84	Travelling to and from College will be overly time-consuming
91	I haven't made the right decision to study for a degree
92	Living in a new and unfamiliar area will be hard to get used to
93	Living away from my parents/family will be really hard to get used to
97	I'm really not interested in one of my subjects, so I'll probably not do well in it.
98	I'm not happy about having to do a degree in subjects that I didn't select, and don't want to do
104	My parents/relatives will be disappointed in me if I don't finish the course.

4.4.vi. Results: Sub-category E (1) Concerns about Abilities & Performance.

Four factors were derived from the data which accounted for 62% of the total variance. A quartimax rotation gave the clearest solution, however there were still three items (86, 90, 101) loading on two different factors. In all cases, no loading exceeded 0.492. Whilst this tends towards unreliability, a total exclusion of the loadings would mean that the relevant 3 items would have to be omitted altogether. The items are considered in later sections as they occur within factors. For this section only, derived items are shown as they appear factor by factor instead of in an end-of-section table.

Factor 1.

This factor had an eigenvalue of 4.257, and accounted for 32% of the total variance (68, 69, 71, 72, 86, 90). The first four items of the list loaded highly (0.623 – 0.768) whilst the last two were those mentioned previously which both had low loadings. There did appear to be some difference in meaning. The first group of items (68,69, 71, 72) suggested that students anxieties stemmed from trying to make a comparison between how they felt they had performed in past academic tasks, and how this might or might not impact on their future performance. Generally, the tone is negative and students appear to think that they will not be able to cope with the work demands of Higher Education. The second group (86, 90) suggested similar self-doubt, but this was referring to organisational skills, and the superiority of others in this area. Two items are created from this factor (see table 19 for all revised items).

Factor 2.

Six items loaded on this factor which accounted for 12% of the total variance (67, 73, 75, 86, 90, 101). There was no clearly discernable meaning , and again there was some division within the factor in terms of high and low loadings. Items 63, 67, 75 largely seemed to suggest students anxieties about their intellectual abilities, and again there was a confidence element in the sense that students perceived others to be better, or perhaps more superior than themselves. Items 86, 90 also loaded on the previous factor 1, which did tie in with the emphasis here on negative self-perception. Item 101 however seemed somewhat different, as it focussed on concerns about the size of the expected workload, and whether this would be manageable. Therefore, items on this factor are reduced to 2.

Factor 3.

Two items loaded on this factor which had an eigenvalue of 1.251, and accounted for 9.61% of the total variance (74, 101) Loading on the previous factor, item 101 suggested concerns about abilities to produce appropriate standards of work, however item 74 suggested that this was less to do with cognitive ability, and more to do with practicalities such as having access to a computer. These items can be reduced to 1.

Factor 4.

Again two items loaded on this factor, which had an eigenvalue of 1.086 and accounted for 8.357% of the total variance (70, 105). Although both of these loadings were fairly high (0.656, 0.644 respectively), and they did not load on any other factors, there appeared to be no similarity in meaning at all. Item 70 indicated students concerns about performance in exams, whilst item 105 indicated concerns about

coping with a new subject/discipline. However what seemed to be rather more apparent was a clear distinction between the two items. Item 105 related to concerns about lack of skills in an anticipatory sense, whilst item 70 in relation to past experience. For example, 'I don't think I will be able to do it', as opposed to 'I know I cant do it'. Whilst there is no evidence to suggest even the most tentative of links, this distinction is arguably too apparent to dismiss. Therefore both items will be included, virtually unchanged (item 105 is reworded for brevity, but the meaning is unchanged. See table 19 for revised items.

Table 19. Concerns about Abilities & Performance. Revised items.

Item no.	Factor	Revised item
68, 69, 71, 72	1	I will not be able to perform at the academic level expected of me in Higher Education
86, 90	1	Other students always seem to be better at organising themselves than me.
67, 73, 75, 86, 90.	2	I feel that intellectually, I wont be able to keep up with other students on my course.
101	2	I feel that I will not be able to cope with the workload.
74, 101	3	I will not be able to produce the level of work that would like to unless I have access to a computer.
70	4	I tend not to perform well in exams
105	4	I will be expected to do as well as other students in a subject I have never done before

4.4 vii. Results: Sub-category E (2). Approaches to Studying.

Two factors were derived from the data, which accounted for 65% of the total variance. A varimax rotation gave the clearest solution.

Factor 1.

This had an eigenvalue of 5.391 and accounted for 49% of the total variance (78, 79, 80, 85, 87, 88, 89). There was a clear indication of students concerns about their poor attitudes towards their work. All items loading on this factor appeared to present a list of avoidance strategies and justifications for producing either poor work, or none at all. However the majority of items suggested that there was an implicit knowledge that this was not the best way to proceed and that some kind of change was needed. The comprising items list a range of tasks and strategies adopted by students, however perhaps one useful distinction to make is that between items which suggest a lack of self-discipline or motivation, and those which suggest poor organisational skills. The two are not necessarily the same thing. Therefore these seven items can be reduced to two.

Factor 2.

This factor had an eigenvalue of 1.789, and accounted for 16% of the total variance (77, 102, 103, 106). Concerns here were centred around not finishing the course, and strongly linked into this appeared to be a resentment about having to spend time and patience on work. Item 77 was slightly different to the others in that it relocated the blame for non-completion of work on other people. The remaining items seemed to be more of an admission, rather than avoidance of blame. Therefore 2 items are created from this factor to accommodate the difference. Table 20 shows the revised items.

Table 20. Approaches to Studying. Revised items.

Item no.	Factor	
78, 79, 85, 87, 88	1	I find it difficult to motivate myself to get started, and to complete work
80, 89	1	I find it difficult to organise everything so that I can get all my work done on time
102, 103, 106	2	I don't know if I will finish the course if it starts to take up too much of my time and energy
77	2	I tend to blame anyone and anything else when for my failure to complete the work.

4.4viii Results: Sub-category E (3). Confidence.

Five items in total were entered into the analysis, and all loaded on just one factor which had an eigenvalue of 2.761 and accounted for 55.21% of the total variance. Rotation was not necessary.

All items related to students lack of confidence. There were broadly two different dimensions to this, firstly feelings of inferiority amongst other students and lecturers, and secondly, perhaps more explicitly, about their lack of intellectual skills compared to others. Again this social/intellectual distinction is perhaps best summarised by items 94 and 100, which are shown in table 20.

Table 21. Confidence. Revised items.

Item no.	Factor	
94	1	I am very self-conscious and often feel inferior amongst other students.
100	1	Often I feel like I'm the only one who has problems trying to understand anything

4.4ix. Results: Sub-category E (4). Miscellaneous/Other.

This sub-section contained 11 items which could not clearly be placed in any of the others, and apart from the wider categorisation of 'Anxieties', were not directly linked to each other. A 4-factor solution was found which accounted for 69.41% of the total variance, and rotated using varimax method.

Factor 1.

This factor had an eigenvalue of 3.439, and accounted for 31% of the total variance (91, 92, 93). The main focus here was of students anxieties about living away from home (92, 93), and of wondering if the right decision had been made to study for a degree (91). As all three items load highly, 'the right decision' could be less related to studying, and more about studying away from home. Nonetheless, there may well be a distinction between 'home' and 'career', so two items are produced to account for the possibility. Table 21 shows the revised items.

Factor 2.

This factor accounted for 15% of the total variance (76, 91, 97, 98). This factor clearly indicated students' anxieties about their subjects. (Item 91 also loaded on the previous factor, which gives support for the decision to distinguish between home and

career). Specifically, the focus was on subjects not being interesting, and the related issues of not wanting to do it, and expecting not to do well in it. One item can summarise this appropriately.

Factor 3.

This factor accounted for 12% of the total variance (81, 82, 83). The link here is quite tenuous, but it could be argued that the general tendency is towards concerns about not being able to have a good social life, perhaps through having to do College work, or lack of funds. It could also be argued that item 83 is relatively pore to do with living expenses in general, but given that all these items load highly, the 'social' defintion is accepted.

Factor 4.

Two items loaded on this factor which accounted for 10% of the total variance (84, 104). Comprising of just 2 items, the factor is unstable at the outset, however the two items don't appear to have any shared meaning at all. Item 84 relates to time spent travelling to and from College, whilst 104 relates to concerns about not disappointing parents. Finally, item 104 loads very highly (0.928) and item 84 rather lower. Given poor statistical support for any structure here, the two items will be included in their original form.

Table 22. Miscellaneous/Other. Revised items.

Item no.	Factor	
92, 93	1	Living away from my home and family will be hard to get used to.
91	1	I don't know if I have made the right decision to study for a degree
76, 91, 97, 98	2	The subjects I am taking may turn out to be less interesting that I thought which will affect my progress in them.
81, 82, 83	3	I worry that I won't be able to have a good social life through a lack of money.
84	4	Travelling to and from College will be overly time consuming
104	4	My parents/ relatives will be disappointed in me if I don't finish the course.

Table 23. Section F. Beliefs about Higher Education (28 items).

107	For me, education is an alternative to employment
108	Education is a necessary step towards getting a well paid job
109	Education is a necessary step towards getting a job that you really enjoy
110	Education is about the acquisition of knowledge
111	Employees prefer to employ people who are educated
112	Being educated means that you don't have to rely on others for help to get by
113	Education means having an enormous amount of knowledge
114	Education means that you know masses about that you are really interested in
115	Educated people are those who have really strong opinions about things
116	Education is anything that prepares you for later life
117	Education means collecting relevant information that you will need later in life
118	Education is the process of trying to increase your knowledge
119	Educated people have achieved more than anyone else in a specific area
120	Education is knowing all there is to know about a specific subject
121	You need to have completed all the necessary courses before you can become educated
122	You cannot become educated without an appropriate amount of general knowledge
123	Educated people have a wider ranging knowledge about most things
124	To become educated, you need to have read lots and lots of books
125	Educated people collect any information that is available to them, and not a necessarily from books.
126	There's a real difference between someone who is educated and someone who is not.
127	Educated people only really differ to other people in that they can talk more intellectually about things
128	You cannot become educated without having had the proper tuition
129	Self-educated people are very different to those who have had tuition at degree level.
130	Its virtually a waste of time trying to educate anyone who hasn't got the brain for it.
131	Unless you have done well at school, there's no real point trying to get anywhere in Higher Education
132	Education is about changing your ideas when you realise you were wrong
133	Educated people tend to look at things in a different way to everybody else
134	Educated people should know the right answer/solution to question and problems, and if they don't, then they need to find out

4.4x. Results: Sub-section F.

Eight factors were derived which accounted for 72% of the total variance. As with some of the previous sections, some items loaded on more than one factor. A varimax rotation gave the clearest solution, however, there were still five out of 28 items which shared variance with two, and in one other case three, other factors.

Factor 1.

Ten items loaded on this factor, which 25% of the total variance (items 112, 115, 119, 120, 121, 122, 123, 124, 126, 131). There was no clear definition of this factor until loadings were grouped into high (0.674 and above), and low (0.590 and below). The group of higher loadings suggested a belief about education as being the amassing of knowledge (items 119, 120, 121, 123, 124). This could be wide-ranging knowledge, or even subject specific, but another suggestion was that this knowledge must be collected in a school-like fashion, eg, taking courses and reading books. All revised items are shown in table 24.

The second group of loadings (112, 115, 122, 126, 131), still to pointed towards education as knowledge gathering in an academic setting, but there was the added dimension that education cannot be achieved by everyone. Or perhaps more from this particular perspective, unless an individual has the right personality and is intelligent enough, then they will never be able to collect the appropriate amount of knowledge. This broadly suggests two separate beliefs of education as knowledge gathering, and education (still knowledge gathering) as only for the intelligent. 2 new items representing these views are shown in the table at the end of the sub-section.

Factor 2.

Nine items loaded on this factor, which and accounted for 13% of the total variance (107, 113, 127, 128, 129, 130, 131, 133, 134). Again there were groupings of high and low loadings, however, there was one clearly discernable thread (with the possible exception of one item, 107). The main concern with interpreting this factor was that generally, it seemed to a good extent to echo the interpretation of the lower loadings on the previous Factor 1. Arguably, the only possible difference here between the two, is that Factor 2 seems to put more of an emphasis on a description of educated people, for example there is a huge difference between educated and non-educated people, they have different (more intelligent) views and can discuss things more intellectually. However, no claims are made here that this interpretation is definitive, there is far too much overlap with the previous items loading on Factor 1. For the purpose of creating the revised instrument, a new item will be constructed incorporating the above discussed, simply as none of the items so far have clearly captured this meaning. It is not suggested that this item is representative of the factor itself. Item 107, which does not appear to have any obvious commonality with any of the others, is included, again in order to achieve breadth. Two items are derived from this factor.

Factor 3.

Four items loaded on this factor, which accounted for 7.9% of the total variance (108, 109, 110, 111). This was relatively more simple to interpret, and it suggested a belief about education as being the key to getting a 'good' job, one that pays well, and is enjoyed. Item 110 also loads on this factor which is surprising as it does not follow this obvious thread, and its meaning has also been accounted for in the two previous

factors. The only explanation for this anomaly is that the items all appear in a cluster on the pilot questionnaire, and participants were not prepared for the change of topics. Therefore this item is not accounted for further. Following, one item is derived from this factor.

Factor 4.

Three items loaded on this factor, which accounted for 6.31 of the total variance (116, 117, 126). This suggested a view of education that is not strictly bound to an academic context, and sees education as experience. Indeed anything that prepares you for later life. Item 126 did not initially appear to fit this idea, however, as its loading was negative, it could be interpreted as suggesting that educated people are *not* different to those who aren't, which again supports the idea of education-as-experience. One item is derived from this factor.

Factor 5.

Three items loaded on this factor, which accounted for 5% of the total variance (132, 133, 134). Item 134 was at odds with the other two, and as it loaded also on Factor 2, and had a negligable loading here of only 0.41. it was not accounted for further. Whilst two loadings are unreliable support for the existence of a factor, the intention here is simply data reduction rather than the creation of new constructs, so the factor and remaining items are explored further. There is a view of education-as-personal growth here, with the inclusion of changing ideas and seeing things differently. A second possibility is that these two items are quite different from each other. Education could be (a) dynamic, in the sense that educated individuals are willing to change, or (b) more static, in that no change is necessary as educated people are one thing, and non-educated are something else. In view of these possibilities, the decision

was made to reject item 133 altogether from this factor, as it also loaded on Factor 2, and its meaning already accounted for. Therefore one item is derived from this factor, education-as-evolving.

Factor 6.

Three items loaded on this factor, which accounted for 4% of the total variance (107, 113, 114). Although there was no clear commonality here, closer inspection revealed the possibility of education-as-interest, or the pursuing of a personal hobby. The highest loading (0.814) was from item 114, which suggested interest; item 113 suggested yet again 'lots of knowledge' which is not contradictory to finding out as much as possible about subjects of interest. Finally item, 107, which sees education as an alternative to work, loads negatively suggesting that it isn't. This gives more support for the idea of personal interest or hobby, something that isn't strictly work-related. One item is derived from this factor.

Factor 7.

Two items loaded on this factor, which had an eigenvalue of 1.26, and accounted for 4% of the total variance. (111, 118). With the loading of only two items , the extraction of anything meaningful should not be attempted, general interpretations would be unreliable. In any case, both items were suggesting education-as-a-means-to-employment, this which had been accounted for in previous factors. No items are created from this factor.

Factor 8.

Two items loaded on this factor which accounted for 4% of the total variance (125, 126). Again any interpretation of this factor would be unreliable at best. Item 126 had a low loading of 0.42, and loaded on 3 other factors (slightly higher in both cases), therefore it was not accounted for further. Item 125 gave a high loading of 0.88, and seemed to suggest a view of education as the collection of as much new knowledge as possible from anywhere possible, for its own sake. This was slightly different to Factor 1, where knowledge had to come from a credible (academic) source. Therefore it was decided that this much broader view of education should be included. One item is constructed from this factor.

Table 24. Section F. New items derived from the 8-factor solution.

Item no.	Factor	Item
119, 120, 121, 123, 124.	1	Education is the amassing of knowledge by taking courses and reading as much as possible.
112, 115, 122, 126, 131	1	Education cannot be achieved by those who aren't intelligent enough to take courses and pass exams.
113, 127, 128, 129, 130, 131, 133, 134.	2	Educated people seem to have very different views to other people, and they can talk intelligently about them.
107.	2	For me, education is an alternative to employment.
108, 109, 111.	3	Education is the only way to get a really good job.
116, 117, 126	4	Education is anything at all that prepares you for later in life.
132.	5	Education is about changing your ideas when you realise you were wrong.
107, 113, 114.	6	Education is actively trying to find out everything you can about things that you are really interested in.
125.	8	Education is the collection of as much information as possible from any available source.

Table 25. Section G. Future Directions (20 items).

Where Do You See Yourself In 3 Years Time?

135	Taking the next step towards my chosen career, even though I'm not sure how to go about it yet
136	I would like to be certain, but conditions and circumstances around me seem to be changing all the time
137	My financial situation will be the strongest determinant of the next step I take
138	Although I did have a really good idea, I'm having to re-think things as I've had to take subjects that I hadn't planned to.
139	I'm not sure, I'm a person whose decisions are constantly changing
140	I have no idea, I hadn't thought about it at all
141	I want to keep an open mind and wait to see which doors might be open to me by doing these subjects
142	I'm never sure, I'm always looking round for any new options that might take my interest
143	I'm really just want to concentrate on enjoying my subjects now, so I'm not thinking that far ahead
144	I want to continue looking at my chosen subjects at a higher level of study
145	I'll be well on the way to getting some kind of really well-paid job
146	I hope to find a job that will be intellectually challenging and satisfying
147	I want to take a year out to try out other things I've always wanted to do
148	I want to take a year out to have a really good think about what to do with the rest of my life
149	I haven't decided yet – I'm excited about the wide range of options open to people with degrees
150	I want to continue studying, I would prefer this to a job
151	I'll probably continue studying - its easier than looking for a job
152	I will be taking other courses that I'll need in order to get the job I want
153	As long as I get my degree, I will worry about that when the time comes
154	I cant afford to think that far ahead because my family commitments could change.

4.4xi Results: Sub-section G.

Six items loaded on this factor, which accounted for 69% of the total variance. A quartimax rotation gave the clearest solution, with four out of 20 items loading on more than one (but not more than two) factors.

Factor 1.

Six items loaded on this factor, which explained 24% of the total variance (136, 139, 141, 142, 143, 149). This strongly suggested that many students felt that they did not have any clear future directions for a variety of different reasons. Looking at the higher loadings (items 136, 141, 142, 149), this suggested one quite distinct reason. This was that students felt that their studies would lead to a wider range of choices and they preferred to wait and explore the options rather than make a definite commitment. The two lower loadings (items 139, 143) suggested that this was because the student hadn't thought about this as the main intention was to concentrate on enjoying the course in the present. Therefore two items are derived from this factor. All revised items are shown in table 26.

Factor 2.

Five items loaded on this factor, which had an eigenvalue of 2.66, and accounted for 13% of the total variance (138, 140, 143, 145, 146). Broadly, this factor again suggested that students did not have any clear directions for the future, indeed item 143 loaded also on Factor 1. There seemed to be two further threads here as to why this might have been. Firstly, students seem to recognise that circumstances beyond their control may change, and secondly, perhaps a contradiction to this interpretation, they wanted to take a year out to think about their lives. This suggests that some plan

has been made, yet this isn't recognised as such as it isnt linked to a specific career. However, for the purpose of this analysis, 2 items containing both interpretations were constructed.

Factor 3.

Five items loaded on this factor which accounted for 10% of the variance (135, 136, 137, 145, 146). The dominant theme here was that of students seeing themselves as working towards their chosen career. There were also issues of uncertainty, e.g., how to actually go about this (136) and also some financial concerns, therefore two items are derived from this factor, relating to confidence and a lack of confidence about their career aims.

Factor 4.

Two items loaded on this factor which accounted for 8% of the total variance (150, 151). Although there were only two loadings here, they were both high (0.829 & 0.897) and the meaning was unambiguous. Students here saw their future direction as being to continue studying, as this was preferable to looking for a job. These items are collapsed into one.

Factor 5.

Four items loaded on this factor which and accounted for 6% of the variance (139, 146, 147, 148). This factor was not easy to define. Three out of the four items loaded on other factors, whose meanings had largely been accounted for already. There was no clear thread to this factor, however, with the heaviest loadings on items 147 & 148, (0.865, and 0.652 respectively) and the other two items loading at only 0.429, and 0.486, more attention was paid to the former. As in Factor 2, this seemed to suggest

that students wanted to take time out after their courses. Yet unlike Factor 2, there was more of an emphasis here on doing other things that they clearly wanted to do before settling down, even though there was no clear idea what these were. Therefore, one new item is constructed from this factor.

Factor 6.

Three items loaded on this factor which had an eigenvalue of 1.20, and accounted for 6.01% of the total variance (144, 152, 153). This suggested that students wanted to continue studying for a specific purpose. However item 144 suggested that this was to explore their subject in more depth, and item 152, for a chosen job. Item 153 suggests that students aren't looking ahead until they are sure that they have got their degrees, so loosely this could be pointing towards the student who is keen to pass, so they can eventually continue their studies. Therefore, the three items are collapsed into two, both which attempt to incorporate the 'concerns' expressed in item 153.

Table 26. Section G. New items derived from the 6-factor solution.

Item no.	Factor	Item
136, 141, 142, 149.	1	I'm not sure, I would like to know more about the options that will be open to me after completing my course.
139, 143.	1	I haven't really thought about it, I just want to concentrate on enjoying my course.
138, 140, 154.	2	I don't want to make any firm decisions as my circumstances have already, or may well change in the future.
143, 148.	2	I intend to take some time out to think about things properly, once I have completed my course.
135, 136, 137	3	Ideally, I will be taking the next step towards my chosen career, although realistically I'll have to see what happens over the next 3 years.
145, 146.	3	I'll be well on the way to getting a well-paid job that I really enjoy.
150, 151.	4	I'd like to continue studying as this is preferable to getting a job
139, 147, 148	5	I want to take a year out to explore, and do other things I've always wanted to do.
144.	6	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.
152	6	If I manage to get my degree, I'll be taking further courses which will enable me to get the job I want.

4.5. Final Revisions.

The refined 75-item instrument was now ready for administering. The original intention had been to present it to one cohort of Psychology students at three levels of studies. However, due to increasing time constraints, it seemed unlikely that a longitudinal approach would have been successful. The decision was to change to a cross-sectional design. Instead of following the same cohort for three years, one single cohort comprising levels 1, 2 and 3 will be tested over the course of the year and compared.

Secondly, in view of the change in design, the piloted questionnaire required some amendments in order to accommodate all three levels. Previously this was designed for level 1 students only. The changes were minimal, and in most cases simply required some rewording. The first change was to the introductory statement at the beginning of each section. For example, instead of asking students what they expected to gain from their courses (which suggests the entire duration of degree studies) the statement was changed to read 'courses/modules'. Similarly instead of asking 'where do you see yourself at the end of three years?', students were asked 'where do you see yourself at the end of your course?'. This was considered to be acceptable for all levels of study.

A further amendment to the questionnaire was to rename the entire instrument 'Perceptions of Higher Education', instead of 'Expectations', again which was not appropriate for levels 2 and 3. This also applied to the seven comprising sections where necessary.

A final change was to the order of the sections. It had been noticed that all of the information that had been collected in the 'Reasons For Entering Higher Education' questionnaire at the end of the interviews, had actually been discussed within them. This meant that the 'Goals' section of the original 4-component 'Conceptual Frame' did not now need to be examined by an individual measure. However, it was decided that as this was one of the main independent variables of the research, then the scoring system should be changed for that particular section. The relevant section (Personal Goals and Aims) was next relocated to the first Section A, and instead of rating each of the items on a 5-point scale, respondents were now asked to tick just one of the boxes which they feel is their most important goal. This will provide a useful grouping variable.

The revised instrument was now capable of measuring two out of the four components of the Conceptual Frame. These were 'Conceptions of Learning' (original sections C & D: The Purpose of Lectures, and The Role of Lecturers) and also 'Students Goals & Aims' (original section B).

Copies of the original 156-item instrument and the refined 75-item instrument can be found in appendices 1 and 2.

Chapter 5.

Testing Students Perceptions of Higher Education, Conceptions of Knowledge, and Academic Performance.

5.1. Introduction.

This section presents the collective results from the Perceptions of Higher Education questionnaire, the RCI, and student's coursework grades. The first section shows the results of the first baseline (cross-sectional) analysis, and shows the patterns of scores across three groups of students at levels 1, 2 and 3 of their studies. Next, a further factor analysis is carried out on the questionnaire itself in order to provide a representative picture of specific factors of concern to this particular student population. Comparisons are made between extrinsically and intrinsically motivated students in terms of their conceptions of knowledge and other factors elicited from the analysis. Finally, the results of the longitudinal analysis are reported. Developments in reasoning skill (conceptions of knowledge), are reported and compared with gains in marks and grades.

5.2. Triarchic Abilities test.

One of the aims of this research was to assess each student in terms of their scores on this particular measure of learning styles. It had been hoped to examine this aspect of students more stable abilities, as opposed to more flexible choices such as personal aims, and to explore the extent to which these may impact upon the course of development. However, as outlined in chapter 3, virtually no students managed to complete this test in the time available. Therefore, it was not possible to carry out statistical analyses on these incomplete data sets. These datasets were therefore used only to organise students into separate categories - simply to provide a varied sample

for interviewing. The exclusion of this test does not influence any aspect of the following results. It simply means that one of the originally stated research questions cannot be explored, that is, how far students learning styles may impact upon the course of development. In hindsight it could be that a more appealing reward needs to be offered for participation in what is, in reality, quite an arduous test. Likely a financial incentive may have worked. But in any event, the issue of logistics still remains – gathering a large cohort of students into an appropriate place and having the correct amount of time to complete the test. Even though participation could still be problematic using a financial incentive, it seems the only other option would have been to combine this with recruiting of students individually and asking them to attend smaller testing sessions in more freely available locations. However this still cannot guarantee attendance, and it lengthens the data collection process considerably.

5.3. Baseline Assessment:

Procedure.

The revised 76-item, 7-section 'Perceptions of Higher Education' questionnaire was given out to 250 students (Level 1: n = 121, Level 2: n = 58, Level 3: 71). They were presented with the questionnaire at the beginning of lectures and seminar sessions early in the autumn semester.

5.3ii. Results

First of all, students' goals were assessed in terms of whether their motivation for studying was either intrinsic or extrinsic (Section A, items 1-6). The questionnaire asked students to select their one *main* goal for choosing to study. 28 students did not complete this section, giving a total n = 222. Frequency counts (see table 26) showed that overall, there was a noticeable trend across all three levels, with the greater

numbers of students selecting the first item; 'To collect appropriate skills and knowledge that I need for my future career'. No other items included career-orientated goals.

However, there was a considerable discrepancy between group sizes. The next step was to review the characteristics of each of the goals in more depth, to see if sensible and meaningful reductions could be made, thus increasing group sizes. Goals 2-6 can be viewed as more intrinsic reasons for choosing to study as there is a clearer indication here that students wish to develop more in the way of their personal rather than career skills. Similarly, these five goals do not appear to view studying as a secondary route to a primary goal. Therefore a decision was taken to distinguish between intrinsic (goals 2-6) and extrinsic (goal 1), and explore potential differences in the perceptions of these two, rather than six groups. Table 26 shows the first categorisation of 6 goals and frequencies of these goals across levels, whilst table 27 shows the revised division of students into two groups.

A single chisquare analysis was used to test the hypothesis that there would be a significant difference between students with intrinsic (n = 83) and extrinsic (n = 163) goals. Results from an observed x expected chisquare test found this hypothesis to be supported ($X = 26.01$: $p = 0.0001$).

Table 27. Frequency counts of goals across 3 levels of study.

Section A. Goals.	Level 1	Level 2	Level 3	Total n
1. To collect appropriate skills & knowledge that I will need for my future career.	67	39	44	140
2. To learn more about myself and my abilities.	15	3	8	36
3. To gain as much knowledge as I possibly can about my chosen subject.	12	4	7	23
4. To really understand what writers and theorists in my subject are trying to say.	3	5	2	10
5. To make lots of new friends and build up my social life.	1	1	1	3
6. To become more confident in myself and with others.	6	0	4	10
Total n	104	52	66	**222**

Table 28. Original 6 Goals, and Re-categorisation (Total: n = 222).

Item	Goal	Frequency (n)	Group
1	To collect the appropriate skills and knowledge that I will need for my future career.	150	1 (extrinsic)
			Total n =150
2	To learn more about myself and my abilities.	26	2 (intrinsic)
3	To gain as much knowledge as I possibly can about my chosen subject.	23	2 (intrinsic)
4	To really understand what writers and theorists in my subject are trying to say.	10	2 (intrinsic)
5	To make lots of new friends and build up my social life.	3	2 (intrinsic)
6	To become more confident in myself and with others.	10	2 (intrinsic)
			Total n =72

5.3iii. Reasoning about Current Issues test (RCI).

The next step was to see if there were any differences in the levels of reasoning skills between the two intrinsically motivated and extrinsically motivated groups at the first wave of testing. Before the results are provided, an outline of this test and scoring procedure is given.

5.3iv. Materials.

In order to assess reasoning skills (Conceptions of Knowledge, King & Kitchener, 1994) the Reasoning about Current Issues test (RCI) was selected (Kitchener & Woods, 2000). There are 2 sections to the original test. The first is the Student Essay Discrimination Measure. This presents students with a real world controversy in the form of 2 small essays. Students are required to read both of these and decide which of the two represent a more sophisticated way of thinking and reasoning about the given controversy. The RCI is a questionnaire based measure, which was selected as this was viewed to be a quicker and easier way of data collection, offering the chance of collecting both qualitative and quantitative data. In any event, there is very little difference between the nature of the dilemmas, so it seemed prudent to select just one of the tests; the one that appeared easier to complete, and the one which would generate the most fruitful production of data. Following is an outline of the RCI as was used for this research.

The RCI is a 4-part questionnaire-based measure (see appendix x for a copy of this questionnaire. When given the RCI, students are first presented with a real life dilemma. For example:

> "Some researchers contend that alcoholism is at least in part, due to genetic factors. They often refer to a number of family and twin studies to support this contention. Other researchers however, do not think that alcoholism is in any way inherited. They claim that alcoholism is psychologically determined. They also claim that the reason that several members of the same family often suffer from alcoholism is due to the fact that they share common family experiences, socio-economic status, or employment". (*with permission from Woods, 2001*).

Students are required to read the dilemma and then asked to indicate their personal opinion on the issue. In the case of this particular dilemma, students are presented with the following open-ended question; "With respect to genetic factors, I think genetic factors contribute....". They may then respond in one of three ways; 'at least partially'; 'I don't know/cannot decide'; or 'do not contribute'. The second section of the RCI then asks students to provide a written justification for their point of view. Next, students are presented with a series of 10 likert-format statements, each of which correspond to the stages of intellectual development as outlined by King & Kitchener (1994). For example, the first statement given for this particular dilemma reads "When I hear a scientist say whether alcoholism is genetically determined or not, then I know what to believe". This would correspond with the lower levels of reasoning. Similarly, a statement designed to represent higher levels of reasoning, is "My point of view is based on my analysis of where the weight of the evidence lies. It is best to account for all the evidence and other things I know about related topics such as addiction, personality and genetics". Students are required to read all statements provided and rate the extent to which they feel each one is similar or dissimilar to their own viewpoint. Ratings range from 'very similar' to 'very

dissimilar' on a 4-point scale. Also included in this rating scale is 'meaningless'. This is provided because one of the statements included for each dilemma is actually meaningless, and is inserted in the attempt to identify students who may simply tick statements which sound to them to be conceptually sophisticated. For example, in this dilemma, the statement reads; "I look at the quality and density of the proof-claim of this issue and align my assumptions intrinsically. The facts of this issue must be probabilistically migrated from that what is unproven, to proven".

For each dilemma, whilst there are 10 statements, some of these are different versions of the same 'stage'. Again, for this particular dilemma, there are 2 comparative statements which are both measuring stages 2-3 (pre-reflective stage). The above statement "When I hear a scientist say whether alcoholism is genetically determined or not, then I know what to believe", is comparable to the following; (b) "My beliefs are based on what I have been taught by people who really know the right information". Again this is used to look at the wider pattern of scores, and to check for consistency.

Finally, the student is then asked to select and rank order three statements from the list which they feel best represents their point of view. Again this is used to check for consistencies with the other three sections.

Scores were collected from this measure via the likert-scale statements presented in Section 3. This procedure was as follows. Statements most often rated as 'very similar', or 'similar' are noted, and the numerical value which corresponds to that (or those) particular stage(s) of reasoning were collected as data. However according to Woods (2001) students may tick more than one statement. In such cases, it was

advised to take an average of the most popularly occurring scores. If however, there is no clear indication of any stage, then researchers are advised to refer to the '3 most representative statements', and if necessary, the qualitative statement provided in section 2. Thus there are several sources of information which can be used in conjunction if necessary, to confirm which stage a student is actually at.

5.3v. Procedure.

For the first wave of testing, the first dilemma was administered at the same time as the 'Perceptions of Higher Education' questionnaire. It was given to the same cohort of students in their seminars and lectures, early in the autumn semester. This particular dilemma was the 'Artifical Sweeteners' dilemma (see appendix 3). The test paper itself gives clear instructions to participants how to proceed – no other verbal instructions were necessary (see also appendix 3).

5.3vi. Results.

Descriptive statistics showed an upward trend in students' levels of reasoning skills across levels 1, 2 & 3 of their studies (see Fig 1.) Whilst this appears encouraging, it is important however to notice that the mean scores are perhaps a more useful indicator (see table 28). These figures show that the relative gains are small, and do not exceed one particular stage (stage 4: quasi-reflective). Whilst the range across all three levels of study is quite extensive, standard deviations are quite small and relatively similar, suggesting that the average scores here are representative

Fig.1. Gains in reasoning skills across Levels 1, 2 & 3.

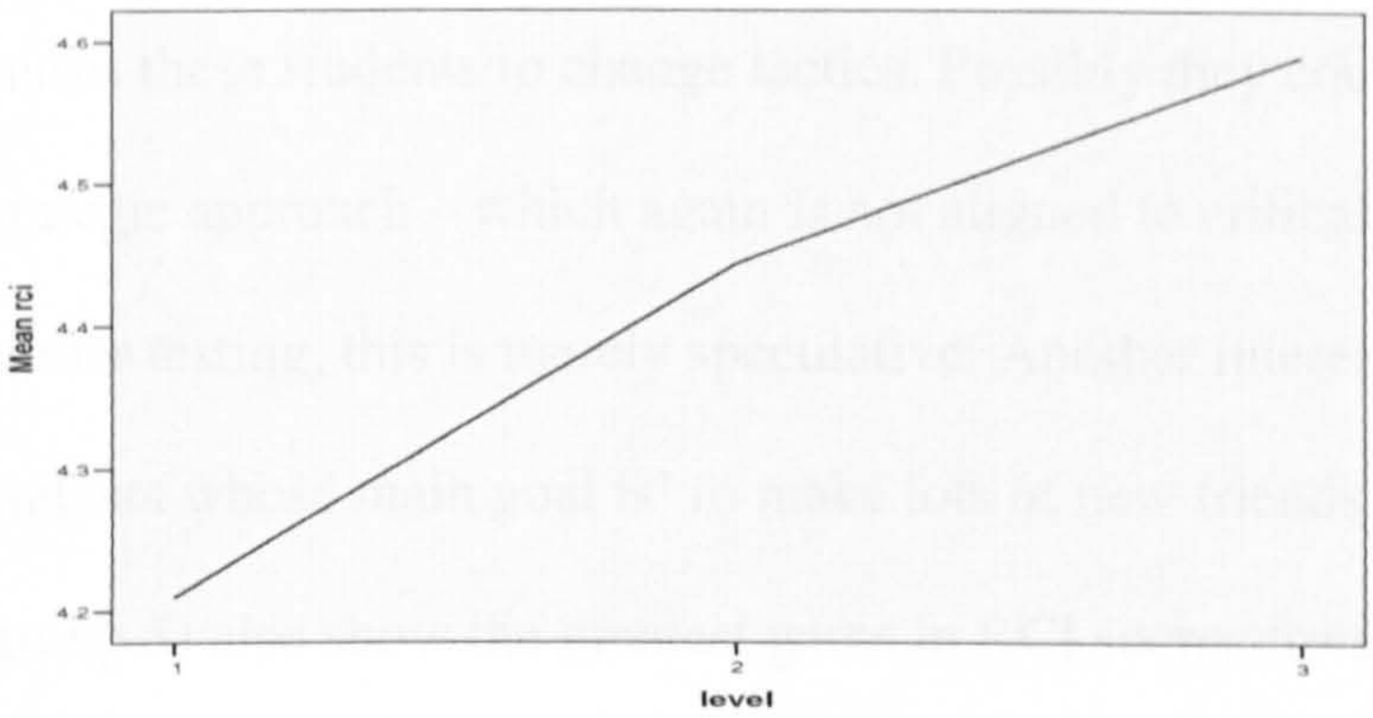


Table 29. Descriptive statistics for RCI scores across 3 levels of study (n = 224)

Level	n	mean	s.d.	min	max
1	105	4.2	0.9	1	6
2	53	4.4	0.8	2.5	6
3	66	4.5	1.0	2	6

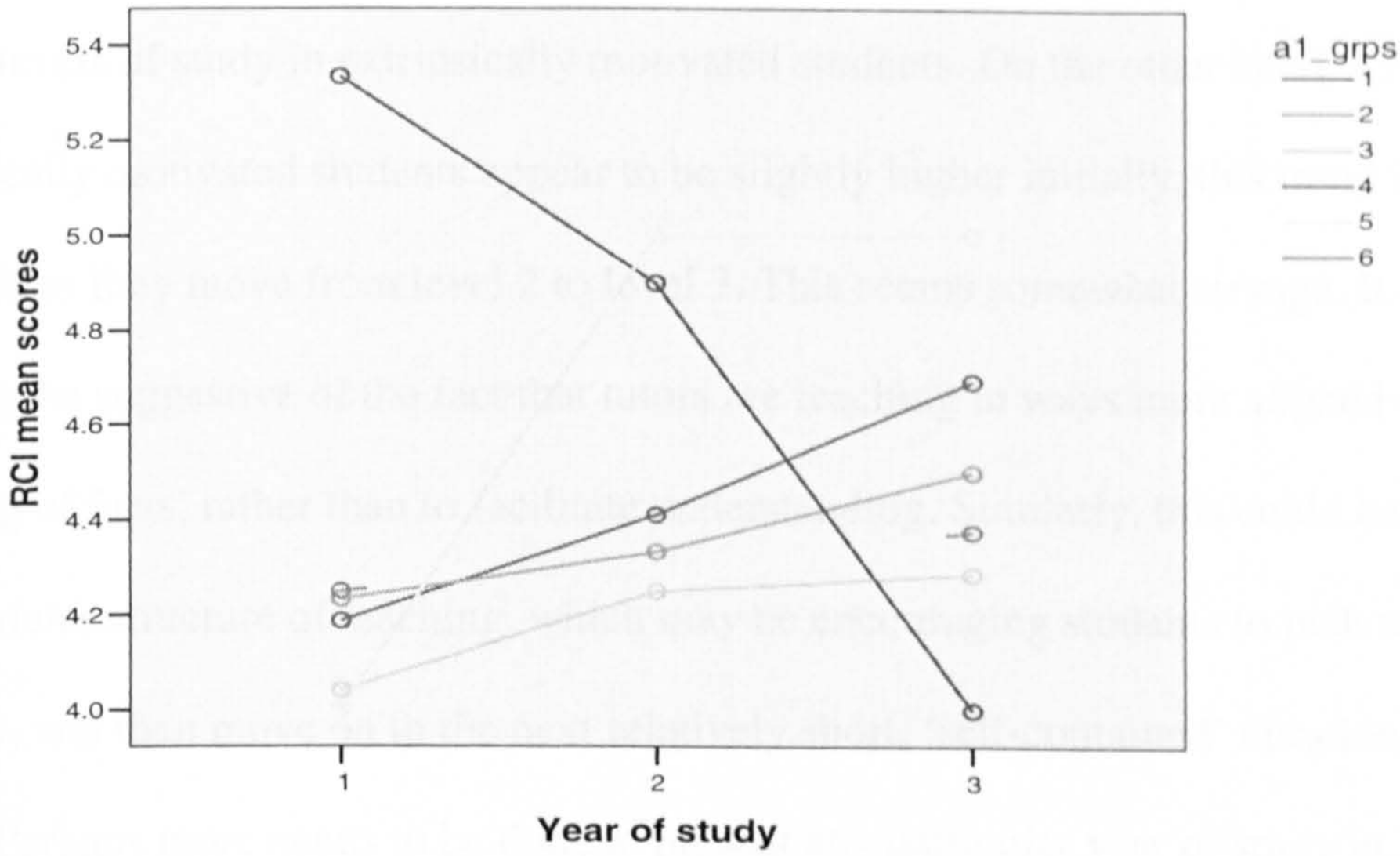
As the group sizes were unequal, a Kruskal –Wallis test was selected to test for significance. No differences were found across the groups, suggesting no significant gains as students' years of study increased.

The next step was to compare scores on the RCI test across the different goal-groups across the three levels of study. Firstly, scores are presented from the 6 original goals, however given the discrepancies between groups sizes, no further statistical analyses are carried out here. The most outstanding observation is the sharp decrease observed in scores from level 1 to level 3 by group 4 (see Fig 2). Interestingly this is the group whose main goal is; 'to really understand what writers and theorists in my subject are trying to say'. This group also are observed to be those scoring most highly on the RCI than any other group at level 1, and their scores are lowest at level 3. This suggests some support for the idea that critical thinking is perhaps not similar to deep

processing, unless of course, something is occurring across the years of studying that causes these students to change tactics. Possibly they could be moving towards a more strategic approach – which again is not aligned to critical thinking. However without further testing, this is merely speculative. Another interesting observation is that students whose main goal is' to make lots of new friends and build up my social life' (group 5) also show the greatest gains in RCI scores from levels 1 – 2, however this does not increase any further at level 3. However, this is the highest scoring group at level 3 compared to any other group. Finally, it is interesting to consider that the decline by group 4, and the gains shown by group 5 are from intrinsically motivated and extrinsically motivated students respectively. This is somewhat counter-intuitive, as it could perhaps be expected that these trends would be in the reverse.

Students whose main goal is 'to collect the appropriate skills and knowledge that I will need for my future career' (group 1; extrinsically motivated), are those who appear to be showing the steadiest increase. However mean scores suggest the gain is small (4.2 – 4.6) and does not exceed the boundaries of stage 4 (quasi-reflective). The other two groups show fairly similar trends, which is that of very small gains. The lowest gains of all are observed by students whose main goal is 'to gain as much knowledge as I possibly can about my chosen subject' (group 3). This is also quite interesting as it does suggest that students whose aim it is to collect knowledge are those who are the potential 'surface processors', and do not develop skills of critical thinking as much as others do. However this is still a gain, albeit very small, and it is to be compared to the sharp decline across levels by those who profess that their aim is to 'understand'.

Fig. 2. Mean scores of RCI across 6 different 'goal-groups'.



After the six groups had been collapsed to create the 2 new, 'Intrinsic' and 'Extrinsic', findings were similar. Descriptive statistics suggested again that gains in critical thinking were greatest in extrinsically motivated students. Whilst gains were low in both groups, it is the extrinsically motivated students whose gains are more consistent. Intrinsically motivated students show the higher baseline scores at level 1 and their scores are slightly higher at level 2, but much of the gain is lost at the end of level 3 study (see table 29).

Results of a Levene's test permitted the use of a parametric analysis (F = 0.928, p = 0.464). A (2 x 3) Anova was carried out on these data to check for any significant differences. No significant main effects were found for either 'Goals' (F = 0.026; p = 0.873; df = 1), or Level (F = 2.431; p = 0.09; df = 2). No significant interaction was found (F = 0.965: p = 0.38; df = 2). A closer inspection of a post hoc Scheffe test showed that there was a trend towards significance between scores of the Extrinsic group at levels 1 & 3, however this should be treated with some caution given that there is some discrepancy in group sizes. In summary, it appears that whilst gains in

reasoning skills are small overall, there is at least a trend in an upward direction across levels of study in extrinsically motivated students. On the other hand, whilst intrinsically motivated students appear to be slightly higher initially, this trend is reversed as they move from level 2 to level 3. This seems somewhat strange. It could possibly be suggestive of the fact that tutors are teaching in ways more aligned to the learning of facts, rather than to facilitate understanding. Similarly, this could be due to the modular structure of teaching, which may be encouraging students to pick up facts quickly, and then move on to the next relatively short, 'self-contained' duration of study. Perhaps more needs to be done to present any particular year of study in a more holistic way.

Table 30. Mean RCI scores of Intrinsically & Extrinsically Motivated Students, by Level of Study.

Goals	Level	n	Mean	s.d.
Intrinsic	1	37	4.2	0.91
	2	13	4.5	0.97
	3	22	4.3	1.02
Extrinsic	1	67	4.1	0.98
	2	39	4.4	0.91
	3	44	4.6	0. 8

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5.4. Exploring differences in 'Perceptions of Higher Education' between Intrinsically & Extrinsically motivated students.

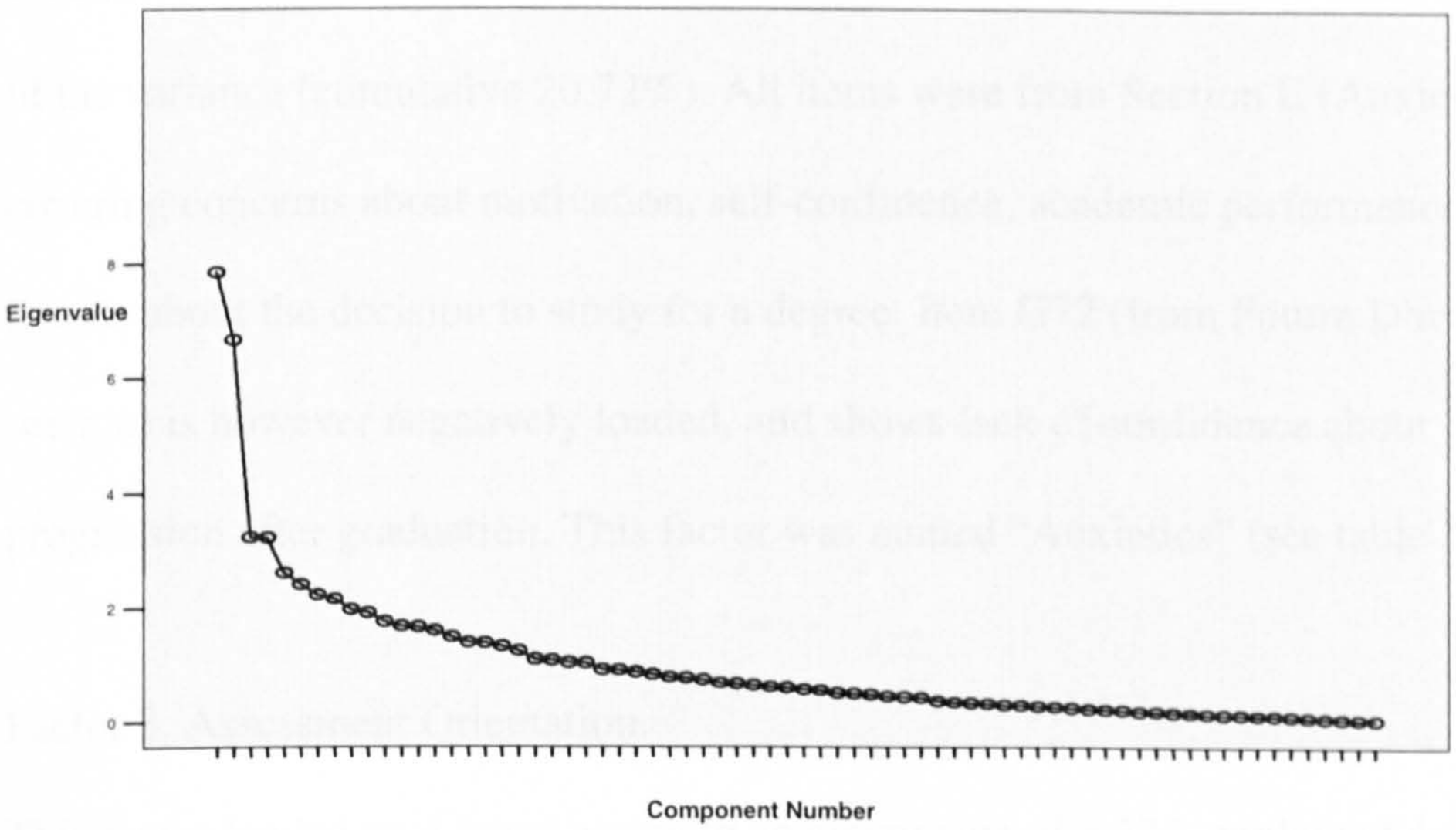
A further exploratory factor analysis was carried out on the 'Perceptions of Higher Education' questionnaire in order to look for the more prominent, characteristic perceptions of this particular cohort. As a reminder, there were seven sections to this questionnaire. The first (section A) was that of 'Goals'; as a grouping variable only,

this was not included in the analysis. Section B ('Perceptions of Progress', 7 items), Section C (Perceptions of Lectures, 13 items), Section D (Perceptions of Lecturers/Tutors, 12 items), Section E (Anxieties, 19 items), Section F (Perceptions of Education, 9 items) and Section G (Future Directions, 10 items) were all entered into the analysis. All values below 0.4 were suppressed, as recommended by Field (2001). A varimax rotation provided the clearest structure. The following results are based on responses from the original sample, from students at levels 1, 2 & 3 (n = 246).

5.4i. Results

Initial analysis suggested that there were 23 factors which had eigenvalues above 1, however, a scree plot (fig. 3) suggested that there were four clear factors. The plot shows all of the factors in descending order, and a more subjective judgement is required to select and retain the factors that account for most of the variance. Those which lie to the right of the steeper curve are considered to be of less importance to the analysis (Brown, 2006).

Fig. 3. Scree Plot showing four factors elicited from the 76-Item questionnaire.



Following is a description of the factors.

Factor 1. Study Orientation.

Total n = 246. Group 1 (Extrinsic) n = 183: Group 2 (Intrinsic) n = 63.

This factor loaded on 17 items and with an eigenvalue of 7.845, accounted for 11.208% of the total variance. With the exception of items E40 and G73, all other items originate from Section C (Perceptions of Lectures) and Section D (Perceptions of Lecturers/Tutors). Items in these sections are virtually identical, focussing on academic study and related activities. Item E40, although from the 'Anxieties section, still appears to focus on concerns related to academic study. Similarly, item G73, from 'Future Directions', is based around continuation of studies. This factor was named "Study Orientation" (see table 30).

Factor 2. Anxieties.

This factor loaded on 14 items and with an eigenvalue of 6.661, accounted for 9.515% of the variance (cumulative 20.72%). All items were from Section E (Anxieties), covering concerns about motivation, self-confidence, academic performance and doubts about the decision to study for a degree. Item G72 (from Future Directions section) is however negatively loaded, and shows lack of confidence about progression after graduation. This factor was named "Anxieties" (see table 31).

Factor 3. Assessment Orientation.

This factor loaded on 4 items and with an eigenvalue of 3.225, explained 4.607% of the total variance (cumulative 25.33%). Loadings were relatively low, and items C19 & C23 also loaded on Factor 1. However there was a clear emphasis here on the collection of knowledge, which suggested that the factor was worth retaining. Item F66, which also loads on Factor 4 is negatively loaded, suggesting that knowledge or information is selective rather than wholesale. This 'selectivity' is also evidenced in items C19 and D33. In view of this, the factor is named 'Assessment Orientation' as it seems to be suggesting that students perceive the role of lectures and lecturers' themselves as being to provide students with appropriate information. In an educational context, this can be accepted as being in order to pass coursework and exams (see table 32)

Factor 4. Degree as a Stopgap.

This factor loaded on 6 items and with an eigenvalue of 3.218, explained 4.597% of the total variance (cumulative 29.72). Most of these items were from Section G (Future Directions). Four out of the six items which outlined clear intentions were negatively loaded, suggesting a lack of direction. Items G70 and G74 however, loaded

positively - again suggesting this. Item F66 is less explanatory. There is a negative loading on this naïve conception of education which is perhaps a little counter-intuitive. It could be that such students actually do hold naïve conceptions of education in that only the 'right' answers constitute 'real' learning, and given their lack of direction, they are picking up very little from their immediate educational context of Higher Education. This factor was named " Degree as a Stopgap" (see table 33).

Table 31. Factor 1: Study Orientation. Component Items & Loadings.

Loading	Item no.	Item
(.420)	C17	To present information in an interesting way so that students find learning easy and pleasurable.
(.471)	C18	To criticise theories and literature, and try to encourage students to do the same.
(.418)	C19	To give students as much information as possible, so that they can select out the parts they think are important.
(.509)	C22	To motivate students into going away and learning more about the subject/topic in their own time.
(.426)	C23	To make sure that all students get exactly the same information.
(.529)	C24	To enable lecturers to deliver information to a whole lot of students quickly and easily.
(.592)	C25	To show students the flaws in others' ideas, and encourage them to form their own solutions to these.
(.543)	C26	To try to keep students on top of their work by showing them just how difficult a subject/topic can be.
(.562)	D30	To make information interesting so that students find learning easy and pleasant.
(.474)	D32	To simplify the learning process for students by structuring things clearly.
(.663)	D34	To criticise theories and literature and try to encourage students to do the same.
(.438)	D35	To stimulate and facilitate discussion amongst students.
(.433)	D36	To ensure that all students receive the same information about the subject/topic
(.521)	D37	To encourage students to keep on top of their work by reminding them how difficult the subject/topic can be.
(.642)	D38	To show students the flaws in others' ideas, and encourage them to form their own solutions to these.
(.530)	E40	Other students always seem to be better at organising themselves than me.
(.419)	G73	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.

Table 32. Factor 2. Anxieties. Component Items & Loadings.

Loading	Item no.	Item
(.486)	E39	I will not be able to perform at the academic level expected of me in Higher Education.
(.510)	E40	Other students always seem to be better at organising themselves than me.
(.609)	E41	I feel that intellectually, I will not be able to keep up with other students on my course.
(.586)	E42	I feel that I will not be able to cope with the workload.
(.409)	E44	I tend not to perform well in exams.
(.520)	E46	I find it difficult to motivate myself to get started, and to complete work.
(.614)	E47	I find it difficult to organise everything so that I can get all my work done on time.
(.558)	E48	I do not know if I will finish the course if it starts to take up too much of my time and energy.
(.438)	E49	I tend to blame anyone and anything else for my failure to complete the work.
(.619)	E50	I am very self-conscious and often feel inferior amongst other students.
(.632)	E51	Often I feel like I am the only one who has problems trying to understand anything.
(.474)	E53	I do not know if I have made the right decision to study for a degree
(.412)	E54	The subjects I am taking will turn out to be less interesting than I thought which will affect my progress in them.
(-.439)	G72	I will be well on the way to getting a well-paid job that I really enjoy.

Table 33. Factor 3. Assessment Orientation. Component Items & Loadings.

Loading	Item no.	Item
(.423)	C19	To give students as much information as possible, so that they can select out the parts they think are important.
(.450)	C23	To make sure that all students get exactly the same information.
(.430)	D33	To provide students with all the knowledge they will need in order to pass their exams and assignments.
(-.419)	F66	Education is the collection of as much information as possible from any available source.

Table 34. Factor 4. Degree as a Stopgap. Component Items & Loadings.

Loading	Item no.	Item
(-.403)	F66	Education is the collection of as much information as possible from any available source.
(.489)	G70	I intend to take some time out to think about things properly, once I have completed my course.
(-.420)	G71	Ideally, I will be taking the next step towards my chosen career, although my financial situation will probably determine what I can and cannot do.
(-.489)	G73	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.
(.467)	G74	I want to take a year out to explore, and do other things I have always wanted to do.
(-.479)	G75	If I manage to get my degree, I will be taking further courses which will enable me to get the job I want.

5.4ii. Exploring Group Differences.

The above analysis gives a picture of the characteristics of this student population. The next step was to look for any differences occurring between the internally and externally motivated student groups. The simplest way to do this was to calculate an average score from all students, for each of the items within each of the factors. Thus a single representative score could be measured and compared between students in Groups 1 and 2. Scores range from 1 (strongly disagree, to 5 = strongly agree)

Factor 1. Study Orientation

All levels. Total N = 246. Group 1 (Ext.) = 183: Group 2 (Int.) = 63).

This factor is useful and informative in that all items loaded on the two sections of the questionnaire that were designed to explore Conceptions of Learning (i.e. Section C.; 'Perceptions of Lectures)', and Section D; 'Perceptions of Lecturers'). This allows comparisons to be made across the two groups of extrinsically (Group 1) and intrinsically (Group 2) motivated students (see table 34). Disappointingly, it can be seen from the mean scores that largely, both groups of students are tending to be unsure about most of the items. There are only two areas in which it seems that students do have some clear views. These are firstly, item C22 ("To motivate students into going away and learning more about the subject/topic in their own time"). There is evidence that students are tending to agree with this view of the purpose of lectures, however there was no statistical support for this very small difference. The same applies for item D32 ("To simplify the learning process for students by structuring things clearly"). Again students are tending to agree with this view of the purpose of lectures, but again, no statistical support was found for this very small difference. Finally item C26 ("To try to keep students on top of their work by showing them just

how difficult a subject/topic can be"), shows students tending to disagree about this view of the purpose of lectures, but again no statistical support was found for this.

In general, all the differences are observably small and there was no statistical support for any of them. There are also no observable trends in the pattern of scoring, for example one group consistently scoring higher or lower than the other. This section suggests that there are no real differences between intrinsically and extrinsically motivated students in terms of their conceptions of learning, and perceptions of teaching and learning.

Table 35. Comparison of Study Orientations between Intrinsically & Extrinsically Motivated Students. (*Items in bold are those broadly representing conceptions of learning as outlined by Marton & Saljo, 1976*).

No.	Item	Grp 1 Mean	Grp 2 Mean
C17	To present information in an interesting way so that students find learning easy and pleasurable.	3.85	3.73
C18	**To criticise theories and literature, and try to encourage students to do the same.**	3.72	3.80
C19	**To give students as much information as possible, so that they can select out the parts they think are important.**	3.21	3.15
C22	**To motivate students into going away and learning more about the subject/topic in their own time.**	4.28	4.23
C23	**To make sure that all students get exactly the same information.**	3.41	3.66
C24	**To enable lecturers to deliver information to a whole lot of students quickly and easily.**	3.41	3.81
C25	**To show students the flaws in others' ideas, and encourage them to form their own solutions to these.**	3.63	3.64
C26	To try to keep students on top of their work by showing them just how difficult a subject/topic can be.	2.69	2.83
D30	To make information interesting so that students find learning easy and pleasant.	3.79	3.96
D32	To simplify the learning process for students by structuring things clearly.	4.02	4.04
D34	**To criticise theories and literature and try to encourage students to do the same.**	3.74	3.80
D35	**To stimulate and facilitate discussion amongst students.**	3.95	3.93
D36	**To ensure that all students receive the same information about the subject/topic**	3.45	3.72
D37	To encourage students to keep on top of their work by reminding them how difficult the subject/topic can be.	3.13	3.23
D38	**To show students the flaws in others' ideas, and encourage them to form their own solutions to these.**	3.68	3.80
E40	Other students always seem to be better at organising themselves than me.	3.15	3.10
G73	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.	3.57	3.47

This factor also contained items which broadly were capable of assessing conceptions of learning as outlined by Marton & Saljo (1976). These items are emboldened in the above table X. Items C18, C22, C25, D34 and D35 suggest a deep conception of learning. There is an emphasis on critical thinking and independent learning in these items. There is relatively little difference in the preponderance of 'not sure' responses across these items. Whilst the cohort generally tend to agree that the purpose of lectures is to 'motivate students into going away to learn more about the topic in their own time', there is virtually no difference in scores. Items C19, C23, C24 and D36 suggest a surface conception of learning, as there is a focus on the collection of information. Scores across the groups suggest that both are not sure that this is the purpose of lectures (section 'C' items), nor that this is the role of tutors (section 'D' items). There is a small trend towards tending to agree that the purpose of lectures is 'to deliver information to a whole lot of students quickly and easily' (item C24) perhaps more so by the intrinsically motivated students, however results of a Mann-Whitney test for unequal group sizes found this to be non-significant.

The majority of responses by both groups were 'unsure' on most of these items. This was felt to be somewhat disappointing in terms of discriminating between the groups perceptions. However, this may simply be offering more support for the view that it is difficult to measure and assess conceptions of learning accurately, at least by trying to relate such conceptions broadly to the Marton & Saljo (1976) dichotomy. But in any event, care was taken to collect data for this questionnaire from students themselves, in the hope that they might be better able to relate to the meanings. It is one thing to find no significant differences between groups, but another to find that both groups are for the majority, 'unsure' about most things. At another level, it could be that the

broad division of these two groups was not accurate enough to detect differences. Yet again, it still seems unusual perhaps, that there is general consensus of 'unsure'.

Factor 2. Anxieties.

Table 35 shows the mean scores on these items again suggest that in the main, both groups of students are tending to disagree with many of the stated anxieties (scores ranging from 1 – 3), and to be unsure about the rest (3 – 3.69). More importantly there are again no clear instances where the views of the two groups differ. Possibly the largest difference can be seen on item E45 ("The subjects I am taking will turn out to be less interesting than I thought which will affect my progress in them"), though this is fairly unsubstantial. According to the scoring system, Group 1 (extrinsic) students are tending towards 'disagreeing' with this item, whereas Group 2 (intrinsic) are tending towards being unsure about this. This could have some small implications for the idea that intrinsically motivated students will be more interested in their subject areas and will have chosen them more carefully. Alternatively it could mean that extrinsically motivated students are less concerned about being interested in their studies, and more concerned with the outcome of these. In any case, given the small, and non-significant differences across all items, there can be no real conclusions drawn for the hypotheses that the perceptions of the two groups are different.

Table 36. Factor 2. Comparison of Anxieties between Intrinsically & Extrinsically Motivated Students.

No.	Item	Grp 1 (EXT.) Mean	Grp 2 (INT.) Mean
E39	I will not be able to perform at the academic level expected of me in Higher Education.	2.74	2.84
E40	Other students always seem to be better at organising themselves than me.	3.15	3.17
E41	I feel that intellectually, I will not be able to keep up with other students on my course.	2.63	2.63
E42	I feel that I will not be able to cope with the workload.	2.86	2.63
E44	I tend not to perform well in exams.	3.69	3.24
E46	I find it difficult to motivate myself to get started, and to complete work.	3.19	3.09
E47	I find it difficult to organise everything so that I can get all my work done on time.	2.91	3.09
E48	I do not know if I will finish the course if it starts to take up too much of my time and energy.	1.74	1.97
E49	I tend to blame anyone and anything else for my failure to complete the work.	1.70	1.72
E50	I am very self-conscious and often feel inferior amongst other students.	2.39	2.49
E51	Often I feel like I am the only one who has problems trying to understand anything.	2.38	2.49
E53	I do not know if I have made the right decision to study for a degree.	1.72	1.95
E54	The subjects I am taking will turn out to be less interesting than I thought which will affect my progress in them.	2.30	2.70
G72	I will be well on the way to getting a well-paid job that I really enjoy.	3.33	3.07

Factor 3. Assessment Orientation.

This 4-item factor again shows students tending towards uncertainty on three items (see table 36). Item F66 did suggest a difference, the only one so far to evidence a clear distinction between the groups ("Education is the collection of as much information as possible from any available source"). In terms of the difference in groups' perceptions, this could mean either of two things. Group 2 (intrinsic) are tending to agree with this view, which was negatively loaded. Therefore they may perceive that education requires selective knowledge only, or it could mean that they do not perceive education itself as simply being an act of collecting knowledge. Given that there is no further clear direction of views from Group 1 which may have helped clarify this, the meaning will be considered later in relation to other indicative findings across the model. In any case, results of a Mann Whitney test for unequal group sizes found no statistical support for this difference.

Table 37. Factor 3. Comparison of 'Assessment Orientation' between Intrinsically & Extrinsically Motivated Students.

No.	Item	Grp 1 (EXT) Mean	Grp 2 (INT) Mean
C19	To give students as much information as possible, so that they can select out the parts they think are important.	3.21	3.15
C23	To make sure that all students get exactly the same information.	3.41	3.66
D33	To provide students with all the knowledge they will need in order to pass their exams and assignments.	3.19	3.03
F66 -	Education is the collection of as much information as possible from any available source.	3.47	2.49

Factor 4. Degree as a Stopgap.

Again, there are only two items here which suggest some clear opinion (items G70 and G74; see table 38). The rest suggest that students are unclear as to why they might really want or need their degrees and what they might do after gaining them. Item G74 suggests that both groups of students are tending to disagree that they will be thinking further about their directions in life after their degrees are completed.

Perhaps to be expected, this score is slightly lower for extrinsically motivated students. Interestingly, item G70 is worded quite similarly, yet intrinsically motivated students are unsure here. Maybe this has some bearing on the *amount* of time they feel they might need; in this case it could mean months, even weeks, rather than a year. Using a Mann-Whitney test, this difference was found to be significant (U= 5067; p = 0.02). More interestingly, there is no real indication that extrinsically motivated students intend to pursue a career on completing their degrees. Items G71 and G75 are both negatively loaded on this factor, and in both groups' cases, they are unsure. But this could be due to the wording in the items. G71 also highlights potential restrictions by financial situations. Given that many within this sample were level 1 and 2 students, they may well have had doubts about what financial situation they may eventually find themselves in. The same might be said about item G75. This item states '*if* I get my degree...' which again, might seem further away from level 1 and 2 students, as opposed to level 3. Also, depending on the type of career a student has in mind, further courses may not be perceived as necessary.

Table 38. Comparison of 'Degree as a Stopgap' between Intrinsically & Extrinsically Motivated Students. (* significant at p< 0.05).

No.	Item	Grp 1 Mean	Grp 2 Mean
F66 -	Education is the collection of as much information as possible from any available source.	3.47	3.29
G70	I intend to take some time out to think about things properly, once I have completed my course.	2.66*	3.12*
G71 -	Ideally, I will be taking the next step towards my chosen career, although my financial situation will probably determine what I can and cannot do.	3.36	3.24
G73 -	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.	3.57	3.47
G74	I want to take a year out to explore, and do other things I have always wanted to do.	2.58	2.73
G75 -	If I manage to get my degree, I will be taking further courses which will enable me to get the job I want.	3.85	3.66

5.4iii. Summary.

These results suggest, at least in terms of the 'goals' distinction made in this study, that there is very little difference between the perceptual outlooks of the 2 groups. Conceptions of Learning are similar (as measured on Factor 1), both groups share the same sets of concerns and anxieties, and both largely hold similar views about knowledge and assessment. One significant difference is found between groups in terms of the time students intend to take before embarking on their next steps, post graduation. Whilst there is some statistical support for this difference, in that extrinsically motivated students tend to disagree, it still cannot be said with confidence that these students are planning to go straight into a career – just that they don't intend to think about things properly.

5.5. Longitudinal Analysis.

Following on from the baseline (cross-sectional) analysis, this second dataset was collected when the original level 1 students had reached the end of their level 2 studies, and the original level 2 students were nearing the end of level 3. There was at

this time, a very large decline in the sample sizes. Students were given a second dilemma ('Preparing the Workforce for the 21st Century'; see appendix 4) in their weekly sessions, but many chose not to complete it. This could have been because the test took at best 10 minutes to complete, and at worst, 20. In any case, many students had completed the test previously and may not have wished to do so again. By the very nature of the test, it does require some in-depth-thinking.

Data were collected from 135 students at Levels 2 and 3. Of this dataset, only 30 responses were valid for comparison. This provided 12 students from level 1, 11 students from level 2, and 7 students from level 3. The 7 level 3 students were repeating the year.

5.5i. Development of Critical Thinking Skills (RCI).

Descriptive statistics for students at all levels suggest that there is no gain in RCI scores over a 2-year academic period (see table 38). In fact, there is a small decrease, although this does not fall outside of one RCI stage, which suggests that these students enter their studies as pre-reflective thinkers, and remain there. The same appears to be the case with their marks. Students enter and remain at a lower-second class academic level. This suggests there may be some relationship between RCI and academic performance. However a paired-samples t-test found no significant differences between either RCI scores, or students grades.

Table 39. Mean scores of RCI (times 1 & 2) and Marks (times 1 & 2).

	n	Mean	S.D
RCI 1	29	4.34	1.1
RCI 2	30	4.15	1.0
Marks 1	29	56.5	6.9
Marks 2	29	55.2	6.8

When the scores were compared across 'goal-groups', a different pattern emerges. Table 39 shows the mean scores of both sets of RCI scores, and both sets of marks and grades (n = 30). Surprisingly, this shows that both groups score more highly at the first wave of testing than at the second. Also, it is the extrinsically motivated students who score higher than the intrinsic group at both times of testing. The decline in their scores over time is also larger than that of the intrinsic group. Interestingly, it is the intrinsic group who score more highly in terms of their marks, again at both times of testing, although these marks appear to shift downwards a whole degree class at time 2. The extrinsic group remain consistent. Paired-samples t-tests found no significant differences between groups RCI scores at any level. This pattern of scores suggest that if there is a relationship, then this is more complex and could be dependent on other, different types of motivation in students.

Table 40. Two groups: Mean scores of RCI (times 1 & 2) and Marks (times 1 & 2).

	Grp 1 (Extrinsic) (n = 22)		Group 2 (intrinsic) (n = 7)	
	Mean	S.D.	Mean	S.D
RCI 1	4.5	1.0	3.8	1.4
RCI 2	4.1	1.0	3.7	1.1
Marks 1	55	7.1	61	4.4
Marks 2	55	7.1	56	6.2

Correlational analysis of all students scores on these measures showed no significant relationships between RCI scores and marks, although marks themselves correlate highly with each other over time ($r = 0.71$; $p = 0.01$) (see table 40). Whilst there are small relationships between both sets of RCI scores and both sets of marks, it is interesting to see that the first RCI scores predict the second set of marks slightly better than the second. However these results should be treated with caution due to the

very small sample sizes. Further analyses were not carried out across the two goal-groups as a sample of 7 (intrinsic) would have been poor for comparison.

Table 41. Correlations of RCI scores (times 1 & 2) with marks.
(Marked correlations are significant at p‹ 0.01).

	RCI 1	RCI 2	Marks 1	Marks 2
RCI 1	-	0.13	0.19	0.25
n		29	28	28
RCI 2		-	0.22	.023
n			29	29
Marks 1			-	0.71*
n				29
Marks 2				-

5.5ii. Development of Academic Grades.

Whilst the sample size for all those completing the 2 RCI tests was small, this was not the case for marks and grades. These were collected for analysis from 190 students at time 1, and 171 at time 2. Table 41 compares the mean scores from the 2 groups of students at both times of testing. Again, overall, there is a small decrease in grades from both groups, although this is relatively small. T-tests on all scores found no significant differences over time or across the groups.

Table 42. Comparison of mean scores of 2 groups at times 1 & 2.

	n	Time 1		n	Time 2	
		Mean	S.D		Mean	S.D
Grp 1. Extrinsic	121	55.4	8.0	105	54.7	9.2
Grp 2. Intrinsic	69	55.1	8.9	66	54.9	10.4

5.6. Summary of Statistical Findings.

This picture of results suggest that there are no striking differences between students who are intrinsically motivated to study and those who are extrinsically motivated. This pertains to their development of critical thinking skills, their marks and grades, and their perceptions of Higher Education. The only clear difference to be found is that there are significantly more students choosing to study in order to progress towards their chosen career.

The picture of gains in critical thinking is somewhat unclear. The first baseline measures showed that there was a general upward trend across levels of study, although these were small and not found to be significant. Students began at 4.2, progressed to 4.4, and at the end of their studies, achieved 4.5. This suggests that students enter at an early pre-reflective stage, and progress only to midway over an 3-year period. Whilst this direction was expected, the results should be met with some caution as they are in fact different groups, and their tuition may have varied.

However it seems that this upward trend is reversed when students' motivations are taken into account. It was expected that intrinsically motivated students would be likely to be those whose scores would be higher that extrinsically motivated, but this was not the case. At baseline, intrinsically motivated students did score 4.2 on their RCI scores, as opposed to 4.1 by extrinsics. At level 2, both groups gained 0.3 on their original scores, but by level 3, the intrinsics lose 0.2 from their level 2 scores, whilst the extrinsics gain this amount. Thus whilst intrinsically motivated students score more highly at levels 1 and 2, the trend is reversed at level 3. But again, these

are different groups and given the relatively small differences, these could be due to variations in teaching, or slight variations in cohorts.

When looked at longitudinally, the trend changes again. Scores were collected from the same students over an 18-month period. Whilst as before the trend is downwards, but at both times of testing it is the externally motivated students who score more highly than intrinsic. Also for this sample, it is shown that the intrinsically motivated students score 3.8 at baseline, and 3.7 when tested later. This drop of 0.1 in scores is less than 0.3 as scored by the externally motivated, but perhaps more interestingly, this places these students in a pre-reflective stage of reasoning. Whilst interesting and somewhat unexpected, it is again reminded that this sample of students was very small (n = 29) and the groups were highly disproportionate.

The same applies to findings which suggest that there is no relationship between RCI scores and students' marks and grades. These results suggest that it is the baseline scores which are slightly higher correlated with in academic grades over an 18-month period. There is also perhaps surprisingly, a weak (though positive) correlation between RCI scores over time. Yet it is also found here that both groups of students mean grades at baseline are also slightly higher than at the second time of testing, which could suggest that Higher Education is perhaps not conducive to the development of critical thinking, and something else is happening.

Given the previous findings of discrepancies in groups' scores, and trends in directions, this set of findings might have been interesting to speculate upon. It could have been, as suggested in chapter 1, that certain students do not feel the need to

develop their critical thinking skills, and simply collect the knowledge that they think they will need after graduation. It may be that there is a conflict of goals between tutors and students. But in any case it is interesting to see that it is the extrinsically motivated students whose marks (although not significantly) improve the most, and their RCI scores, although decreasing, remain higher than intrinsically motivated. This could mean that although Higher Education purports to encourage critical thinking, it is in fact emphasising the knowledge component. It might have been suggested that intrinsically motivated students RCI scores decrease over time precisely because of this, i.e., they are not getting the experience they expected. But given that their scores are lower at baseline, this can perhaps be ruled out. Yet their scores only decrease by 0.1, as opposed to 0.4 by the extrinsic group.

This speculation is perhaps negated when looking at the characteristics of Intrinsic and Extrinsically motivated students. Across 4 factors, and their component items, there were few differences. Little was found to discriminate between the groups. Most responses were of 'unsure', however whilst all students tended to agree that the purpose of lectures was to encourage the development of critical thinking, there was a trend by the intrinsically motivated students towards seeing a lecturers' role as being to disseminate information fairly amongst students. Extrinsically motivated students were not sure. But again this difference was very small, and indeed the students who completed this questionnaire were not those who submitted 2 RCI scores for comparison.

In terms of anxieties, again there were no indications that there were any differences between the groups. The same was found for Assessment Orientation where responses were again mostly 'unsure'. However there was one small noticeable difference, in

that intrinsically motivated students tended to disagree that 'education is the collection of as much information as possible from any available source'. Again there is a focus on information collection, but what this really means is unclear. It could be that only the 'right' information is relevant, or that it has to come from the 'right' place. But in any event, this is reminiscent of pre-reflective stages of reasoning where the focus is on the 'right' answer, and authority figures. This would also tally with the findings that these students RCI scores were lower than the extrinsics, both at baseline and at the end of the testing period.

For the 4th factor (Degree as a Stopgap) and it's 6 component items, there were mainly the same set of 'unsure' responses. However there was one significant difference, which saw extrinsically motivated students tending to disagree with the idea that they 'would be taking some time out to think things through properly once their course were completed. This could suggest either that they have a clear plan which they intend to execute, or that they will be doing nothing at all. Scores on other similar items gave no support for either of these speculations, so relatively little can be learned from this finding.

Finally, apart from the point mentioned earlier regarding the role of lecturers', there were no differences found on those items which were indicative of both deep and surface conceptions of learning. At one level, this could have been because there were relatively few of them as opposed to other existing instruments, however, these items were derived from interview situations from this specific cohort, so at least it could be argued that they understood the basic distinction. On the other hand, it could have been that they largely felt that both dissemination and collection of information, also the encouragement of critical thinking, are both important aspects of lectures and

tutors roles. Given the findings in the literature that this distinction is somewhat fuzzy, and much depends on what an individual understands by the terms, this is also a possibility.

These result provide little to suggest that students motivations to study can critically influence either their perceptions of Higher Education, and on a note of lesser confidence, their development of critical thinking skills. Responses for comparison were poor. The only real suggestion is that more students are tending to study for a degree in order to attain their chosen careers, rather than for intrinsic (as described here) and personal reasons.

5.7. Revisiting the interview transcripts.

As a final attempt to look for any patterns, the interview scripts were looked at again. These raised some interesting clues. The Level 1 students had been asked where they saw themselves in three years time, however despite these responses, it became clear that there were other motivations too. Eight out of the 12 respondents gave clear extrinsically motivated reasons, which were that they saw a degree as a means towards getting a job or career. This ratio is relatively reflective of the larger baseline sample figures. However three others were less clear, and it seemed that they had more than one reason (see table 42). Even at this level, things are not totally clear-cut. For example, RC is clear throughout the interview that the main reason for studying is deep interest in the subject matter. The aim is to continue studying for higher degrees, but if this is where RC wants to spend most of his/her life, then it can be assumed perhaps that the ultimate goal is to get a job in the subject. This could be viewed as both the subject as a means in itself, or a means to an end. Without further questioning

this is not clear. However, once again, this could mean that the broad distinction made here between two different types of students goals, is too narrow.

Table 43. Students' Reasons for Choosing to Study. (*see appendix 4 for transcriptions*).

	Extrinsic	Intrinsic
NH	"And then, I mean what I want to do eventually, I want to teach. I want to teach at University, so that's, that's the other thing, the academic qualification that's going to allow me to go forward into that field". (135).	"Um...basically become this mythical creature, the independent learner, so I can go out and do it myself. (134). "In fact the realm I want to go into there's no destination. Um...it's a journey". (185).
JM	"Well, yeah, obviously I want enough to live off, but...um...yeah, O.K., perhaps I want a career more than a job". (314). Well, getting the knowledge that you can, to get a job. (307).	"But anyway, I had no stimulation, no conversation [amongst others], no-one like-minded". (204)
RC	"Three years time? Hopefully working towards a Masters and Ph.D. Sounds silly, but I've already started looking around". (111)	"I've learned Psychology is a very interesting subject, that I would like to spend a lot of my life in it." (171)

Looking at students' eventual outcomes, there were once again no clear patterns. For the intrinsic/extrinsic students, JM completed the course with a first class degree, RC completed with a 2i, and has begun PhD studies. However NH dropped out of the course at Level 2, but it is not known why. Another respondent (CL) could not be classified into either category (see table 41). Most of the interview was concerned with indecision about courses, for example:

"Cause you go off and learn it, so that you come out of the degree *with* a degree, but also with the knowledge."(80)

"And now I've changed my decision and changed the course, so that I don't know. I want to take up something to do with Psychology, but I honestly don't know what's going to happen. (87).

This provides little insight in terms of intrinsic and extrinsic motivation, although it could be guessed that this student viewed a degree as a stopgap.

The other eight extrinsically motivated students can be seen to have had a variety of outcomes (see table 43), although it is interesting to see that only two of these completed their courses. According to available information on the student database, five students did not complete. The student who could not be classified however, did go on to complete the course. Yet another, is at present, still studying. This information perhaps suggests, unlike the statistical data, that students who have at least some intrinsic reasons for studying may gain a higher degree class. However the sample size here is quite small. This pattern of results (which shows seven out of the 12 participants failing to complete their course) is not strictly representative of the wider population. Also, it should be remembered that students second subject (which constitutes the final classification), have not been accounted for in any of the analyses here. This is because as previously mentioned in the introduction, there may be differences in what counts as 'critical thinking' across subject areas, therefore marks may not have been comparable.

Table 44. Degree Outcomes of 12 Students.

n	Category	Status
NH	Int / Ext	Left the course during level 2.
PW	Ext	Graduated 2.i.
SMC	Ext	Currently still studying, having failed Level 2 twice.
IW	Ext	Left the course at end of Level 1.
CL	Uncategorised	Graduated 2.ii
KB	Ext	180 credits only
LH	Ext	Currently not on database
JM	Int / Ext	Graduated 1st class .
SD	Ext	Graduated 2.ii.
NHf	Ext	Currently not on database
MD	Ext	Left the course during Level 2.
RC	Int / Ext	Graduated 2.i.

5.8. General Summary.

These results, both statistical and qualitative, provide little to suggest that students' motivations to study can critically influence either their perceptions of Higher Education, and on a note of lesser confidence, their development of critical thinking skills. From the limited information available here, neither does it appear that they can notably influence the eventual degree class a student may get, or whether they remain in their courses at all. What other factors may be relevant are beyond the aims of this research. However, the qualitative results suggest that student motivations may often be complex and interact in a variety of different ways. This is explored in the Discussion.

Chapter 6.

Discussion.

6.1. General Discussion.

The picture of results from this study, when analysed statistically, suggest that there are virtually no significant differences between students in terms of whether they are (as described here), intrinsically or extrinsically motivated to study. This is also the case for the development of their critical thinking skills (as measured by the RCI), their marks and grades, and also in terms of their perceptions of Higher Education. The 'Perceptions of Higher Education' questionnaire also contained items which could to a reasonable extent, assess some aspects of students conceptions of learning. In this case too, no clear differences were found.

What was found however, was that some of the trends in development in critical thinking skills was fairly similar to the findings of King & Kitchener (1994). They found that students tend to enter College at a pre-reflective stage of 3.5, with senior students tending to average 4 (quasi-reflexive). The Level 1 students in the cross-sectional analysis here, were found to be slightly higher than this at the first wave of testing, (4.2: quasi-reflexive). The Level 3 students did show small gains (4.5), although they did not progress beyond this particular stage. However, these observed gains in development were not found to be significant. Also they may only be useful as more general benchmarks as they were collected from different groups of students. This tells us little about the development of the individual.

Even so, the cross-sectional analysis did reveal some differences in the trends of scores when students were divided into the intrinsically and extrinsically motivated groups. Across the three levels of study, extrinsically motivated students RCI scores rose from 4.1 to 4.4, to 4.6. This is to be compared with intrinsically motivated students whose scores were higher at level 1 (4.2), rising to 4.5 at level 2, and then falling to 4.3 at level 3. If intrinsically motivated students (as described here) are aiming, for example, 'to really understand what writers and theorists in my subject are trying to say', then it might be expected that their RCI scores would have continued to increase, and remain higher than those of the extrinsically motivated students. In fact, it was these particular students whose scores decreased most dramatically. It is one thing to point out that these were different groups of students, but in view of the finding that all other groups (for example those whose goal was to collect knowledge, and those who wished to build up their social lives) scored more highly, it seems at this point, somewhat counter-intuitive.

Findings from the longitudinal analysis also revealed no significant differences. It was disappointing that few students could be compared for analysis, as these findings may have been more insightful to the aims of this research. However, whilst the cross-sectional findings did reveal some gains in RCI scores overall, this was not found when individual students were compared longitudinally. Overall, scores fell from 4.3 to 4.1. This trend was similar when student's scores were compared between the two goal groups. Extrinsically motivated students scores fell from 4.4 to 4.1, whilst intrinsically motivated students scores fell from 3.8 to 3.7.

The pattern of marks and grades initially appears to challenge these trends. Longitudinally, the average grades of intrinsically motivated students are observed to decline from Level 1 to Level 3 (61% - 56). Extrinsically motivated students, whilst scoring slightly lower at both times of testing remain consistent (55% – 55%). This suggests, by the nature of a degree course, that these students to actually do make progress in this area, even if not in terms of developing their critical thinking skills.

These findings suggest that critical thinking (RCI) scores are not related to academic performance. This idea was given further support by correlational analysis which showed that only students previous marks could significantly predict later marks over a duration of 18 months ($r = 0.71$). Relationships with RCI scores were small, and non-significant.

Given that the distinction made between student goals was meaningful, then this suggest that on the whole, it is extrinsically motivated students who might gain the most from their degree courses. Intrinsically motivated students scores were observed to decline in terms of both critical thinking skills (RCI) and their grades. However findings from the degree outcomes of the 12 students originally interviewed, did not always suggest this. Out of the eight students who were grouped as extrinsically motivated, five of these had either left the course, or were still studying, having failed some of their years/modules. One student had graduated with a 2.ii classification, and another with a 2.i. This is fairly comparable to those students whose reasons could not be clearly distinguished, and so were categorised as having both intrinsic and extrinsic reasons. One student gained a 2.i classification and the other a first class. Another had left the course. These are marginally better results. Although these findings should be met with some caution in view of the small sample

size, this does suggest that whilst more extrinsically motivated students may leave their courses, those who remain appear more or less capable of gaining very similar outcomes. Yet interestingly, these results are slightly in conflict with the trends in RCI scores.

This research also set out to investigate student conceptions of learning. Given that there are argued to be links between deep conceptions and a propensity to think critically (Marton, 1984), this study found no evidence of this. Again, in terms of the intrinsic/extrinsic distinction made here, both goal groups were found not to differ significantly on any of the 17 items compiling the "Study Orientations" factor. No distinctions were found between items measuring either a deep or a surface approach. What is more interesting is that both groups were found to be 'unsure' on all of the items. Initially this appeared a little odd, however, combined with the findings from Chapter 2 (Construction of a Measure to assess Conceptions of Learning), this may simply be demonstrating further, that such conceptions are difficult to assess. Results from this initial study showed that one cohort of 65 students were tending to agree with everything presented in the two questionnaires. Also it was only items measuring 'surface conceptions' that correlated signficantly. Arguably more attention should be paid to the later findings which suggest students are 'unsure' as to the purpose of lectures and the role of the tutors, and that they cannot be sure whether these are designed (or performed), to disseminate knowledge or to encourage critical thinking. Alternatively this could mean that both groups of students feel that all aspects (both deep and surface) are crucial components of the study environment, and they cannot decide which of the two are more important. Yet again, it could mean that students are genuinely not clear, or, that they do in fact view lectures and tutors as having multiple

roles. In any case, according to Marton (1984), this should perhaps not be occurring if students can, in fact, be realistically divided into two groups who have qualitatively different ways of thinking. Findings from this study suggest that they perhaps cannot.

Whilst many of these findings were non-significant, some interesting speculations can perhaps be made in view of the trends observed. It was found in support of Tynjala et al, (1993), also Bliekle & Powell, (2005) that there were in fact, significantly more students whose main aim it was to study for a degree in order to get the knowledge they needed for a job/career. Factor analysis of the 76-item questionnaire found four factors which can be said to represent the characteristics of this particular student population. Perhaps understandably, it was the purpose of lectures and the roles of a tutor which seemed to dominate their perceptions of Higher Education. Both groups of students however, whilst appearing to be able to discern between knowledge acquisition and aspects of critical thinking, did not make any noticeable distinction between them. In the majority of cases, they were unsure as to whether any of these statements described the main role of tutors or purpose of lectures. Next, also understandably, another factor comprised of different anxieties experienced by the students. Again, many of these were concerned with studies (for example, 'I will not be able to perform at the academic level expected of me in Higher Education'). Interestingly, scores suggested that student were tending to disagree that any of the comprising anxieties would give them any cause for concern. Four of these items appeared to pinpoint student's motivations towards their studies (for example; 'I do not know if I will finish the course if it starts to take up too much of my time and energy', also, 'I tend to blame anyone and anything else for my failure to complete the work'. Students strongly disagreed with these items. This portrays a picture of a

cohort who whose perceptions are focussed around their studies, and whilst they are unsure about many aspects of them, they do not appear to be anxious about any of them. More interestingly, all students were unsure about the statement; 'I will be well on the way to getting a good job that I really enjoy'. This seems to mitigate the primary reason for choosing to study as stated by many of these students; – 'to collect the appropriate skills and knowledge that I will need for my future career'.

The fourth factor to be derived from the analysis was 'Degree as a stopgap'. Items comprising this factor appeared to be describing students intentions after completing their degrees – 3 out of the 6 items evidencing that a degree was in fact, a route to another career or study destination (for example; 'ideally, I will be taking the next step towards my chosen career, although my financial situation will probably determine what I can and cannot do', and 'I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want'). Yet student's scores showed that they were unsure about all of these statements, with the exception of; 'I want to take a year out to explore, and do other things I have always wanted to do'. 'Students tended to disagree with this item which was negatively loaded, suggesting very little in terms of what their real intentions were, and perhaps more of what they were not. But in any case these patterns of scores along the item factors suggest that it is perhaps not a job/career that students actually are at least primarily, aiming for.

This could be explained in several ways. Firstly these somewhat conflicting findings could have been due to the fact that the students were presented with the 76-item questionnaire in the first semester of their Level 1 studies. In view of this, it could well have been that they were unsure of the main role of lectures and tutors, however

this perhaps does not account quite so neatly for the observation that students were not anxious about any aspects of their studies, despite being unsure about many aspects of them. What this may be suggesting, especially in view of the observed difference in RCI trends of the two groups, that students goals may well change as they progress through their studies. Further research may need to account for this, as it could also explain why students who seek knowledge in order to enhance (or gain) their future career, show consistencies in grades as opposed to others who do not have this as their main reason for studying. It could also help to shed further light on what students goals really are, how they themselves perceive them, and also to provide a more meaningful set of goal-category descriptors for educators and researchers.

Perhaps more importantly, a close inspection of student's goals may help to explain why student's skills of critical thinking are lost as they progress through their studies. At one level, it could be argued that this is quite a narrow conclusion, as this research used just one measure of critical thinking, the RCI. More importantly, the test looked at real-world issues, rather than academically (or subject-based) issues. Intrinsically motivated students may have felt less compelled to engage with these, and as the longitudinal sample showed, less compelled to complete them a second time around. However less of the extrinsically motivated students completed them at the second testing, so this was perhaps more due to the test being relatively long and difficult for students to complete. Further research may consider using a shorter measure. But in any event, patterns of results showed that RCI scores fell over an 18-month period, for both groups, which despite the differences in their marks and grades does not bode well for the purported aims of Higher Education (Browne & Litwin,1987). It could be that students find that their expectations are not fulfilled. In the case of the

extrinsically motivated students, in terms of the quality of knowledge they feel they need for their chosen careers, and for the intrinsically motivated, the personal development they feel can be achieved through their studies.

This lead to the related question of what it is that lecturers might be doing when they design courses, and when they teach and assess their students. Previous research has found that there are often inconsistencies within institutions as well as between them, as to what constitutes critical thinking (Lea & Street, 2000). Also, it is often difficult to know what to look for when such things are being assessed (Yorke, 2003). Observations from the research in chapter 2 found that it was only items which measured the acquisition of facts and knowledge which correlated, suggesting also, that students might be unclear as to what lecturers mean when they ask students to carry out tasks which require critical thought However, whilst it may well be the case that aspects of critical thinking are perhaps more subjective (Cann, 1997), this does not account for the fact that lecturers may be rewarding more factually based information, rather than students skills in argument or analyses. Facts are much simpler to identify, and agreement can more easily be reached as to what constitutes these. Again, more research would be needed to explore lecturers' practices in order to determine whether this is, or is not the case.

It is interesting to see that the extrinsically motivated students here, who claimed to be interested in seeking out relevant facts, did remain consistent in their marks and grades, whilst intrinsically motivated students grades showed a drop over one degree class. The latter may have been attempting to relate theories and ideas more, and creative ways of combining, rather than reproducing facts and knowledge. In the

event that these things may not have been 'rewarded' by lecturers, then their marks understandably decreased, as did their motivation. This could also explain their lower scores on the RCI, if intrinsically motivated students were receiving these messages from lecturers that they were doing the wrong thing. Whilst these results were not significant, this still raises some interesting questions.

However, these remarks also need to be viewed in the context of more recent developments in the conceptions of learning literature, which strongly suggest that 'knowledge' and 'memorisation of facts' may be more complex phenomena than was previously thought (Boulton-Lewis, Wilss & Lewis, 1997; Dahlin & Regmi, 1997). Their findings suggested that memorisation and understanding are inextricably linked. This could perhaps explain why students in this research were not making significant distinctions between 'surface' and 'deep' items on the instruments, and they did in fact perceive all items as being important to the learning process. In particular, findings from Marshall, Summers & Woolnough's (1999) study showed that students taking more vocationally orientated courses viewed 'collection of information' as essential. They felt that they would need to have in-depth understanding of the information so that they could apply it successfully in the future. Therefore memorisation and understanding were not viewed as separate entities. This could have been the case with the extrinsically motivated students here. Whilst their RCI scores declined over time, their marks and grades did not.

This research has provided one picture of the characteristics of a current cohort of students. They are seen to be largely concerned with gaining knowledge for their careers and they are in terms of averages, not anxious about any aspects of their

studies. Perhaps somewhat at odds with these things, they are not sure what they are going to do after completing their degrees. This suggests that today's students, unlike Perry's (1970) cohort, are less interested in intellectual and moral development, and they are choosing to study in order to achieve career goals in the near or distant future. Also, whether this research can be said to have successfully highlighted some of the issues raised in the wider conceptions of learning theories, these students, at least initially, appear to make no distinction between the collection of knowledge and the facilitation of independent learning. However, this may appear that it is the students who are to blame. It could be that Haggis (2003) is correct to suggest that student goals are not the same as those intended for them in higher education. However, as Barnett (1996) points out, universities are no longer domains separate from the wider society. In this case, maybe the societal changes are impacting upon lecturers too, and there is increasing pressure upon them to try to assess a phenomenon with so many variations in description that the task becomes at best inconsistent, and at worst, impossible. Students are not taught by one lecturer, they do in fact meet with many. Therefore this downward trend in RCI scores is perhaps the product of a culmination of many different lecturers' perceptions. Given also that these students were completing many modules over the course of their joint degrees, this is a possibility.

However, even though findings from the longitudinal analysis should be met with caution, those from the cross-sectional analysis appear a little less bleak. Independently of students reasons for choosing to study, these figures did observe gains in RCI scores over three levels of study (4.2, 4.4, 4.5 respectively). By groups, extrinsically motivated students made noticeable gains over the years (4.1, 4.4., 4.6)

whilst intrinsically motivated students made similar gains, although the level 3 students scores rose from 4.2., to 4.5, back down to 4.3. Unlike the longitudinal findings, this suggests that critical thinking *can* be taught, or at least lecturers are providing the relevant opportunities for students to develop it. Yet it is still of some concern that it is the intrinsically motivated students who are achieving less than their extrinsically motivated peers. This is especially of concern when it is seen that their RCI scores are higher at levels 1 and 2, yet decrease at level 3. This could be due, as stated earlier that lecturers are rewarding more factually based information, and intrinsically motivated students have become disheartened by level 3. Alternatively it could be that students who do not have a goal beyond the educational setting do not feel the need to push themselves any further. Without a clearer understanding of students goals, and whether or not these may change over the study duration, it is not possible to say within this particular investigation.

This research sought to explore the impact of student's goals on the development of their critical thinking skills. It has been observed that whilst student's goals may be more complex and varied than this research has been able to show, that even using this basis distinction, there is some evidence to suggest that intrinsically motivated students may be at a disadvantage. Their RCI scores, also their marks and grades tend to decline as they progress over their degree courses. However this is just one way of measuring critical thinking, and other measures may produce different results. This is not to say that the RCI is not a useful measure of critical thinking, rather that it may simply too laborious a task for students to engage with, especially as it was completed in their busy seminar slots. It could be the case that these students become de-

motivated with a curriculum that is perceived to reward reproduction of facts, when they themselves are expecting to be rewarded for innovation and creativity.

There may be other reasons for these differences, and also the lack of relationship found here between RCI scores and grades. It has been demonstrated that critical thinking itself has proved to be difficult to define and assess. It could also be that critical thinking is not quite the three-tiered model that Barnett (1996) outlines. The finding that students do not develop their skills in reasoning about real-life issues is perhaps not the same thing as saying that they cannot think critically about aspects of their academic subjects. Indeed the finding that students varied in their propensity to think critically across different contexts was found by Knefelkamp (1998). It could therefore be argued that students learn to think critically not at a global level, but in a more step-by-step fashion, as is required of them when the nature of a task is changed. It could be that this occurs when new tasks are presented and or/ when a particular subject topic changes. Students rarely score identically across all their modules and subject areas.

Attention was also given to the comments by Laurillard (1978) who argued that problem-solving could not be thought of as taking a deep approach. Barnett (1996) appears to have disagreed with this in his own definition of critical thinking. Whichever view is deemed to be appropriate, it can be said that reasoning about current issues and applying a set of procedural rules efficiently, do not quite constitute the same thing. This research used an instrument that does not assess problem-solving skills. This could have immediately disadvantaged students in this sample whose second subject was Information Technology related, and had relatively less

experience of tackling such tasks. Further research may also consider some of the fundamental differences in subject areas.

It may be helpful for researchers in this area to consider the characteristics of the student population. This study found that whilst significantly more students claimed to have chosen to study in order to build the foundations for their future careers, factor analysis suggested somewhat differently. The same cohort of students was found to be unsure of what they intended to do once they completed their degrees. In this instance it appeared that they often perceived higher education studies to be something of a stopgap until they had decided what it was they really wanted to do. This could explain why it was found that they were not anxious about many aspects of teaching and learning that they were unsure about. It also may explain why some students do not go on to develop skills of critical thinking if they are not committed to their studies.

Finally, further research in this area could perhaps try to account more for some of the emotional issues students may experience as they progress through their degrees. Whilst it was not the main aim of this research to explore this, some evidence was found to suggest that this can have an important bearing on whether students do develop in the ways tutors wish them to (Atherton, 1999; Perry, 1970). This could be viewed as a different study rather than a direct improvement on the research outlined here, however, if there are differences between students' goals, it makes sense to suggest that extrinsically and intrinsically motivated students may experience a different range of emotions when learning. For example, those who wish to develop their career aims may find themselves more resistant to change their learning habits,

as opposed to intrinsically motivated students who wish to develop themselves as individuals, and are therefore perhaps more amenable to change.

6.2. Evaluation of the Methodology.

In retrospect, it could have been more prudent to begin this research with a multi-methodological approach rather than to have adopted this in Chapter 3. Findings from the initial questionnaires (Chapter 2) failed to discriminate between deep and surface approaches to learning, and whilst this could indeed have been reflective of students themselves failing to discriminate, it could also have been due to the fact that it was the items themselves, as leaning heavily on those of existing instruments. The phenomenological perspective had been highlighted in the literature review; that [established] questionnaires are derived from the researchers own perspective and as such, interpretation may vary amongst others (Marton, Dall Alba & Beatty 1993). Whilst more attention should have been paid to this, it is likely that the failure to attend to this in the first instance, merely served to expend more time than necessary. But it could also be argued that these initial studies were valuable in supporting these contentions, and the ensuing change of methodological strategy. Both the latter points suggest that it may have been wiser to proceed using a multi-methodological approach rather than to continue with the use of existing, established materials.

Using this approach however, it was still observed that no clear distinction could be made between deep and surface conceptions. The final questionnaire used was based on information provided by students in the same cohort under investigation. Yet it can be said that this simply provides more justification to argue that students are not making such a distinction as has been suggested in previous literature. As previously

suggested, more research could be carried out to look in more depth at what might be understood by these terms, or to explore what they may mean across different subject areas. This had not been accounted for fully in this study.

A related point to consider is that the research could have possibly continued using a purely qualitative paradigm, especially in view of the lack of clear distinction between deep and surface approaches and the need to disentangle these. However it was not the main aim of the study to explore this in depth – even though this does now seem to be an issue for further investigation. The main aim had been to look at this distinction as a potential indicator of critical thinking within a large cohort of students, therefore there was a need to collect a substantial amount of information quite quickly. Carrying out qualitative interviews would not have achieved this due to time constraints. Also due to the nature of phenomenological accounts, this strictly exploratory process may have served to raise more questions than this research was trying to answer.

A second issue was with the problems experienced in data collection for the analysis of learning styles. As virtually no data were collected, this aspect of the research, (apart from providing a means for selecting students for interviews) has played a very small part in the wider study. The greater problem here can be located with the nature and logistics of the testing process itself. It was originally felt that gathering a large amount of students in one place to carry out a written test might be the best way to proceed. However, there is only a limited amount of time that can be expended to providing appropriate venues for an appropriate duration. In terms of the Triarchic Abilities test, perhaps more could have been done to consider the individual

differences amongst students – especially within a cohort of 167. But again, this would have meant more testing in order to identify 'ability' groups, and would have led to the further need for additional space and timeslots. A further approach might have been to provide students with the test and let them complete it in their own time, however there could be no guarantees that they would have either completed or returned it. It appears that the success of gathering data from tests such as this is reliant upon careful, strategic management and planning. For example, the test could have been introduced as part of the Personal Development & Planning strategy. Identifying their own learning styles could have perhaps gone some way into assisting students understanding of differences in learning processes. Whilst providing students with this insight, permission could have been sought from students to use their responses as data.

6.3. Location of findings & implications.

These findings go some way to supporting those of King & Kitchener (1994), in that students do tend to make small progressive gains in critical thinking over the three year duration of their studies. It was also observed that students are tending to choose to study for a degree for many of the same reasons that were found by Taylor (1983), for example, to enhance their career prospects, to pursue a particular subject out of enjoyment, or to develop the self/learn more about themselves and others. Where these findings differed is in the extent to which gains in critical thinking were shown to decrease in students whose reasons for choosing to study were intrinsic. Taylor also found that there were consistencies in the intentions of students and their approaches to learning, whereas this research suggested that no clear distinctions in approaches could be found between either intrinsically or extrinsically motivated groups.

Theoretically, this provides some further support for the growing body of findings which are suggesting that the terms 'deep' and 'surface' approaches are categories of description which may be too narrow to encompass how students think about and approach their studies. Yet as this research found, even when students are invited to provide their own perspectives on learning and studying, similar categories of descriptors emerge. So even whilst students may be aware of a variety of approaches and strategies, it seems that in terms of this particular cohort at least, they are making no real distinctions between them. Therefore the extent to which approaches to learning taxonomies can be used to predict gains in critical thinking is unclear.

The greater contribution to this particular research area is the development of the 76-item questionnaire. The findings from a factor analysis of this instrument does have implications for the ways in which we may usefully understand current undergraduates, and therefore teaching practices. It was found that the greatest proportion of the variability was accounted for by students' approaches and intentions towards their studies. Yet a similar proportion was accounted for by students' anxieties and expectations. These items were largely focussed upon students' self-doubt, or lack of confidence in their abilities. Few noticeable differences were found between intrinsically and extrinsically motivated students, and also it appeared that overall, no particular anxiety was giving cause for concern. It was also observed that financial issues did not arise as an anxiety, which is somewhat surprising in the current climate of increasing fees. Practically, this suggests that more could be done by practitioners of Higher Education to address these early concerns about academic confidence, which could in turn promote and assist the learning process. Indeed, such anxieties could explain the failure observed here to distinguish between deep and

surface processing, and be suggestive of an individual who lacks a thoughtful direction in their approach. However the third factor, which elicited students' expectations of assessment procedures is perhaps a little more insightful. There is a clear emphasis here on the idea that the purpose of lectures and the role of lectures is to provide students with appropriate/relevant information to pass assignments.

These factors, elicited from the questionnaire provide a picture of incoming students as potentially disorganised in their intended approach to studying, their lack of academic confidence, assessment orientated and the need to have relevant information provided for them. Also, despite the most frequent goal that was cited was that of gaining skills and knowledge for a future career, it seems that students do not always picture themselves as gaining that career at the end of their degrees. Many perceive themselves as having to take further courses to achieve this. This supports Barnett (1997) who points out the growing relationship between Higher Education and the outside world and market forces. This research gives some indication of the nature of those students who are learners and consumers who are moving between them. Given this situation, Higher Education may also benefit from providing more of an emphasis on vocationally orientated courses, post-graduation, in order to increase recruitment, meet the needs of students, and improve the provision of graduates fit for the workplace. This research, whilst finding that the extrinsically motivated (career orientated) students showed the more consistent gains in critical thinking, and their academic grades, provides further support for this.

Findings that intrinsically motivated students fared less well in the development of critical thinking skills should be met with caution. Across both groups overall, small

gains were found as have been reported in the wider body of literature. Numbers of students who comprise the intrinsically motivated groups were small, and there were even less of these students who provided longitudinal data. The greater implications of this is that typical cohorts of students are currently not viewing Higher Education as a means of personal/academic development and self-satisfaction. However, given that the distinction made between groups here was meaningful, it does not seem that Higher Education is failing in its espoused aims to foster critical thinking more generally. The greater issue is whether more could be done to attract this type of student, and indeed, to question if these individuals themselves realistically perceive that Higher Education is currently geared towards meeting their own particular needs.

6.4. Reflexive comments.

This study has highlighted issues in the research process which can usefully be noted for the future. The first is that of the limitations of any one particular choice of specific research methodologies, especially when taking a more exploratory approach to students perceptions. One aim had been to explore deep and surface approaches to learning in a specific cohort. In retrospect, the use of established questionnaires (however little they were modified) could be viewed more as trying to establish these 'categories', rather than to explore them. Even though adopting a multi-methodological approach (using interviews to gain insights and data for a new questionnaire) produced similar findings to the first, it can be suggested that these findings were perhaps more representative. This is not to challenge the reliability of existing instruments, many of which have been piloted and trialled extensively. It is more of a lesson to first ask on whom these instruments have been piloted and constructed, and whether the populations are similar.

A second consideration is the use of relatively lengthy questionnaires. The aim of this research had been to be over, rather than under exclusive in gathering information about the student perspective. The 76-item questionnaire was compiled using as much data as possible, especially as it was o be administered to 250 students. As these original insights had come from only 12 students, it was felt that it would be unwise to omit anything that may have been relevant to others. In retrospect this still seems to have been the best decision in view of what the questionnaire had been trying to achieve. It may have been that the greater problem lay in over-ambition; that too much was trying to be achieved with one questionnaire. There is no guarantee that data from any questionnaires consists of well-considered responses, however the probability of fatigue is more likely to increase with the length of the questionnaire. Future research with questionnaires will be more specific.

As well as the possibility of producing unreliable data, it was recognised that lengthy questionnaires could raise potential ethical issues. Whilst participating students were told at the time of testing that they did not have to complete it, most of them did. It is recognised that asking students to partake in any research in their study time is perhaps depriving them to some extent of the latter, yet this is exacerbated when the completion time can take up to 15 minutes. Also, despite advising students of their rights, it cannot be said for certain how much they may have felt pressure to comply when the researcher was a tutor, and they were in their place of study. Mailing the questionnaire to them removes this issue to a degree, however response rates cannot be guaranteed. Administering questionnaires for research purposes does have its issues, but it would be difficult and perhaps unwise to try and discourage it. It is one of the quickest ways of gathering large data sets in a small space of time. Carrying out

interviews alone is time consuming, and although the participant may feel more important and empowered, not all individuals may choose to provide personal information in a one-to-one setting. Therefore this method may attract only a few types of individual. It seems therefore that it is the ways in which the questionnaires are managed, and the timing of presentations is crucial. Future research will account for this with respect to the collection of more reliable data, and the interests of the individual who is providing it.

References.

Alderman, M. K. (1999). Goals and goal setting. In Motivation for achievement : Possibilities for teaching and learning (88-111). Mahwah, NJ: Lawrence Erlbaum Associates.

Astin, H. & Antonio, A.L. (2000). Building Character in College. In About Campus. Nov-Dec 2000. 3-7.

Atherton, J. (1999). Resistance to Learning: A discussion based on participants in in-service professional training programmes. In Journal of Vocational Education and Training. 51, 1, 77-90.

Barnett, R. (1996) (eds) The Limits of Competence, Knowledge, Education & Society. UK. S.R.H.E.

Beatty, L., Gibbs, G., & Morgan, A. (1984) Learning Orientations and Study Contracts. In Marton F., Hounsell D., & Entwhistle N. (1997) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press.

Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). Women's Ways of knowing. New York: Basic Books.

Biggs, J.B. (1985) The Role of Metalearning in Study Processes. In British Journal of Educational Psychology. 55, 185-212

Blieklie, I & Powell, W. (2005). Universities and the Production of Knowledge. In Higher Education, 49, 1-8.

Boulton-Lewis, G. M., Wilss, L., & Lewis, D. (2003). Dissonance between Conceptions of Learning and Ways of Learning for Indigenous Australian University Students. In Studies in Higher Education, 28, 1, 79-89.

Brabeck, M. & Wood, P. (1990). Research on the Reflexive Judgement Model. In King, P. & Kitchener, K. (1994). Developing Reflective Judgment. San Francisco, Jossey-Bass.

Brockbank A., & McGill, I. (1998) Facilitating Reflective Learning in Higher Education. U.K., O.U.P.

Brown. A. (1997) The Development of Key Skills Across Contexts and Over Time. In Capability. 3, 2, 5-11

Browne, M.N., & Litwin, J.L. (1987) Critical Thinking in the Sociology Classroom. In Teaching Sociology. 15, 348 – 391.

Byrne, M; Flood, B. and Willis, P. 2002. Approaches to Learning of European Business Students. In Journal Of Further And Higher Education. 26, 1, 19-28.

Cann, C. (1997) Key Skills at UNN. Materials and Resource Centre for Education and Technology, University of Northumbria at Newcastle.

Cantwell, R. & Scevak, J. (2004). Engaging university learning: the experiences of students entering university via recognition of prior industrial experience. In Higher Education Research & Development. 23, 2, 131 – 145.

Chan, K-W. (2003). Hong Kong teacher education students epistemological beliefs and approaches to learning. In Research in Education. 69, 36-50.

Cheung, C., Kwan, A. Rudowicz, E.,Yue, X.(2002) Assessing University Students' General and Specific Critical Thinking. in College Student Journal, Vol. 36. (Accessed 01. 05. http://www..com/p/articles/mi_m0FCR/is_4_36/ai_96619957).

Chodorow, N. (1974). Family structure and feminine perspective. In Rosaldo, M.. & Lamphere, L. (Eds.), Women in culture and society . Stanford, CA: Stanford University Press.

Coffield, F., Moseley, D., Hall, E. & Ecclestone, K. (2004). Learning styles and pedagogy in post-16 learning: a systematic and critical review. London, Learning Skills Research Centre,

Cresswell, J. (1994). Research Design: Qualitative and Quantitative approaches. Thousand Oaks, CA: Sage.

Cummings, R., Dyas, L., & Maddux, C.D. (2001). Principled Moral Reasoning and behaviour of pre-service teacher education students. In King, P. & Mayhew, M.J. (2002) Moral Judgment Development in Higher Education: insights from the Defining Issues Test. Journal of Moral Education. 31, 3, 247-267.

Curry, L. (1983). An organization of learning style theory and constructs. ERIC Document, 235 185.

Dahlin B., & Regmi, M. P. (1997). Conceptions of Learning among Nepalese Students. Higher Education. 33, 471-493.

Deci. E. (1971). Effects of Externally Mediated Rewards on Intrinsic Motivation. In Journal of Personality & Social Psychology. 18, 105-115.

Deci, E., Koestner, R. & Ryan, R (1999). A Meta-Analytical Review of Experiments Examining the Extrinsic Rewards on Intrinsic Motivation. In Psychological Bulletin, 125, 6, 627-668.

Denzin, N.K. (1978). Triangulation, in Denzin, N.K. (eds) The Research Act: A theoretical introduction to the sociological methods. New York, Mcgraw-Hill.

Denzin, N.K. (1989). The Research Act: A theoretical introduction to the sociological methods. New York, Mcgraw-Hill.

Dunn, R., Dunn, K., & Price, G. E. (1990). In Thomson, B. & Mascazine, J. (1997) Attending to Learning Styles in the Mathematics & Science Classroom. ERIC Article: ED432440.

Eklund-Myrskog, G. (1998). Students' conceptions of learning in different educational contexts. Higher Education. 35, 3, 299-316.

Ennis, R.H. & Millman, J. (1971) Assessing Reasoning Skills. In King, P. & Kitchener, K. (1994). Developing Reflective Judgment. San Francisco, Jossey-Bass.

Ennis, R.H., & Norris, S.P. (1990). Critical thinking assessment: status, issues, needs. In Legg, S. & Algina, J. (Eds.) Cognitive assessment of language and math outcomes Norwood, NJ.

Entwistle, N. (1997). Reconstituting Approaches to Learning: A response to Webb. In Higher Education. 33, 213- 218.

Entwistle N. J. (2000). Approaches to studying and levels of understanding: the influences of teaching and assessment. In J. C. Smart (eds.) Higher Education: Handbook of Theory and Research Vol. XV, 156-218. New York, Agathon Press.

Entwistle, N. J., & McCune, V. (2001). Conceptions, styles and approaches within higher education: analytic abstractions and everyday experience. In R. Sternberg & L-F. Zhang (eds.) Perspectives on Cognitive, Learning, and Thinking Styles. (103-136) London, Erlbaum.

Entwistle N.J., Meyer, J.H.F. & Tait, H. (1991). Student failure, disintegrated perceptions of studying and the learning environment. In Higher Education. 21, 249-261.

Entwistle, N.J., and Ramsden, P. (1981). Effects of academic departments on students' approaches to studying. British Journal of Educational Psychology, 51, 368-383.

Entwistle, N. J., & Ramsden, P. (1983). Understanding student learning. In Marton F., Hounsell D., & Entwhistle N. (1997) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press.

Eley, M. & Meyer, J.H.F. (2004). Modelling the influences on learning outcomes of study processes in university mathematics. In Higher Education, 47, 437-454.

Facione, P. (1990). Critical Thinking: What it is and why it counts. California Academic Press. (http://www.insightassessment.com/pdf_files/what&why98.pdf: accessed 15. 6. 2005).

Facione, P. (1990) Delphi Report. ERIC Document: No. ED 315 423.

Facione, P., & Facione N. C. (1992). The California Critical Thinking Dispositions Inventory (CCTDI); and the CCTDI Test manual. Millbrae, California Academic Press.

Facione, P.A., Facione , N.C., & Giancarlo, C.A.(1997). The motivation to think in working and learning. In New Directions for Higher Education. E. Jones (eds.) Jossey Bass.

Felder, R.M &. Brent, R (2005). "Understanding Student Differences. In Journal of Engineering Education. 9, 1, 57-72.

Field, A. P. (2000). Discovering statistics using SPSS. London: Sage.

Findley, M.J. & Cooper, H.M. (1983). Locus of Control and Academic Achievement: A Literature Review. In Journal of Personality & Social Psychology. 44, 419-427.

Flowers, L, & Pascarella, T. (2003). Cognitive Effects of College: Differences between African-American and Caucasian Students. In Research in Higher Education. 44, 1, 21-49.

Gadzella, B., Masten, G., & Huang, J. (1999). Differences between African American and Caucasian students on critical thinking and learning style. In College Student Journal. 33, 538-542.

Gadzella, B. Stacks, J., & Stephens R. & Masten, W. (2005). The Watson-Glaser Critical Thinking Appraisal, Form-S for Education Majors. In Journal of Instructional Psychology. (http://www..com/p/articles/mi_m0FCG/is_1_32/ai_n13670699 Accessed: 12. 7. 05).

Garcia, J. (1997). Cited in Sternberg, R.J., Castejon, J.L., Prieto, M.D., Hautamaki, J. & Grigorenko, E. (2001) Confirmatory Factor Analysis of the Sternberg Triarchic Abilities Test in Three International Samples. An Empirical Test of the Triarchic Theory of Intelligence. In Journal of Psychological Assessment. 17, 1, 1-16.

Genovese, J. (2003) Historical change in the cognitive and affective language of teaching. In Journal of Instructional Psychology. (Accessed 02 05. http://www.findarticles.com/p/articles/mi_m0FCG/is_4_30/ai_112686165/).

Gfellner, B.M. (1896). Ego development and moral development in relation to age and grade level during adolescence. In King, P. & Mayhew, M.J. (2002) Moral Judgment Development in Higher Education: insights from the Defining Issues Test. Journal of Moral Education. 31, 3, 247-267.

Giancarlo C. A. (1993). An exploration of cognitive strategies and dispositions in relation to ego-resiliency. Unpublished master's thesis, University of California. In Giancarlo, C. A., & Facione, P. A. (2001). A look across four years at the disposition towards critical thinking among undergraduate students. Journal of General Education. 50, 1, 29-55.

Giancarlo, C. A., & Facione, P. A. (2001). A look across four years at the disposition towards critical thinking among undergraduate students. Journal of General Education. 50, 1, 29-55.

Gilligan, C. (1982) (eds). In a Different Voice. London, Harvard University Press.
Gongre, W.M. (1981) A study of moral development using the defining issues test, for three ethnic groups at Bacone College. In King, P. & Mayhew, M.J. (2002) Moral Judgment Development in Higher Education: insights from the Defining Issues Test. Journal of Moral Education. 31, 3, 247-267.

Gravaso, R., Pasa, A., & Mori, T. (2002). Influence of Students' Prior Learning Experiences, Learning Conceptions and Approaches on their Learning Outcomes. Paper presented at ASET HERDSA Conference, University of Southern Queensland (2002).

Grigorenko, E. & Sternberg, R. (1995). Cited in Rayner, S. & Riding R. (1997). Towards a Categorisation of Learning Styles. In Educational Psychology. 17, 1& 2, 5-25.

Grugulis, I, (2000) The Management NVQ: A Critique of the Myth of Relevance. In Journal of Vocational Educational &Training. 52, 1, 79-99.

Haggis, T. (2003). Constructing Images of Ourselves? A Critical Investigation into 'Approaches to Learning' Research in Higher Education. In British Educational Research Journal. 29, 1, 89-104.

Halonen, J. (1995). Demystifying Critical Thinking. in Teaching of Psychology. 22, 1, 75-78

Harvey, L. and Knight, P. (1996). Transforming Higher Education. Buckingham: Open University Press.

Hautamaki, J. Arinen, P. Hautamaki, A. & Sheinen, P. (1998). The Epidemiology of Excellence: An assessment of the commitment to thinking by Sternbergs Triarchic Ability Test in Finland. Paper presented at annual meeting of European Council for High Abilites. Oxford, September 18-21, 1998.

Hesketh, A.J. (2000). Recruiting an Elite? Employers' Perceptions of Graduate Education and Training. In Journal of Education and Work. 13, 3, 245-269.

Hodgson, V. (1984) Learning from Lectures. In Marton, F, Hounsell, D. & Entwistle N. (1997) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press.

Hofer, B. & Pintrich, P. (1997) The Development of Eistemological Theories: Beliefs about knowledge and knowing and their relation to learning. In Review of Educational Research. 67, 88-140

Honey, P. & Mumford, A. (1995). Using your Learning Styles. Peter Honey Publications, Maidenhead.

Jones, A. (2004). Teaching Critical Thinking: An Investigation of a Task in Introductory Macreconomics. In Higher Education Research. 23, 2, 167-181.

Jones, A. (2005) Culture & Context; Critical Thinking and Student Learning in Introductory Macroeconomics. Studies in Higher Education, 30, 3, 339-354.

Keeley, S.M. & Browne, M.N. (1986). How College Seniors Operationalise Critical Thinking Behaviour. In College Student Journal. 20, 389-395.

Keeley, S., Shemberg, K., Cowell, B., & Zinnbauer, B. J. (1995) Coping with Student Resistance to Critical Thinking. In College Teaching. 40, 140-146.

Kember, D. (2004). Interpreting student workload and the factors which shape students' perceptions of their workload. Studies in Higher Education. 29, 2, 165-185.

King, P. & Kitchener, K. (1994). Developing Reflective Judgment. San Francisco, Jossey-Bass.

King, P., Kitchener, K. & Wood, P. (1985). The Longitudinal-sequential study of intellectual and moral development in young adults. In Moral Education Forum. 10, 1, 1-13.

King, P.M. & Mayhew, M.J. (2003). Theory and research on the development of moral reasoning among college students. Paper presented at the Association for the Study of Higher Education, Portland, OR, November, 2003.

King, P., Taylor, J. & Ottinger, D. (1993). Intellectual Development of Black College Students on a Predominantly White Campus. Paper presented at ASHE Annual Meeting, Atlanta, Georgia. November 1993.

King, P, Wood, P., & Mines, R. (1990). Critical Thinking Amongst College Graduate Students. In Review of Higher Education. 13, 3, 167-186.

Kitchener, P, Lynch, C. Fisher, K. & Wood, P. (1993). Developmental Range of Reflective Judgement: The Effect of Contextual Support & Practice on Developmental Stage. In Developmental Psychology. 29, 5, 893-906.

Kline. P (1994). An Easy Guide to Factor Analysis. London, Routledge.

Knefelkamp, L. L. (1999). Introduction. In Perry W. G.(eds). Forms of Ethnical and Intellectual Development in the College Years: A scheme. San Francisco, Jossey-Bass.

Knefelkamp, L.L. & Slepitza, R. (1978). A Cognitive developmental model of career development: Adaptation of the Perry Scheme. In Whiteley, J.M. and Resnikoff, A. Career Counseling. Monterey, Brooks Cole.

Knefelkamp, L. L., Widick, C., & Parker, C. A. (1978). Applying new developmental findings (New Directions for Student Services No. 4). In Perry, W. (1970). Forms of Intellectual and Ethical Development in the College Years. San Francisco, Jossey-Bass.

Knight, P.& Trowler, P., (2000) Department Level Cultures and the Improvement of Learning and Teaching. *in* Studies in Higher Education, 25,1, 69-83.

Kohlberg, L. (1958). The development of modes of moral thinking and choice in the years 10 to 16. University of Chicago; unpublished doctoral dissertation. In Gilligan, C. (1982) (eds). In a Different Voice. London, Harvard University Press.

Kohlberg, L. (1981) Essays on moral development: Vol. 1. The philosophy of moral development. New York, Harper.

Laurillard, D. (1978). Evaluation of Student Learning in CAL. Computers and Education 2: 259-265.

Laurillard, D. (1984) 'Learning from Problem Solving', in Marton, F., Hounsell, D. and Entwistle, N. (Eds). The Experience of Learning – Implications for Teaching and Studying in Higher Education.Edinburgh: Scottish Academic Press.

Laurillard, D. (1997) Styles and Approaches in Problem Solving. In Marton F., Hounsell D., & Entwhistle N. (Eds) The Experience of Learning – Implications for Teaching and Studying in Higher Education. Edinburgh, Scottish Academic Press.

Laurillard, D. (1993). Rethinking University Teaching: A framework for the effective use of Educational Technology. New York, Routledge.

Lave, J & Wenger, E. (eds) (2003). Situated Learning – Legitimate Peripheral Participation. Cambridge University Press, U.S.

Lea, M. & Street, B. (2000) Student Writing in Higher Education – An Academic Literacies Approach. in Studies In Higher Education. 23, 2, 157-171.

Locke, D. & Tucker, D. (1988). The Relationship between Black Racial Identity and Moral Development. Journal of Black Psychology 27, 255-271.

Makinen, J., Olkinuora, E., & Lonka, K. (2004). Students at Risk: Students general study orientations and abandoning/prolonging the course of study. In Higher Education. 48, 173-188.

Marshall, D., Summers, M., & Woolnough, B. (1999) Students' conceptions of learning in an engineering context. Higher Education. 38, 291-309

Marton, F., Dall Alba, G., & Beatty, E. (1993). Conceptions of Learning. International Journal of Educational Research. 19, 277-300.

Marton, F., Watkins, D. & Tang, C. (1997). Discontinuities and Continuities in the Experience of Learning: An Interview Study of High School Students in Hong Kong. Learning and Instruction 7, 1, 21-48.

Marton, F. & Saljo, R. (1967a) On qualitative differences in learning, outcome and process In British Journal of Educational Psychology. 46, 4-11.

Marton, F. & Saljo, R. (1976b) On qualitative differences in learning, outcome and process II. British Journal of Educational Psychology. 46, 115-127.

Marton, F. & Saljo, R. (1984). Approaches to Learning. In Marton F., Hounsell D., & Entwhistle N. (eds) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press

McLoughlin, C. (1999). Culturally inclusive learning on the web. In K. Martin, N. Stanley and N. Davison (Eds), Teaching in the Disciplines/ Learning in Context. 272-277. Proceedings of the 8th Annual Teaching Learning Forum, The University of Western Australia, February 1999, Perth UWA.
http://lsn.curtin.edu.au/tlf/tlf1999/mcloughlin.html (Accessed 4. 12. 05.)

Mc Keachie, W. J. (1995). Learning styles can become learning strategies. The National Teaching & Learning Forum. 4, 6, 1-3.

Mc Peck, J.E. (1981) Critical Thinking & Education. New York, St, Martins Press.

Meacham, J. (2003). Student intellectual development: many developmental and educational psychologists agree that young adults mature through a sequence of stages - Featured Topic. In Liberal Education. Summer, 2003. (Accessed 12. 8. 05. http://www.findarticles.com/p/articles/mi_m0NKR/is_3_89/ai_109131868).

Meyer, J.H.F. (2000). An overview of the development and application of the Reflections on Learning Inventory (RoLI). Paper presented at the RoLI Symposium, Imperial College London. July (2000).

Meyer, J. H. F. (2000). Variation in contrasting forms of "memorising" and associated variables. In British Journal of Educational Psychology 70:163-176.

Meyer, J. H. F., & Kiley, M. (1998). An Exploration of Indonesian Postgraduate Students' Conceptions of Learning. In Journal of Further and Higher Education, 2, 3, 287-298.

Meyer, J.H.F. & Shanahan, M. (2001). A Triangulated Approach to the Modelling of Learning Outcomes in First Year Economics. In Higher Education Research & Development. 20, 2, 127-145.

Miles, M. & Huberman, A.M. (1994). Qualitative data analysis: an expanded sourcebook. (eds) Thousand Oaks, CA; Sage.

Mines, R. King P., Hood A., & Wood, P. (1990). Stages of Intellectual Development and Associated Critical Thinking Skills in College Students. In Journal of College Student Development. 31, 537-574.

Moore, W.S. (1989). The Learning Environment Preferences: Exploring the Construct Validity of An Objective Measure of the Perry Scheme of Intellectual Development. In Journal of College Student Development. 30, 504-514.

Paivio, A. (1971). Imagery and Verbal Processes. New York: Holt, Rinehart & Winston.

Paradice, D.B. & Dejoie, R.M. (1991). The ethical decision-making processes of information systems workers. In King, P. & Mayhew, M.J. (2002) Moral Judgment Development in Higher Education: insights from the Defining Issues Test. Journal of Moral Education. 31, 3, 247-267.

Pask, G. (1976). Styles and Strategies of Learning. In British Journal of Educational Psychology. 46, 128-148, 1976.

Pask, G. & Scott, B. (1972). Learning strategies and individual competence. In International Journal of Man-Machine Studies. 4, 217-253.

Patton, M. (1990). Qualitative Evaluation and Research Methods (eds). Nwebury Park, CA: Sage.

Patton, M. (2002). Qualitative Evaluation and Research Methods (eds). Thousand Oaks, CA: Sage.

Perry, W. (1970). Forms of Intellectual and Ethical Development in the College Years. San Francisco, Jossey-Bass.

Pintrich P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning Italian Students' Epistemological Beliefs, Motivation and Achievement In Journal of Educational Psychology. 92, 544-555

Ramsden, P. (1981) The Context of Learning in Academic Departments. In Marton F., Hounsell D., & Entwhistle N. (eds) The Experience of Learning – Implications for Teaching and Studying in Higher Education. Edinburgh, Scottish Academic Press.

Ramsden, P. (1984). The Context of Learning. In Marton F., Hounsell D. J &. Entwistle, N. J (eds), The Experience of Learning – Implications for Teaching and Studying in Higher Education. Edinburgh: Scottish Academic Press.

Ramsden, P. (1992) Learning to Teach in Higher Education. London, Routledge

Rayner & Riding (1997). Towards A Categorisation of Cognitive Styles & Learning Styles. In Educational Psychology. 17, 1 & 2, 5-27.

Rest, J. (1988). Why does college promote development in moral judgment? In King, P. & Mayhew, M.J. (2002). Moral Judgment Development in Higher Education: insights from the Defining Issues Test. In Journal of Moral Education. 31, 3, 247-267.

Rest J. & Thoma S. (1985). Relation of Moral Judgment Development to Formal Education. In Developmental Psychology 21, 4, 709-714.

Richardson, J.T.E. (1987). Research in Education & Cognitive Psychology. In Richardson, J.T.E., Eysenck, M.W. & Piper, D.W. (eds). Student Learning: Research In Higher Education and Cognitive Psychology. Milton Keynes, SRHE.

Riding, R. (1998). Cognitive Styles Analysis Users' Manual. Learning & Training Technology. Birmingham. U.K.

Rocco, T., Bliss., A. Gallagher, S. & Perez-Prado, A. (2003). Taking the next step: Mixed Methods Research in Organisational Systems. In Information Technology, Learning and Performance Journal, 21, 1, 19-29.

Rogoff, B., & Lave J. (1999). Everyday Cognition – Development in a Social Context. Harvard University Press. NY.

Ryan, R, Mims, V. & Koestner, R. (1983). Relation of a Reward Contingency and Interpersonal Context to Intrinsic Motivation: A Review and Test using Cognitive Evaluation Theory. In Journal of Personality and Social Psychology. 45, 736-750.

Saljo, R. (1997) Reading and Everyday Conceptions of Knowledge. In Marton F., Hounsell D., & Entwhistle N. (eds) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press.

Sax, L. (2006). Citizenship and Spirituality Among College Students: What Have We Learned and Where Are We Headed? In Journal of College & Character. Accessed 6. 9. 06: http://www.collegevalues.org/articles.cfm?a=1&id=1023.

Scouller, K. (1998). The influence of assessment method on students' learning approaches: Multiple choice question examination versus assignment essay. In Higher Education, 35, 453-452.

Simons, J., Vansteenkiste, M., Lens, W., & Lacante, M. (2004). Placing Motivation and Future Time Perspective Theory in a Temporal Perspective: Effects of Time Perspective on Student Motivation. Part 2. In Educational Psychology Review. 16, 2, 121-139.

Soldz, S., & Vaillant, G. E. (1999). The Big Five personality traits and the life course: A 45-year longitudinal study. In Journal of Research in Personality, 33, 208-232.

Sternberg, R.J. (1984). Towards a Theory of Triarchic Intelligence. In Behavioural & Brain Sciences. 7, 269-287.

Sternberg, R.J. (1988). The Triarchic Mind: a new theory of human intelligence. New York, Viking.

Sternberg, R.J., Castejon, J.L., Prieto, M.D., Hautamaki, J. & Grigorenko, E. (2001) Confirmatory Factor Analysis of the Sternberg Triarchic Abilities Test in Three International Samples. An Empirical Test of the Triarchic Theory of Intelligence. In Journal of Psychological Assessment. 17, 1, 1-16.

Sternberg, R. J., & Clinkenbeard, P. C. (1995). A triarchic model for identifying, teaching, and assessing gifted children. In Roeper Review. 17, 255-260.

Sternberg, R.J., Grigorenko, E., Ferrari, M. & Clinkenbeard. (1999) A Triarchic Analysis of an Aptitude-Treatment Interaction. In European Journal of Psychological Assessment. 15, 1, 3-13.

Strange, C., & King, P. (1991). Intellectual Development and Its Relationship to Maturation in the College Years. In Journal of Applied Developmental Psychology. 2, 281-295.

Strebler, M., Robinson,D., & Heron, P. (1997) Getting the Best Out of Your Competencies. In Institute for Employment Studies. Report 334.

Strebler, M., Thompson, M. & Heron, P. (1997) Skills, Competencies and Gender – Issues for Pay and Training In Institute For Employment Studies Report 333.

Tait, H., Entwistle, N. J., & McCune, V. (1998). A.S.S.I.S.T.: A re-conceptualisation of the Approaches to Studying Inventory. In C. Rust (Eds.). Improving Students as Learners . Oxford: Oxford Brookes University, Centre for Staff and Learning Development.

Tang, S. & Hall, V.C. (1995). The Over-Justification Effect: A Meta-Analysis. In Applied Cognitive Psychology. 9, 365-404.

Tashakkori, A, Aghanjanian, A & Mehryar, (1996).Consistency of Iranian adolescent behavioural intentions across two decades of change. Paper presented at 54th Annual Convention of International Council of Psychologists. Banft, Canada.(July 1996).

Tashakkori, A. & Teddlie, C. (1998). Mixed Methodology: Combining Qualitative and Quantitative Approaches. (Applied Social Research Methods, No. 46). Thousand Oaks, CA; Sage.

Taylor, E. (1983). Learning Orientations and Study Contracts. In Marton F., Hounsell D., & Entwhistle N. (eds) The Experience of Learning – Implications for Teaching and Studying in Higher Education. G.B., Scottish Academic Press.

Te Wiata, I. (1996). Module 1: Thinking critically and making judgments. In Nightingale, P. Assessing Learning in Universities. Sydney: University of New South Wales Press. pp13-38.

Triarchic Abilities Test (Abbreviated version, 1993). With permission from Professor R. Sternberg, University of Yale, U.S.

Trochim, W. (2006). The Research Methods Knowledge Base: The Quantitative debate. Accessed 9.9.06; http://www.socialresearchmethods.net/kb/qualdeb.htm.

Trowler, P. (1996). Angels in marble? Accrediting prior experiential learning.in higher education. In Studies in Higher Education. 21, 17-30.

Tynjala P., Vaalima J. & Sarja, A. (2003). Pedagogical Perspectives on the Relationship between Higher Education and Working Life. In Higher Education. 46, 147 – 166.

Van Rossum, E.J. & Schenk, S.M. (1984) The Relationship between Learning Conception, Study Strategy and Learning Outcome. In British Journal of Educational Psychology. 54, 73-83.

Wagner & Harvey (2003). CAT Item Exposure Control for the Wagner Assessment Test (WAT). Paper Presented at SIOP conference. Orlando, Florida (2003).

Walker, P., Finney, N. (1999). Skill development and critical thinking in higher education. In Teaching in Higher Education. 4, 4, 531-547.

Watson, G., and Glaser, M.E., (1964). Watson Glaser Critical Thinking Appraisal Manual. Harcourt, Brace & World Inc., NewYork

Whitston, K. (1998) Key Skills and Curriculum Reform. In Studies In Higher Education. 23, 3, 307 – 319.

Witkin, H. and Goodenough, D. (1981) Cognitive Styles, Essences and Origins: Field dependence and field independence. New York, International University Press.

Yorke, M. (2001) Employability in the first cycle higher education. A working paper for the 'Skills Plus' Project. Liverpool John Moores University. http://www.services.ex.ac.uk/cas/employability/staffintro.shtml. Accessed 6. 8. 06.

Yorke, M. (2003). Formative Assessment in Higher Edcuation: Moves towards theory and the enhancement of pedagogic practices. In Higher Education, 45, 477-501.

EXPECTATIONS OF HIGHER EDUCATION

The following questionnaire is looking at students' expectations of Higher Education.
Students have many different reasons for choosing to study for a degree. They choose to enter Higher Education at different times in their lives, and they come from a variety of different educational and vocational backgrounds. These differences can affect students perceptions and expectations of what their Higher Education experiences will be like, and also what they eventually expect to get out of their courses.

The following questionnaire draws upon some of students more commonly held expectations and beliefs about learning and studying in Higher Education. If you could take the time to fill in this questionnaire it would be very much appreciated – and please remember that any results could be used to help us to improve your experience!!

Thank You Very Much!

Section A. Expectations of Higher Education

The following statements show some of the more commonly held beliefs that students have about their courses, and how they expect to progress. Could you please read each statement, and using the scale below, rate the extent to which each represents your own thoughts and ideas.

Please use this key for all sections.
5 = *Strongly Agree*
4 = *Agree Somewhat*
3 = *Don't know*
2 = *Disagree Somewhat*
1 = Strongly Disagree

		5	4	3	2	1
1	I'm expecting the course to introduce me to lots of issues and debates					
2	I expect that the course will force me to question myself and my ideas					
3	The course will be fairly easy once I have settled into a routine					
4	In order to do well, all I really need to do is to find the right answer to set questions					
5	As an undergraduate I will not be expected to question existing theories and literature					
6	Most of my learning will be as a result of listening closely in lectures and seminars					
7	Most of my learning will be the result of reading textbooks in my own time					
8	Most of my learning will take place though talking to others on my course					
9	Most of my learning will be the result of having completed set tasks					
10	Most of my learning will take place whilst I'm working through the tasks I'm required to do					
11	Most of my learning will come about through thinking about what I have done in previous tasks					

Section B. Personal Aims.

Below is a list of statements which describe some of the main goals and aims that students have as they begin their Higher Education studies. Could you please read each one, and rate the extent to which each statement reflects YOUR OWN aims and goals. Use the same scoring key.

During my Higher Education studies, one of my main goals is to: -

		5	4	3	2	1
12	Build upon the skills and knowledge that I already have					
13	Pick up new skills and knowledge that I didn't previously have					
14	Become less reliant on others for my learning					
15	Collect all the skills and knowledge I will need for my chosen career					
16	Make lots of new friends and build up my social life					
17	Become more confident in myself and with others					
18	Learn all I possibly can about my chosen subject					

19	Learn how to apply my new found skills in useful ways					
20	To learn more about myself					
21	To really understand what writers and theorists in my subject are trying to say					

Section C. Lectures

The following is a set of statements which describe what students commonly think to be the purpose of lectures in Higher Education. Please would you read each one, consider what YOU think is the main purpose of lectures, and rate the extent to which you agree or disagree with each.
Use the same scoring key.

The main purpose of lectures is: -

		5	4	3	2	1
22	To get students interested in the subject/topic					
23	To motivate students into going away and learning more about the subject/topic in their own time					
24	To give students some idea of how difficult the subject really is, and how hard they will have to work					
25	To present information in an interesting way so that students have a better chance of learning it.					
26	To outline key points that students really need to know about the subject/topic.					
27	To give students just enough information so that they can go and direct their own research into a subject/topic for themselves.					
28	To get students together so that they all get the same information at the same time					
29	To enable students to take in whole blocks of knowledge					
30	To give students a chance to take notes about things that they may need to know at a later stage					
31	To explain things in a way that students can quickly and easily understand them					
32	To support seminars by giving students something to talk about in them					
33	To give students a whole lot of information so that they can select out the parts that they think are important					
34	To give students selected information, but usually not enough, or appropriate for them to get a really good grasp of the topic					
35	To give students the chance to find out what the lecturer thinks is important about the topic					
36	To give students the relevant information that that they will need to include in their assignments and exams					
37	To bombard students with as much information as possible; often far too much for them to remember					
38	To get students to think about ideas and viewpoints					
39	To show students the flaws in others' ideas, and encourage the them to form their own solutions to these					
40	The purpose of lectures is not clear - students could just as easily go and read about a topic for themselves					
41	To make learning easy and pleasant for students, by presenting them with properly paced, clearly structured information					

42	To present information in an interesting and amusing way so that students will stay motivated to listen.					
43	To criticise theories and literature and try to encourage students to do the same					
44	The purpose of lectures is not clear – most of the time they simply repeat what is written on handouts					

Section D. Lecturers/Tutors

Below is an identical list of statements. For this section, could you please rate the extent to which you consider each to represent what YOU think to be the main role of lecturers/tutors in Higher Education.. Please use the same scoring key.

The main role of a Lecturer is: -

		5	4	3	2	1
44	To get students interested in the subject/topic					
45	To motivate students into going away and learning more about the subject/topic in their own time					
46	To give students some idea of how difficult the subject really is, and how hard they will have to work.					
47	To make information interesting so that students have a better chance of learning it.					
48	To outline key points that students really need to know about the subject/topic.					
49	To give students just enough information so that they can go and direct their own research into a subject/topic for themselves.					
50	To get students together so that they all get the same information at the same time					
51	To enable students to take in whole blocks of knowledge					
52	To give students a chance to take notes about things that they may need to know at a later stage					
53	To explain things in a way that students can quickly and easily understand them					
54	To support seminars by giving students something to talk about in them					
55	To give students a whole lot of information so that they can select out the parts that they think are important					
56	To give students selected information, but usually not enough, or appropriate for them to get a really good grasp of the topic					
57	To give students the chance to find out what the lecturer thinks is important about the topic					
58	To give students the relevant information that that they will need to include in their assignments and exams					
		5	4	3	2	1
59	To bombard students with as much information as possible; often far too much for them to remember					
60	To get students to think about ideas and viewpoints					
61	To show students the flaws in others' ideas, and encourage the them to form their own solutions to these					
62	The main role of lecturers is not clear - students could just as easily go and read about a topic for themselves					
63	To make learning easy and pleasant for students, by presenting them with properly paced, clearly structured information					
64	To present information in an interesting and amusing way so that students will stay motivated to listen.					
65	To criticise theories and literature and try to encourage students to do the same					
66	The main role of lecturers is not clear – most of the time they simply repeat what is written on their handouts					

Section E. Anxieties about Higher Education.

Below are a list of statements which describe some of the concerns that students have, prior to, and in the early stages of their Higher Education studies. Would you please read each one, and rate the extent that you would either agree or disagree with these, as one of YOUR OWN concerns.
Try to respond as accurately as possible about any of the following that you feel would be likely to impact on your progress.

Use the same scoring key: -

		5	4	3	2	1
67	My revision strategies will not be good enough at this level of study					
68	After previously doing well, I tend to worry that I wont be able to maintain this standard					
69	After not putting enough effort into my previous studies, I will find it difficult to be able to keep up with the work at this level.					
70	I tend not to perform well in exams					
71	I tend to perform poorly at written tasks (eg. essays, reports etc.)					
72	I tend to perform poorly at practical tasks					
73	I will have difficulty keeping up with other students; they always seem to understand things much quicker than I do					
74	I will not be able to produce the level of work that I would like to unless I have access to a computer					
75	Intellectually, the course will be too difficult for me to follow and complete.					
76	The subjects I have chosen to study will not be as interesting as I'd thought					
77	I tend to blame anyone and anything else for my failure to do the work.					
78	It is extremely difficult to keep focussed on my work					
79	I find it difficult to motivate myself to actually get down to the work					
80	I find it difficult to organise my time so that I can get all my work done					
81	I will have a whole range of new situations to cope with, as well as my work					
82	I need to make new friends and establish my social circle quite early on in the course					
83	As a student, I will have to pay out much more on necessities than I will be able to afford					
84	Travelling to and from College will be overly time-consuming					
85	I need to be much more self-disciplined in my work					
86	I don't know how much time or effort I should be putting in my studies					
87	I am always looking for ways to justify taking a break from my studies					
88	I am far too careless when completing assignments					
89	I'm always rushing to complete work at the last minute					
90	Other students always seem to be better at organising themselves than me					
91	I haven't made the right decision to study for a degree					
92	Living in a new and unfamiliar area will be hard to get used to					
93	Living away from my parents/family will be really hard to get used to					

94	I am very self conscious and often feel inferior amongst the other students					
95	I'm not sure how easy it will be to work alongside mature (or) younger students					
96	I cant keep asking questions as people will think I'm stupid					
97	I'm really not interested in one of my subjects, so I'll probably not do well in it.					
98	I'm not happy about having to do a degree in subjects that I didn't select, and don't want to do					
99	I am intimidated by the intelligence and experience of lecturers					
100	I will be the only one who has problems trying to understand anything					
101	Aside from problems I may/may not be having outside of the course, I worry that I will not be able to cope with the workload					
102	I don't know if I will manage to finish the course, as I tend to get bored with most things very quickly					
103	I don't know if I will manage to finish the course, I never seem to be able to stick with things that I feel are demanding of my time and patience					
104	My parents/relatives will be disappointed in me if I don't finish the course.					
104	Lecturers/tutors will expect me to do just as well as other students in a subject/topic I have never done before					
106	I don't know if I will manage to finish the course if I find it prevents me having any leisure time for myself					

Section F. Beliefs about Education

Below are a list of statements representing some of the more commonly held beliefs about education, what it means to be 'educated', or to be an 'educated person'. As an undergraduate student, what does this mean to you? Please rate the extent to which you agree or disagree with each of the statements.

Please use the same scoring key.

		5	4	3	2	1
107	For me, education is an alternative to employment					
108	Education is a necessary step towards getting a well paid job					
109	Education is a necessary step towards getting a job that you really enjoy					
110	Education is about the acquisition of knowledge					
111	Employees prefer to employ people who are educated					
112	Being educated means that you don't have to rely on others for help to get by					
113	Education means having an enormous amount of knowledge					
114	Education means that you know masses about that you are really interested in					
115	Educated people are those who have really strong opinions about things					
116	Education is anything that prepares you for later life					
		5	4	3	2	1
117	Education means collecting relevant information that you will need later in life					
118	Education is the process of trying to increase your knowledge					
119	Educated people have achieved more than anyone else in a specific area					
120	Education is knowing all there is to know about a specific subject					

121	You need to have completed all the necessary courses before you can become educated					
122	You cannot become educated without an appropriate amount of general knowledge					
123	Educated people have a wider ranging knowledge about most things					
124	To become educated, you need to have read lots and lots of books					
125	Educated people collect any information that is available to them, and not a necessarily from books.					
126	There's a real difference between someone who is educated and someone who is not.					
127	Educated people only really differ to other people in that they can talk more intellectually about things					
128	You cannot become educated without having had the proper tuition					
129	Self-educated people are very different to those who have had tuition at degree level.					
130	Its virtually a waste of time trying to educate anyone who hasn't got the brain for it.					
131	Unless you have done well at school, there's no real point trying to get anywhere in Higher Education					
132	Education is about changing your ideas when you realise you were wrong					
133	Educated people tend to look at things in a different way to everybody else					
134	Educated people should know the right answer/solution to question and problems, and if they don't, then they need to find out					

Section G. Future Directions

Students have lots of different reasons for choosing to study for a degree. Depending on these reasons, students will have different ides about how they see themselves at the end of their studies, and the next steps they wish to take. Below are a list of statements which reflect some of the future hopes and intentions students have when they initially begin their courses. Referring to the question (in bold) please read each one, and rate the extent to which you feel this reflects your own.
Use the same scoring key: -

Where Do You See Yourself In Three Years Time?

		5	4	3	2	1
135	Taking the next step towards my chosen career, even though I'm not sure how to go about it yet					
136	I would like to be certain, but conditions and circumstances around me seem to be changing all the time					
137	My financial situation will be the strongest determinant of the next step I take					
138	Although I did have a really good idea, I'm having to re-think things as I've had to take subjects that I hadn't planned to.					
139	I'm not sure, I'm a person whose decisions are constantly changing					
140	I have no idea, I hadn't thought about it at all					
141	I want to keep an open mind and wait to see which doors might be open to me by doing these subjects					
142	I'm never sure, I'm always looking round for any new options that might take my interest					

143	I'm really just want to concentrate on enjoying my subjects now, so I'm not thinking that far ahead					
145	I want to continue looking at my chosen subjects at a higher level of study					
146	I'll be well on the way to getting some kind of really well-paid job					
147	I hope to find a job that will be intellectually challenging and satisfying					
148	I want to take a year out to try out other things I've always wanted to do					
149	I want to take a year out to have a really good think about what to do with the rest of my life					
150	I haven't decided yet – I'm excited about the wide range of options open to people with degrees					
151	I want to continue studying, I would prefer this to a job					
152	I'll probably continue studying - its easier than looking for a job					
153	I will be taking other courses that I'll need in order to get the job I want					
154	As long as I get my degree, I will worry about that when the time comes					
156	I cant afford to think that far ahead because my family commitments could change.					

Thank You Again For Your Time!

Perceptions of Higher Education.

Section A. Personal Goals.

Below is a list of statements which describe some of the goals and aims that students have as they begin their courses. Which one of these would you consider to be your own MOST IMPORTANT goal? Please tick just ONE box

1	To collect the appropriate skills and knowledge that I will need for my future career.	
2	To learn more about myself and my abilities.	
3	To gain as much knowledge as I possibly can about my chosen subject.	
4	To really understand what writers and theorists in my subject are trying to say.	
5	To make lots of new friends and build up my social life.	
6	To become more confident in myself and with others.	

Section B. Perceptions of Progress.

The following statements show some of the more commonly held beliefs that students have about their courses/modules, and how they expect to progress through them. Could you please read each statement, and using the scale below, rate the extent to which each represents your own views.

Please use this key for all the following sections.

5 = *Strongly Agree*
4 = *Agree Somewhat*
3 = *Not Sure*
2 = *Disagree Somewhat*
1 = Strongly Disagree

		5	4	3	2	1
7	I expect that I will learn most by working through, and completing set tasks.					
8	I expect that most of my learning will take place through collecting information from lectures and textbooks.					
9	I expect that I will learn best by talking to others on my course.					
10	I expect I will learn best by looking back and thinking about tasks and problems I have experienced in the past.					
11	I am expecting the course to introduce me to lots of interesting issues and debates.					
12	I expect the course will force me to question my personal ideas and beliefs.					
13	I expect that the course will be easy, as long as I just keep finding the right answers to set questions.					

Section C. Perceptions of Lectures

The following is a set of statements which describe what students commonly think are the purpose of lectures in Higher Education. Please would you read each one, and according to your own views, rate the extent to which you agree or disagree with each. Use the same scoring key.

The main purpose of lectures is: -

		5	4	3	2	1
14	To give students the relevant information that they will need to include in assignments and exams.					
15	The purpose of lectures is not clear to me – all the relevant information can easily be accessed in textbooks and handouts.					
		5	4	3	2	1
16	To present the facts in ways that students can pick them up easily and remember them when they need to.					
17	To present information in an interesting way so that students find learning easy and pleasurable.					
18	To criticise theories and literature, and try to encourage students to do the same.					
19	To give students as much information as possible, so that they can select out the parts they think are important.					
20	To give out information that is important to know about in a particular subject.					
21	To generate interest and thought about a subject/topic.					
22	To motivate students into going away and learning more about the subject/topic in their own time.					
23	To make sure that all students get exactly the same information.					
24	To enable lecturers to deliver information to a whole lot of students quickly and easily.					
25	To show students the flaws in others' ideas, and encourage them to form their own solutions to these.					
26	To try to keep students on top of their work by showing them just how difficult a subject/topic can be.					

Section D. Perceptions of Lecturers/Tutors

Students have different views about what they perceive to be the role of their lecturers and tutors. Below are some of the more commonly held views. Could you please read each one and rate the extent to which you agree or disagree with each. Use the same scoring key.

The main role of a Lecturer is: -

		5	4	3	2	1
27	To provide students with as much information as possible about a subject/topic.					
28	To outline key points that students really need to know about the subject/topic					
29	To give students the basic information, so that they can select out for themselves the parts that they think are most important.					

30	To make information interesting so that students find learning easy and pleasant.					
31	To motivate students into going away and learning more about the subject/topic in their own time.					
32	To simplify the learning process for students by structuring things clearly.					
33	To provide students with all the knowledge they will need in order to pass their exams and assignments.					
34	To criticise theories and literature and try to encourage students to do the same.					
35	To stimulate and facilitate discussion amongst students.					
36	To ensure that all students receive the same information about the subject/topic					
37	To encourage students to keep on top of their work by reminding them how difficult the subject/topic can be.					
38	To show students the flaws in others' ideas, and encourage them to form their own solutions to these.					

Section E. Anxieties

Below are a list of statements which describe some of the main concerns that students have, prior to, and throughout their courses. Would you please read each one, and rate the extent that you have experienced each of these yourself.

** **Item 52.** <u>If you have NOT moved away from home in order to complete your course, then please leave this item blank.</u>

		5	4	3	2	1
39	I will not be able to perform at the academic level expected of me in Higher Education.					
40	Other students always seem to be better at organising themselves than me.					
41	I feel that intellectually, I will not be able to keep up with other students on my course.					
42	I feel that I will not be able to cope with the workload.					
43	I will not be able to produce the level of work that I would like to unless I have access to a computer					
44	I tend not to perform well in exams.					
45	I will be expected to do as well as other students in a subject I have never done before.					
46	I find it difficult to motivate myself to get started, and to complete work.					
47	I find it difficult to organise everything so that I can get all my work done on time.					
48	I do not know if I will finish the course if it starts to take up too much of my time and energy.					
49	I tend to blame anyone and anything else for my failure to complete the work.					
50	I am very self-conscious and often feel inferior amongst other students.					
51	Often I feel like I am the only one who has problems trying to understand anything.					

52	I am often homesick and miss my family and friends. **					
53	I do not know if I have made the right decision to study for a degree.					
54	The subjects I am taking may turn out to be less interesting than I thought, which will affect my progress in them.					
55	I worry that I will not have a good social life through a lack of money.					
56	Travelling to and from College will be overly time consuming.					
57	My parents/ relatives will be disappointed in me if I do not finish the course.					

Section F. Perceptions of Education.

Below are a list of statements representing some of the more commonly held beliefs about education; what it means to be 'educated', or to be an 'educated person'. What does this mean to you? Please rate the extent to which you agree or disagree with each of the statements. Please use the same scoring key.

		5	4	3	2	1
58	Education is the amassing of knowledge by taking courses and reading as much as possible.					
59	Education cannot be achieved by those who are not intelligent enough to take courses and pass exams.					
60	Educated people seem to have very different views to other people, and they can talk intelligently about them.					
61	For me, education is an alternative to employment.					
62	Education is the only way to get a really good job.					
		5	4	3	2	1
63	Education is anything at all that prepares you for later in life.					
64	Education is about changing your ideas when you realise you were wrong.					
65	Education is actively trying to find out everything you can about things that you are really interested in.					
66	Education is the collection of as much information as possible from any available source.					

Section G. Future Directions

Students have lots of different reasons for choosing to study for a degree. They also have different ideas about how they see themselves at the end of their studies, and the next steps they wish to take. Below is a list of statements describing some of the hopes and visions that students commonly report. Could you please read each and rate the extent to which it reflects your own.

Use the same scoring key: -

		5	4	3	2	1
67	I am not sure, I would like to know more about the options that will be open to me after completing my course.					

68	I have not really thought about it, I just want to concentrate on enjoying my course.					
69	I do not want to make any firm decisions as my circumstances have already, or may well change in the future.					
70	I intend to take some time out to think about things properly, once I have completed my course.					
71	Ideally, I will be taking the next step towards my chosen career, although my financial situation will probably determine what I can and cannot do.					
72	I will be well on the way to getting a well-paid job that I really enjoy.					
73	I hope to continue looking at my chosen subject at a higher level of study if I get the grades I want.					
74	I want to take a year out to explore, and do other things I have always wanted to do.					
	I will probably continue studying as this is preferable to getting a job.					
75	If I manage to get my degree, I will be taking further courses which will enable me to get the job I want.					

On the next page you will find a description of a psychological issue which has long given rise to heated debate. Could you please turn the page, consider the issue, and rate the extent to which you either agree or disagree with the statements of opinion provided.

THANK YOU VERY MUCH FOR YOUR TIME!

Instructions: Because this questionnaire is aimed at understanding how people like you think about various issues, it asks not only what you think but why you hold the opinions you do.

The Task: You will be shown five short descriptions of some current issues. These issues are similar because people sometimes disagree about the best answer. For each issue, you will be asked consider for general questions.

Question 1: In Question 1, you will be asked for your personal opinion about the issue. Please indicate it in the space provided.

Question 2: For some issues you will be asked:

Why experts disagree.

For other issues you will be asked:

Why you believe the way you do.

Take a moment to consider your opinion about the question. Write down your response to the question in a few sentences in the space provided. **(Do not,** for example, write down "I think experts disagree." or "I think that food additives are safe." **Instead** indicate in a few sentences why experts disagree or why you believe the way you do.

Please give the best answer **you** have to each question.

Question 3: You will be Shown statements taken from interviews with people like yourself. Please indicate which statements are most similar to your own views by darkening the appropriate square.

Boxes **VS**, **S**, **D** and **VD** are used to indicate whether your response is **V**ery similar, **S**imilar, **D**issimilar or **V**ery **D**issimilar to your own thinking.

For example, if you read sentence A below and decided that it was **S**imilar to your views, you would darken the box labelled **S** as follows:

VS (S) D VD M A. Researchers who are honest will not disagree about whether a particular artificial sweetener is harmful.

It may be that your views on a topic do not exactly match the ones presented here. Please indicate a few statements for each issue which are at least somewhat similar.

A Check On Reading: Because we have found that some people do not read the statements carefully, we have included some statements that should **not** make sense to you. When you encounter such statements, mark them as "Meaningless" by darkening the (M) .

Question 4: You will be asked to indicate your first, second and third choices for which statements are like how you think.

Try to rank the top three statements for each issue, even if the statements do not exactly match your views. If only one or two statements are similar to your views , check the "none of these" box in the appropriate rankings.

Please mark only one statement per ranking.

Artificial Sweeteners

People often have to make decisions that may affect their health such as deciding whether to eat foods or drink beverages that contain artificial sweeteners. There have been conflicting reports about the safety of these additives. For example, some studies have indicated that even in small amounts, artificial sweeteners (such as Nutrasweet) can cause health problems, making foods containing them unsafe to eat. Other studies, however, have indicated that even in large amounts, artificial sweeteners do not cause health problems, and that the foods containing them are safe to eat.

1. Please indicate your personal opinion on this issue: I think that artificial sweeteners are safe.

Are not safe for people to eat		I do not know/cannot decide		Are safe for people to eat
○	○	○	○	○

2. How is it possible that researchers in the same field disagree about whether a particular artificial sweetener is harmful? (Please write your answer on the line provided.)

3. Many people have heard about disagreements among researchers about this and they suggest differing reasons why that might happen. How similar is each of the following reasons to your own understanding of why researchers disagree
VS = Very similar, S = Similar, D = Dissimilar, VD = Very Dissimilar, M = Meaningless

(VS) (S) (D) (VD) (M) A. Researchers who are honest will not disagree about whether a particular artificial sweetener is harmful

(VS) (S) (D) (VD) (M) B. Researchers disagree about this issue because, like everyone else, they are confused about the safety of artificial sweeteners. Therefore it is my perspective that what they conclude is their opinion.

(VS) (S) (D) (VD) (M) C. Researchers disagree whether enough studies have been done that show artificial sweeteners are safe or that these chemicals are not safe.

(VS) (S) (D) (VD) (M) D. Researchers disagree because of the different ways they were brought up and/or the different schools they attended.

(VS) (S) (D) (VD) (M) E. Researchers disagree because they approach the issue with different opinions already in mind about whether additives are safe. As a result, they conduct studies to support their view.

(VS) (S) (D) (VD) (M) F. Researchers arrive at different conclusions because the evidence itself is complex and they examine it from several perspectives. They arrive at a decision by synthesizing their knowledge, experiences and expert opinions.

(VS) (S) (D) (VD) (M) G. Researchers might say that one view about the safety of a sweetener was better, but they would also say that this viewpoint is relative to a particular way of understanding this issue.

(VS) (S) (D) (VD) (M) H. Researchers disagree because the permitted hard evidence is synthesized into available belief systems about different comprehensive factual analyses.

(VS) (S) (D) (VD) (M) I. Researchers disagree because they are really studying different facets of the issue and the best ways to address one facet of the issue are different than the best ways to address other facets.

(VS) (S) (D) (VD) (M) J. Researchers disagree because their evaluation of the evidence leads them to defend diffent conclusions. Some researchers conclusions are more reasonable, however, and reflect a more comprehensive synthesis of the information.

4. Please rank the statements above (A,B,C, etc.) that are most similar to your thinking. Please check only one statement per line. If no statement beyond one or two is at all like your thinking, check the box labelled "None of These" on the appropriate line(s).

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) **Is most like I think**

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) [None of These] **is second most like how I think**

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) [None of These] **is second most like how I think**

Preparing the Workforce For The 21st Century

Educators, civic leaders and members of the business community disagree about how to best prepare the workforce of the 21st centuary. Some claim that colleges should emphasize basic subjects such as math, English, or history. If these courses are well taught ,they argue, students will have the general skills necessary for the future. Others argue that the rapid rate of change in the 21st century requires specific training in skills that are adaptable to many situations, such as critical thinking or problem solving. They argue that colleges should emphasize such general skills in order to better prepare people for learning after thy leave college.

1. Please indicate your personal opinion on this issue: I think that colleges should do more.

Emphasize basic subjects		I do not know/cannot decide		Specifically teach critical thinking/problem solving
○	○	○	○	○

2. People give different explanations for their opinions about what colleges should emphasize. What is the basis for your point of view about this question? (Please write your answer on the line provided.)

3. Many people disagree about this and give different reasons for their own beliefs. How similar is each of the following reasons to the basis for your own beliefs about what colleges should emphasize.

VS = Very similar, S = Similar, D = Dissimilar, VD = Very Dissimilar, M = Meaningless

(VS) (S) (D) (VD) (M) A. There isn't much proof on either side of the issue about what colleges should emphasize so I believe what I want to believe. My point of view just makes sense to me.

(VS) (S) (D) (VD) (M) B. The facts aren't very clear because there is so much information involved in deciding what to emphasize in college. So I just believe what seems right to me based on my own background.

(VS) (S) (D) (VD) (M) C. When I hear people I respect say what they believe about how to best prepare the workforce of the 21st century, then I know what to believe.

(VS) (S) (D) (VD) (M) D. My beliefs are based on what I have been taught about how people should be educated by those who really understand what will be needed in the 21st century.

(VS) (S) (D) (VD) (M) E. I look at the ocular opinions and the assumptions I can draw from its collusiveness. Generally, the facts of this issue must be probabilistically migrated from that which is proven to that which is unproven.

(VS) (S) (D) (VD) (M) F. My point of view is based on a evaluation of the evidence and its fit with related arguments and assumptions. As a result of that evaluation, I am confident about the reasonableness of my conclusion.

(VS) (S) (D) (VD) (M) G. Researchers might say that one view about the safety of a sweetener was better, but they would also say that this viewpoint is relative to a particular way of understanding this issue.

(VS) (S) (D) (VD) (M) H. Researchers disagree because the permitted hard evidence is synthesized into available belief systems about different comprehensive factual analyses.

(VS) (S) (D) (VD) (M) I. Researchers disagree because they are really studying different facets of the issue and the best ways to address one facet of the issue are different than the best ways to address other facets.

(VS) (S) (D) (VD) (M) J. Researchers disagree because their evaluation of the evidence leads them to defend diffent conclusions. Some researchers conclusions are more reasonable, however, and reflect a more comprehensive synthesis of the information.

4. Please rank the statements above (A,B,C, etc.) that are most similar to your thinking. Please check only one statement per line. If no statement beyond one or two is at all like your thinking, check the box labelled "None of These" on the appropriate line(s).

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) **Is most like I think**

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) [None of These] **is second most like how I think**

Statement (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) [None of These] **is second most like how I think**

N.H.

1. I. "How are you finding H.E. so far?"

2. R. "I've been here four weeks. Er, the first week completely did my head in,
3. because everything was so disorganised and up in the air, all over the place.
4. Um...just giving my job up and there was anxiety over that. And this...from a
5. very ordered lifestyle to this complete chaos. Well, it seemed to me, all of a
6. sudden it was like God, have I done the right thing? By the start of week two
7. though, no problems, it's alright. Just easing through, getting done."

8. I. "Do you mean the first teaching week?"

9. R. "The first teaching week, yeah. Yeah, everything's fine. You know, it's a
10. new experience. It's rather good, I'm enjoying myself."

11. I. "What's been good about it?"

12. R. "What's particularly good about it?" It's good to be back in a learning
13. environment. Um...at school I threw up against a wall and I shouldn't have
14. done. Um...being a hormone driven sixteen year old I left sixth form and it's
15. good to be back. Good to be in a situation with good interaction. It's
16. informative. And it's a hell of a lot better than work!"

17. I. "Do you think?"

18. R. "Oh, without a...yeah... I was working eighty five to ninety hours a week.
19. I'm putting the hours in here, and putting the research hours in. And
20. then...and also it's...you get out of it what you put into it. You don't in the
21. job I was doing. The reason I wanted to get out was because of zero job
22. satisfaction."

23. I. "Anything bad?"

24. R. Anything bad? No, um...not...[stops]"

25. I. "Not 'bad', no. Sorry, not a good word. Negative?"

26. R. "Negative? Um, no, not really, no. Um...being a mature student you get
27. certain situations where you're put into groups. Perfect example, Unique
28. Learning. We've been given the...you know...er, into groups, pick a poem
29. and do a critique. Er...ah, a communications critique on it. So we got into
30. groups and there was me and these three eighteen-year olds. And when we
31. went for our first meeting and I sat down, and everyone sat round me and got
32. their pens out and waited for me to speak. And I said hang on, I'm the same,
33. I'm in exactly the same situation as you're in. And one of the lads actually
34. turned round and said...er, oh, I'll just get on with whatever poem you pick,
35. 'cause I haven't done poetry since I left school. I said I'm thirty-*two*! I'm...I

36. left school a long time ago! Um…but then I don't think that's a negative
37. experience. I think it's…it's…the experience. Um [whispers], it can be a bit of
38. a bind sometimes. I suppose so."

39. I. "What qualifications did you get here with?"

40. R. "Did I get here with?"

41. I. "Yeah. Did you do A levels, Access?"

42. R. "I did um…A level English Literature last year at night school. And my
43. professional qualifications…and…qualifications, I had from school, so
44. um…[stops]".

45. I. "You were in Further Education last year?"

46. R. "I was in night school doing the English Literature at A level. That's, er…a
47. condensed one-year course".

48. I. "Do you think there's any change in tuition, in teaching? Any kind of
49. change from A level to H.E.?"

50. R. "Oh yeah! It's…it's…you're far more reliable on your own
51. capabilities. You go out there and find stuff out in H.E. Whereas in F.E. and in
52. school, you're sort of sat there waiting for somebody to put information on
53. you, rather than just giving pointers where to go and find the information. You
54. go out and find it for yourself. Er, actually I prefer this. I think you learn a hell
55. of a lot better, you take in a hell of a lot more information. Sort of get
56. out…on…and find it on your own."

57. I. "Why do you think that is?

58. R. "Why? I think it's a difference, the difference between being told
59. something and reading something. I always think you take things in better
60. when you read them. I think if you're given information as opposed to going
61. out and finding it for yourself, it's a better quality, a better quality of
62. knowledge that you gain. You don't er…not as much bounces off you when
63. you have gone out and found it for yourself and dug it all out."

64. I. "How are you finding the different methods of teaching? In terms of the
65. overall learning environment, class structures?

66. R. "Er, well, seminar structure is very similar to F.E., when you're actually sat
67. in there. And I think the two go hand in hand, er, the lectures and the seminars.
68. The seminars are supposed to back up what you have learned in the lectures
69. and discuss them. Um…how am I finding it? I don't think There's anything as
70. to how I'm finding it. It's …er…it seems to be achieving…um. Well, four
71. weeks in and that would be difficult to say, but it seems to be achieving what
72. it needs to achieve. I'm picking up what I need, er…what I *feel* I need from
73. the lectures, and then taking in what I've learned from the lectures and

74. expanding on it in the seminars. And then I'm going away from the seminars
75. and expanding again with library work on my own, and that seems to me the
76. ways it's built to work. So it seems to be working for me."

77. I. "So what do you think the purpose of lectures is?"

78. R. "Well, the purpose of lectures is, er, I think more than to give you
79. information, they are there to give you things to think about. Er...it's very
80. difficult. It must be...I would have thought it would be impossible to imbibe
81. on people a load of knowledge, while standing at the front of the room giving
82. a two-hour lecture. But what you *can* do is to create certain sparks and certain
83. bullet points that will enable that person to go on, and um...direct their own
84. sort of research in an appropriate way. It's only a blueprint for study.

85. I. "You haven't actually done any assignments yet? It's quite early on to
86. be...to have actually handed something in to be assessed"

87. R. "I've handed in two pieces to be assessed in English".

88. I. "Right. Have you had them back?"

89. R. "I've had both pieces back, yeah"

90. I. "Oh, can you tell me about them?"

91. R. "Well the first one was literally an assessment piece, it was basically a
92. diagnostic. That was...oh God, what was it on?"

93. I. "Similar to Unique Learning?"

94. R. "Well, it was moreso...it was more like you get all these little diagnostics
95. in Unique Learning, but I think it was...because it was a Literature course, it
96. was basically to find out how many people were up to language and essay
97. construction, things like that. And we handed them in, and got them back and
98. discussed various things that people fell down on, like punctuation and
99. spelling. Not word-processing and stuff like that. And we had our first piece,
100. which although marked, it doesn't apparently go towards...[overall degree
101. mark]...and I'm a bit brassed off that it doesn't, like, but er...[stops]"

102. I. "You had a good mark?"

103. R. "It was O.K.,yeah. It was a transcript on a section of King Lear, and
104. basically, just did a transcript on it".

105. I. "What do you mean though, it doesn't count? You mean it doesn't count
106. towards your final degree?

107. R. "It doesn't count towards your final degree. But what it was, er...what it
108. was, er...[laughs] actually I'm not sure what the purpose of it was. It was
109. handed in to be marked as though it *would* have gone towards...so maybe it

110. was just a secondary diagnostic, and to give...er...whereas the first one was
111. to give tutors an idea of where you are up to, and to see....you know. Well,
112. O.K., if you got a D or an E, you need to make it up a bit".

113. I. "Well yes, but the thing is, no marks are actually taken from your first
114. year in *any* subject to make up your final mark".

115. R. "It's pass or fail first year, isn't it?"

116. I. "Yes, But that's not to say that it might not have other effects on you for
117. whatever reason. But maybe it's just English. Maybe I just don't know too
118. much about that subject. In Psychology, you get an essay mark, and
119. whatever it is, it still doesn't count towards your final degree, so it could be
120. that? It would be accounted for in some way, so I wouldn't get too depressed
121. about it".

122. R. "Oh I'm not depressed about it. I was just sort of, you know, it's like the
123. ones where you just staple them to the wall, you completely...you don't
124. *want* to leave them out".

125. I. "What do you think lecturers and tutors are trying to do...achieve, when
126. they teach you?"

127. R. "Overall? I think that...the main thing they are trying to teach you is to
128. go away and learn by yourself. I don't think they're actually sat
129. there...O.K., obviously they're giving you pointers, giving you various
130. critiques or pieces of literature, or various theories...in Psychology. But er,
131. what...I mean at this level, in three years, no-one could stand there and teach
132. you to degree level. You've got to get out there and learn it for yourself. And
133. it's more to becoming an independent learner, isn't it? I *think* that's
134. what...the idea behind it?"

135. I. "What are you expecting from H.E.?"

136. R. "Well I'm hoping to um...fine-tune my own abilities, maybe pick up new
137. abilities along the way. Um...basically become this mythical creature, the
138. independent learner, so I can go out and do it myself. And then, I mean what
139. I want to do eventually, I want to teach. I want to teach at University, so
140. that's, that's the other thing, the academic qualification that's going to allow
141. me to go forward into that field. But it's more...well, a piece of paper opens
142. doors, but if you haven't got the substance there, the piece of paper won't
143. help them. Won't stop them closing the door on you. You've go to be able
144. to...have it...be able to make the grade basically."

145. I. "What subject?"

146. R. "What subject? Do I want to teach? I came here wanting to do English
147. Literature. But now I don't know. Because I'm finding myself very much
148. absorbed in the Psychology. Um...I've got no grounding in academic
149. Psychology, only sort of...counselling patients and dealing with people and

doing my job. And at the usual sort of amateur interest in criminal psychologies and stuff. But certainly, no sort of psychological education I've got. So it's opening up to...it's achieved that already! Sort of sparked an interest in something I *thought* I'd be interested in. Yeah. So it's already achieved...if I walk under a bus tonight, my H.E. experience wasn't a waste. Even if I did that tonight, it wasn't a waste because I feel I've already gained something from the experience".

I. "Do you think though, that you could pick up on that interest in any subject? Suppose you approached Psychology and they said no, suppose you had to teach another subject?"

R. "Um...I would have had to have very, very carefully looked at the options open. I mean there are certain things...when I initially applied, sort of enquired about coming to H.E. which was a long time ago...um, they told me I'd...because I hadn't studied anything in five years, I'd have to do a literary test. And I was affronted to the max! I *was*! I thought cheeky swines, you know? So I decided to go off to school and do the A level over the year. Um, but when I initially enquired, I wanted to do the English. *That's* it, you know? But they said you have to do it as a combined...oh, right! So I was looking for something to combine it with; anything that sparked an interest. Um...and I was going through, sort of Drama and American Studies, no interest. European Studies, no interest. Um...*very* surprised to see Psychology as something you could combine it with, 'cause although there was sort of a very embryonic interest, well, embryonic knowledge, the interest was there. And I was thinking Science school and an Arts school, they're not gonna put *them* together. I spoke to [tutors name], he's my drinking buddy, yeah. And to [tutors partner], we were chatting and they said you could combine Psychology with the English, and told me same in the prospectus, and so thought well, that's the way to go forward. And I think if Psychology wasn't there, well I don't know. Um...through background interest, possibly Sociology. Um...I don't know. To be honest...but something down the political, leading towards politics. That's much more of interest [laughs]."

I. "I know you've practically answered this question, but where do you see yourself in three years? After you get your degree? What will you do with it? What do you want to happen?"

R. "Well, in three years time when I graduate with a combined B.A., that's the first stepping stone. But that's not the destination. In fact the realm I want to go into there's no destination. Um...it's a journey. Where I see myself in three years time is the next step towards getting into University teaching. What that next step will be I'm not sure, because things are changing. There mat be a P.G.C.E. thing coming in, um...don't know whether that will be in by then. If not, there's, er...a financial possibility that I'll immediately do the P.G.C.E. which will allow me to...er...at least while I'm carrying on, 'cause you've go to be a realist. Bills to pay. But in three years time I'll just find myself another three years along the road to....[stops]."

196. I. "O.K. Could you just summarise, anything you think you have learned so
197. far? If there's one thing that stands out? If you were telling someone what
198. it's like at University, what's it like?

199. R. "What have I learned in four weeks? Ha! I've learned that there's
200. insufficient parking! And, well, what I've learned in four weeks. I'm not
201. sure I've actually learned anything, apart from...about myself. As I was
202. saying before about the Psychology, it created...well, it ignited what was a
203. spark. But in terms of what I've actually learned, I couldn't put my finger on
204. one thing I've learned, other than...you know, this is...it's opening me up to
205. myself and allowing me to look at myself and thinking oh, so maybe you're
206. not really that thick after all. But I think every...every mature student who
207. comes into this situation like this, you know, you go off to University and
208. the first week you're waiting for someone to say hang on, what are *you*
209. doing here? Ha, go away you silly boy, go back to Pharmacy. Yeah,
210. it's...well, I'm a pretty self-confident person anyway, but it's certainly given
211. me the confidence in my academic abilities, as well as the confidence I've
212. got in my social skills."

213. I. "Anything else you want to mention?"

214. R. "Um...not really, no. I think four weeks in, I actually...some of the
215. questions you're asking are fairly difficult for me"

216. I. "Yes, I know."

217. R. "And you're thinking...I'm sure that it's very much part of the exercise.
218. Um...um...but to be asked about something after four weeks! I don't think I
219. particularly knew about my own children after they were four weeks old.
220. Especially as I was so young when I had them. Such a shock to become a
221. father, but you know. Um...and well, you know, it's a difficult time.
222. Difficult time to try and answer questions on what you think and feel, and
223. certainly on what you've learned. That's nasty [laughs]".

224. I. "But interesting."

225. R. "It *is* actually. Absolutely.

PW.

1. I. "How are you finding life in H.E.?"

2. R. "Er, it's harder than what I thought. And mainly, find...er, I didn't realise
3. the amount of work. *I* thought it was going to be...I had just done a year at
4. Access course and I just thought it was going to be on par with that. Um...and
5. it's not, it's a *lot* more. And I'm finding it hard, juggling the time to
6. fit...fitting in the reading 'cause I always leave that till last. 'Cause I always
7. think well, that work has to be handed in so I'll leave the reading. And there's
8. that much reading that I feel...I do feel like I'm falling behind, but, um...keep
9. battling on. And I'm finding it hard being a mature student, because I thought
10. there would be more mature students than there are. Psychology's not bad
11. 'cause there's a good mix of ages, but I'm doing Sports as well, and it's
12. probably a young subject [for younger students]. It's because like, There's
13. about four hundred in class, and I only had spotted five mature students
14. including myself. So I do...and I find I'm conscious of it as well. You know,
15. like Thursday this week, I've had Physical Education and the group I've been
16. put in, I'm the only mature student in the group. I feel like the young
17. ones...'cause I've got a daughter of nineteen, and I feel like the young ones
18. just look at me and go oh, what's she doing here? But we did these team
19. games and we had a laugh and I think they realised that I'm the same as them.
20. And um...I felt better at the end of that lesson, but I'm really conscious and
21. I'm finding it hard".

22. I. "What's the ratio like in Psychology?"

23. R. "It's not...well I'd say there's more young students, but there's a lot of
24. mature students".

25. I. "How many'ish?"

26. R. "Probably about sixty percent young, forty percent mature. It's a guess".

27. I. "So there's always more than just a few in each class?"

28. R. "Yeah, yeah."

29. I. "O.K. Anything else?"

30. R. "No, not really. I'm still struggling trying to find my way round. And it's a
31. different way of learning as well, isn't it? Like in College, when I did the
32. Access course I just kept asking questions. Like there's no...I wouldn't dream
33. of putting my hand up in a lecture theatre and asking a question. I'm
34. intimidated. If everyone understands except me".

35. I. "What about seminars?"

36. R. "I'm not so bad in seminars, I will ask in them. But I do feel like, oh God,

37. am I the only one that doesn't understand."

38. I. "Do you think other people feel like that?"

39. R. "I know some of them do 'cause I know sometimes when I've asked, felt
40. embarrassed, somebody else has said to me oh, I'm glad you asked that. And
41. I've thought oh God, so you've felt the same as me."

42. I. "Can I just go back to lectures again for a minute? You say you find them
43. intimidating?"

44. R. "Mm."

45. I. "How? Why?"

46. R. "Well it's probably just when I was young. People who went to University
47. were either really, *really* clever or well-to-do. And I think that's probably
48. ingrained in me a bit. And I'm like oh – these people are really clever and I
49. feel like a fraud for being here.

50. I. "Well, I might be wrong but that's not unique to a lecture. That to me seems
51. pretty much more to do with the whole of University education."

52. R. "Mm."

53. I. "What is it about the lectures?"

54. R. "I don't know. Whether because it's huge numbers, and so I'm...and I feel
55. like I don't want to draw attention to myself by saying I don't understand
56. something, or can you explain it again."

57. I. "But do you [are students supposed to} *ask* questions in a lecture?

58. R. "No".

59. I. "Ah, well then!"

60. R. "There's one...but other people complain about her because she asks
61. questions. Or sometimes she just interrupts to say she's cold or something to
62. be honest with you. And you lose your train of...you do lose your train of
63. thought."

64. I. "What do you get out of lectures?"

65. R. "Well, different...out of different ones really. But the one I've just had this
66. morning, just now, it was Psychology. Probably the best lecture I've had since
67. I've been here. Yeah. It was really...er...well, they have all been interesting
68. because obviously, the subjects I've chosen I'm interested in. And well, he
69. just had the edge. It was more...you know, some of them you settle down and
70. get comfortable and you can feel yourself relaxing too much and you may end

71. up drifting off? Well it was really lively, and he was moving round all the time
72. and he had us doing things in pairs. A little test, clicking your fingers. And
73. then he was bursting balloons, you know, for conditioned responses and that. I
74. was um...conditioned response learning, classical and operant. I've forgotten
75. the lecturers name. Shows you a video of the Simpsons, and different things
76. he used. Things you knew, like he did the advertisement and you knew the
77. advertising campaign. It was just more interesting."

78. I. "Than...?"

79. R. "Than all the other ones I've been to. Well, I'm not saying they weren't
80. interesting, they were. But this was by far the most interesting one I've been
81. to."

82. I. "You understood it?"

83. R. "Yep. Done it before. On the Access course it was like the B unit. So
84. while I've touched on most things, this is like a refresher so I'm not
85. panicking in it. I know I've got my notes there for it, from College.

86. I. "What do you think the purpose of a lecture is?"

87. R. "Er...oh, I don't, I don't...I think to give you some ideas and then you've
88. got to go away and read up on that subject. And they'll outline what's
89. important, then it's up to you to read it and learn it basically. Is that right?"

90. I. "Well it was for you to say."

91. R. "Oh right. But it's just that's what it appears to be at the moment".

92. I. "What about seminars?"

93. R. "Ah, I like them better 'cause they're more informal. And if you...we were
94. all struggling with the essay we had to do for Psychology and everyone was
95. asking. And I think as well, when you're in a small group, you realise that
96. everyone felt the same as you, and was in exactly the same boat. Plus it's got
97. that way that I know everybody, so it's more...I do prefer that to be honest
98. with you"

99. I. "How do you find the tutors?"

100. R. "Fine." [laughs]

100. I. "Why?"

101. R. "Well, I haven't really gone up to anybody in a seminar, or in the lectures
102. or anything, but I feel like I could if I wanted to. I don't feel intimidated or
103. anything, don't feel like they are unapproachable. Hm...er...I feel like
104. they're really clever. Obviously 'cause they've been there and everything
105. and they know what they're talking about. But they don't make me fee like I

can't go to them if I have a problem. And some of them more than others
stress, you know, if you've got anything worrying you, you can go to them.
You can come and see me, like, you know. And I would go if anything was
troubling me".

I. "What do you think a tutors role is?"

R. "Hmm...well I think they're there to give you the outlines, to awaken
your interest in the subject, so you want to go and study the subject yourself.
That...I think University, when I went to College getting taught all the time,
but come here and I have to teach myself! And I think that's what's so
difficult about it. You know, when you're in College the teacher will go over
it again and again, do all the notes on the board. So you just copy their notes
to do essays. They tell us what to look for in the main body, give us the
introduction and so you're...um. And I thought *that* was hard, but here
you're on your own and you've just got to do what you think."

I. "Do you prefer either one?"

R. "Well at the moment I prefer College. And I think now, I moaned when I
was doing College but now, it's a doddle. Um...um...but I'm hoping, 'cause
it's only five or six weeks, I'm hoping it's going to get easier. I was just
saying that to my friend, I hope second year will be easier than first year,
'cause you'll know everything. And you won't be learning new people,
you'll know the library. I find the library daunting, really. I found my way
round the library and I know how to use OPEC, and I know where to find
the books now. But I can't get the hang of the journals"

I. "You've sort of touched on this, but is there anything else that you weren't
expecting?"

R. "Just the teaching myself really and the amount of reading. Because...and
also, you know when you read a novel? I can just whizz through, especially
if you like it. But I don't know how much...when you read it and you want
to learn it, it's not the same thing is it? Hours and hours and hours. And then
when you're at home, it's like oh, I'll just start the tea, I'll have to get that,
I'll have to start that ironing. Whereas...so I find it easier to come in here.
For the past few weeks I've been coming in when I haven't got lectures. Or
some days when I don't have to be in, going to the library. But at home,
looking round to see if there's things I should be doing. So..."

I. "How do you think you have done in your essay?"

R. "God, I...I'm not sure. I think I've done O.K. but I'm not sure I've
answered the question which is...if I haven't answered the question I've just
blown it completely. But I think I *have* answered the question. When I listen
to other people, one...which was...God I can't even remember what the title
was...oh! About the environment and human behaviour, how much the
environment is useful in human behaviour. So I've sort of done an
introduction, I've looked up four aspects of the behaviour – aggression,

148. altruism, alcoholism and homosexual, put like theories of er...people who
149. think that it's due to the environment and put an argument against it with
150. people who totally disagree. And that wasn't really what it asked."

151. I. "So you're waiting with baited breath for that one?"

152. R. "Mm. And I kept reading it. And I was thinking, but with Psychology
153. you...everybody's got to put an argument. Because the way the title read,
154. when I read the title I was thinking really, it was just asking me for all the
155. 'fors' for evolution and human behaviour. And I'm thinking I'm sure
156. everybody's got to put a negative argument. So I'm just waiting for it back."

157. I. "Maybe you're just not sure what people are looking for?"

158. R. "Yeah, that's it. Yeah."

159. I. "What are you expecting to find later on in the course?"

160. R. "Well I'm thinking, ah, I'll get better myself. Once I'm better with the
161. library and er...". [stops]

162. I. "What do you mean, better?"

163. R. "More confident when I can find...know how to go and find everything I
164. want instead of giving in. Like last Friday, I stayed in there an hour and a
165. half and couldn't get anything on those journals. And in the end, out of
166. frustration I just thought oh I can't. Just can't face any more. And I went
167. home. So I'll be happier when I've conquered that. And um...I think it's
168. disciplining myself and that, really. Once I've got into a set pattern of setting
169. time aside for just Uni work and nothing else, it will get better. Well I hope
170. so. Just fall into place. Yeah."

171. I. "What are you hoping to achieve?"

172. R. "At the end of it all? I really want a degree. 'Cause obviously I've worked
173. all my life and got a family, but umm...er...I've had a decent job, don't get
174. me wrong, but not a really good job. What happened was...er....I've had
175. breast cancer, so I was off work for two years, had a mastectomy,
176. chemotherapy. So ill for a long time, stuck in the house. Was reading
177. through papers and a brilliant job came up. Never thought about changing
178. my job, 'cause we relied on my wages as well as [husbands], so it was never
179. a consideration really, to move jobs. We had just moved house and
180. everything. Well, it wasn't a great job...um...and there was this cracking job
181. in the paper and I thought I'd love to do that! And I rang up about it and
182. immediately, and I did train, and er...[thinks]".

183. I. "What was it?"

184. R. "It was er...I can't remember the title of the job, but it was like a Sports
185. promoter, getting people into a better, healthier lifestyle. Eating better,

exercise. And I've been told that the government are putting more money into that side of things, because they are hoping it will save them money on the NHS if people exercise regularly and eat better. So this job was just ideal. I'm really...I do like to keep fit and I've always gone the gym. I'm a qualified aerobics instructor and I thought...I knew I could do the job and the only thing I didn't have was the degree. And er...it was my husband who said to me well I don't know, while you're off, why don't you go to College? So I did the year in College and never planning to go to University, but I enjoyed College that much, and all the time that job at the back of my mind. *That* job! And that's what I want, a job. And the money was brilliant, er, I've forgotten now, but, er, £32,000 it was I think. And I thought I want a job that I'm going to wake up and I'm keen to get out of the house and get there. But I want a good wage at the end of it. And I thought well, I like Psychology and I thought I'll do Sports Studies 'cause I like that as much as I like Psychology. And hopefully I'll get the degree and be able to get that job. Because if I leave it much longer I'll be too old."

I. "What do you think getting an education means?"

R. "Well I thought it was about acquiring knowledge. Um... I still think it is to an extent. But I think education, as in getting a degree, is more about learning to work independently. So if you can go and get a job, the employer will go oh, she's got a degree. She can work on her own. What she doesn't understand...like in other jobs in the past, if I haven't understood something, it's like I've gone to somebody and like can you explain this? Show me how to do this? I think the idea is if you are educated to degree level, you will find that out for yourself. I might be wrong there, but that's what I think"

I. "Not a wrong answer, it's what you think. Here's another thing. Say you were going out with a group of friends, and you haven't seen them since you started here. None of them have been to University. What would be the one thing that stands out for you so far? What would you tell them?"

R. "It would be the amount of hard work. My friends have not been to University and I'm not being funny, but, like me, I've always thought that degrees were easy. You know, 'cause so many people go on to University, and just out, drinking all the time. And...and I thought, I did, I thought that getting a degree was easy. And I know all my friends think the same as...well, they won't believe how hard it is. And I'm sure, to believe me, they would have to come and see how hard it is. You say to someone, oh, I'm doing this essay. And if you haven't, like, been in any form of education in years it's like oh, for Gods sake – an essay? But you can't understand until you experience it for yourself."

I. "Is there anything else you would like to mention?"

R. "No, no".

Tape recorder switched off. Respondent continues to talk freely about experiences with other students, and agrees to continue with interview five minutes into the unrecorded conversation.

227. R. "...and he said, um...and I was just talking to him [fellow student] and I
228. realised that attitudes of different people. And he said to me, oh...what essay
229. he was doing, blah, blah, and that I was really stressed out about mine. And
230. his attitude was well, if you don't understand, it's the very first essay. If you
231. get a mediocre essay, it's only going to get better. So why you are stressing
232. over your first one, it's beyond me! Just take it easy, do your best and you'll
233. get your feedback and you can build on that. And I did go away and I was
234. more relaxed. And I was telling the other women who were with me who
235. were really stressed out. Well, it's a learning curve, like [tutor] just told me.
236. It's...we're going to improve with each essay. And I found it easier to work
237. once I had relaxed a bit."

SMC

1. I. "First thing, how are you finding H.E. generally?"

2. R. "It's alright. Liking it. I'm enjoying it. I'm happier now, with the course
3. anyway."

4. I. "O.K., so you're enjoying it. What specifically are you enjoying?"

5. R. "Um...well I like the Psychology. And I did it at A level, and doing it
6. here...it's just interesting. I really did like I at A level and it's something that
7. I'd like to go into, you know, as a profession as well. So, um...but
8. Sociology's kind of, um...I'm not so sure about Sociology. Still haven't
9. settled into it yet".

10. I. "Have you not done that before?"

11. R. "No, never done that before. But, er...I was quite impressed with my first
12. essay, I got a B."

13. I. "Well done."

14. R. "I know, yeah. It was like...[laughs]...er, yeah. I'm enjoying it. And it's
15. the life as well I suppose. But I'm still waiting for my money."

16. I. "What do you mean, the life?"

17. R. "Well, meeting new people and I'm going out a lot more. Um...and I'm
18. using the phone a lot more which isn't too good. It isn't good because it costs
19. a tenner every time you top up your phone. And er...it's mostly to do with the
20. presentations we have to do."

21. I. "Oh yes, I remember seeing you in [tutors name] office yesterday."

22. R. "Mm."

23. I. "Do you live on campus?"

24. R. "I'm living at home. I live over the water. Which is a pain in the backside,
25. it can take up to an hour and a half to get home.

26. I. "Are you in [College] every day?"

27. R. "I'm in four days. But I usually come in on Tuesdays."

28. I. "O.K. What about other negative things? Other things you have experienced
29. so far that haven't been so good?"

30. R. "Unique Learning. I really don't like it and I don't feel it should be

31. compulsory. Because you don't come into University to do something that
32. somebody *else* wants you to do. It's what *you* want to do. So you're
33. backtracking really, you know what I mean? It's like saying oh you've got to
34. do this, to pass. And with that...the kind of...the motivation just goes out of it,
35. doesn't it? You seem to take less interest in it and you seem to go just for the
36. intention of passing. Not because you care. Which is wrong."

37. I. "And you don't do that in Psychology?"

38. R. "No. I go because I enjoy Psychology. And I do like it. I mean the things,
39. the things they teach you in Unique Learning are useful. The skills you're
40. learning, but they can be done in the seminars. They can be done elsewhere in
41. something that doesn't have to be compulsory."

42. I. "What would you do to improve that?"

43. R. "Improve? What?"

44. I. "The Unique Learning situation."

45. R. "I'd definitely make it not compulsory. And I'd probably...I would rather
46. do something in my seminars. I'd rather do the key skills, the key learning
47. things in seminars. Because is on...you could make it, um...a
48. direction...towards the subject. Instead of like...jaggled."

49. I. "But don't they do a little bit of that in Psychology?"

50. R. "Ah...um...yeah, they do. Which again seems pointless to have Unique
51. Learning. 'Cause you're just doing it... two things".

52. I. "How are you finding the teaching? Generally I mean, not specific really to
53. any one subject."

54. R. "Um...um."

55. I. "Have you come from A level?"

56. R. "A level, yeah,"

57. I. "So is there anything you have found different?"

58. R. "Um...they kind of....there *is* a big difference in the fact that they just
59. leave you alone. Just let you get on with it. They don't chase you up, and it's
60. like...to that extent, it's your learning choices. You can do whatever you want.
61. But um...so it's kind of...it's harder 'cause you've got to be a lot more
62. motivated. Got to want to do it more. But I am, so it's alright."

63. I. "How are you finding the lectures?"

64. R. "Lectures, yeah. Ah, they're alright. Um...I'm still kind of getting to grips

65. with the note-taking...um."

66. I. "So you find you have to take notes?"

67. R. "Yeah. Because I couldn't just sit there and listen, go away and remember
68. everything. I might start taping them actually."

69. I. "What do you think is the purpose of lectures?"

70. R. "Er, just to give you a basis. And then you go yourself and do research.
71. Read around and things. You're given the bones and you've got to build on
72. them. Put the flesh on them."

73. I. "Do you prefer lectures or seminars?"

74. R. "Lectures. Seminars seem to drag on a bit, and um...they're not always to
75. do with...um...they're not always relevant to the lectures. They don't always
76. talk about the lectures, which I think that's what they should be used for. So I
77. don't know.

78. I. "But why might they want to have two different kinds of teaching methods?
79. Such as a lecture and a seminar? What do you think a seminar is for, as
80. opposed to a lecture?"

81. R. "Er...ah...I would think the seminar is just to discuss the lecture. Kind of
82. go in a little bit more. In more detail...and...but with the lecture in mind to
83. give you more of a idea of what you're looking at. And where to go and find
84. the books to read around. But we don't do that."

85. I. "Is there any one particular seminar that you have enjoyed?"

86. R. "Um"

87. I. "I mean one that you really got something out of?"

88. R. "Um...there was the discussion one, the Personality one. And, er...I like
89. the...ah, what was it...the one on Conformity. I liked that one 'cause it baffles
90. me."

91. I. "Why people conform, you mean?"

92. R. "Yeah. Um...I just find it really odd. And I know it's like what you say
93. you'd do is actually far, far different to what you would actually do in the
94. situation. And I'm aware of that, but it just seems so odd that people could just
95. do...[stops]"

96. I. "Oh, you mean that type of experiment? [Milgram]"

97. R. "Yeah, that particular experiment, but other things as well. Such as...well,

98. on the video they showed us, there was some guy walking up and down the
99. train, asking people if he could sit on their seat. And,
100. um...well...[laughs]...fifty percent of them got up and said sure! Why?
101. Why would they do that? I don't think I would unless he gave me a reason.
102. I'd at least ask why! Quite a few of them!"

103. I. "Yeah. It's surprising what you'll do that you don't think you'll do. That's
104. the whole purpose of it. People say they won't, but they do."

105. R. [laughs]

106. I. "So what did you get out of that? You enjoyed the content. Did you have a
107. discussion? Group work?"

108. R. "We had...um, little groups it was."

109. I. "O.K. Is there anything in particular that you weren't expecting?" Not as
110. you say, in terms of Unique Learning. But course material aside, anything
111. else that you weren't expecting?"

112. R. "Hm."

113. I. "How long have you been here now? Ten weeks? Alright then, to put it
114. another way, what *were* you expecting?

115. R. "What was expecting, I was expecting to have a lot of work and I've got
116. that. Um...was expecting to meet new people and everything. And
117. everything I expected I got, really. But with one thing, the essays. They
118. never really told you where the essay was, you had to go out and find it."

119. I. "What do you mean, where the essay was?"

120. R. "Well, I didn't know where the essay questions were. They were on the
121. computer. Somebody else had to tell me."

122. I. "Aren't they in the handbook?"

123. R. "They're not, actually. Had to go to the computer. I think there's a few
124. exam questions in there, but not the essay which I thought was a bit odd.
125. And I don't...I'm not really sure they have thought about the seminars much
126. [laughs]. You know how you get the essay plan in Unique Learning?
127. Yeah – it came out in Psychology! And it was like what's the point in that
128. then?" And I don't think they've put much thought into it [laughs]".

129. I. "Fair enough".

130. R. "That's my thoughts on it anyway".

131. I. "Where do you see yourself at the end of the course?"

132. R. "Er...the whole course? The three years?"

133. I. "Or even perhaps just the end of the first year."

134. R. "Ah...um."

135. I. "What's your overall goal? Do you have an aim for the end of the
136. course?"

137. R. "Well as I said before, I would like to go into Psychology. Like make a
138. career out of it."

139. Any specific one?"

140. I'm thinking about Educational Psychology".

141. I. "Do you know how to go about it?"

142. R. "Er...no. But I'll find out along the way."

143. I. "Right."

144. R. "So at the end of the three years I might...I'll probably still studying I
145. think, probably. 'Cause this is a bit...oh! Do you get a loan? If you're going
146. for a Masters or a PhD, do you get loans?"

147. I. "Well, Masters and PhD's are different. Masters you might have to fund
148. yourself. PhD's are all different. It can depend on whether you are doing a
149. research question of your own, or maybe someone else's. There may be
150. funding available, but if not you may have to pay. And also, that's still only
151. your fees paid, you still have to live, sort of thing."

152. R. "'Cause I thought well, this is a B.A. you see. And if you can't get loans
153. for...like a Masters, well I may as well go for a BSc."

154. I. "BSc.? But you're doing that level now."

155. R. "No, I'm doing a B.A. now."

156. I. "Yeah, but do you mean another degree?"

157. R. "Do another degree, yeah. At least I'd get a loan for it though, wouldn't
158. I? [laughs]"

159. R. "Perhaps you would. But perhaps you wouldn't, because you've already
160. achieved at that level. You've had funding to reach that particular stage, and
161. now you have reached it."

162. I. "I'll be looking into that!"

163. I. "There's a lot in it. If you wanted to carry on, you could have a look round
164. on the internet. There are funding bodies out there. Lots depends on the kind
165. of research you want to do, what area you want to do it in, and whether
166. anyone's available to supervise you."

167. R. "Yeah, yeah. Mm."

168. I. "If I could just carry on, what do you think getting an education is all
169. about?"

170. R. "Hm. Don't know."

171. I. "Alright. What's the difference between a person who is educated and one
172. who's not?"

173. R. "Er...I suppose they've been more...well, they've achieved more in a
174. specific area. Because, er...if you're going through a degree it's usually
175. everything about one thing. So, somebody who isn't educated, who has just
176. left school at sixteen, never been to Uni, well, I suppose they'd have life
177. experiences like, but general knowledge."

178. I. "So you think it's the amount of general knowledge they have?"

179. R. "Maybe. But they've got a more wider-ranging...er...knowledge of
180. things".

181. I. "Could you give an example?"

182. R. "Er...dunno. I suppose maybe it depends on what the person is interested
183. in. Whether they read a lot and things."

184. I. "So they have to read."

185. R. "Well, they can watch telly and things, I don't know. I don't really think
186. there's a great deal of difference between a person who's educated and a
187. non-educated person".

188. I. "In terms of what?"

189. R. "In terms of um...um [stops]"

190. I. "O.K. So the educated person has their knowledge. That's one difference.
191. Anything else?"

192. R. "Um...dunno. Don't think so. Well, at least they'd have more
193. conversation. Intellectual conversation. And, you can be self-educated."

194. I. "Oh, go on."

195. R. "Well, if you've read a *lot* of books, you're self-taught. You've taught

196. yourself.

197. I. "Alright. What have you learned so far? Since coming to H.E. Anything
198. stand out?"

199. R. "No. Nothing spectacular."

200. I. "Has nothing changed since you left A level?"

201. R. "Yeah, the style of working. And the structure of things. But no. Um...I
202. think it's...because I still live at home it's still like going to school. You
203. know, have to come every day, then go back. But it's just different."

204. I. "What's different?"

205. R. "The way we work. You don't get handed sheets and spoon-fed. You
206. have to get out and do it yourself which is completely different to A level.

207. I. "Are you comfortable with it? Which has been easiest for you?"

208. R. "Huh – the F.E. kind. It's the easiest to do. They give you handouts,
209. spoon-feed you, and a lot of the work done for you really. All the research
210. and things. You've just got to know it. Whereas this, you've got to find out,
211. *and* you've got to know it. And then, you've got to *do* it. It's a lot harder, but
212. I don't mind."

213. I. "Do you think you might get more out of it, or one particular style of
214. learning more than another? I mean you, yourself. Do you think you'll have
215. achieved anything different in terms of having finished both courses?
216. Anything or nothing?"

217. R. "Um...I think probably more motivated. And more dedicated. Because
218. it's something that...the er, going to University is something to aim for.
219. Something you really want. Whereas previously, it's just been getting into A
220. level. But this is a specific aim, but it's kind of wider. Whereas...[stops]"

221. I. "What are you hoping to learn?"

222. R. "What am I hoping to learn? Um...[stops]"

223. I. "Are these questions hard?"

224. R. "Well, they give you something to think about. What do I want to learn? I
225. want to learn how to make a difference. To, um....at the moment, in
226. Education. At least in this country."

227. I. "Oh, you mean politically?"

228. R. "Erm, as in like, the curriculum. Like infants and juniors.

229. I. "What's the problem?"

230. R. "Compulsory education? What's the problem?"

231. I. "Yes. What do perceive as a problem that you would like to sort out?"

232. R. "Well, I don't think the sex education is very clued up. I think it's
233. terrible. Erm...and there's a lot of other things really. But I like the way you
234. can, erm...you know, change settings to increase...erm, like you can change
235. from rows to little clusters. You can try this and try that, you know, to
236. increase the academic success of the people. And I like the idea."

237. I. "What do you think you'd need to learn for that?"

238. R. "Erm, I'd need to know a lot more about research. Past research. Erm...
239. erm...kind of think about how you'd use your own research to do it. Learn
240. to do research."

241. I. "Well that's fine, because you get to do Research Methods after
242. Christmas."

243. R. "Er...ah...yeah. Ha! I'm not to keen on Research Methods. Yeah. But I
244. don't like statistics. And I don't like maths. Hate it. And you need to have
245. maths with statistics. How can you not need maths with statistics? I did it at
246. A level."

247. I. "But you don't just sit there doing maths; maths for the sake of it. It's
248. more about looking at the figures you have which provide you with some
249. answers about a research question you have."

250. R. "[Laughs] Yeah, right."

251. I. "Anything else that you're hoping to learn apart from Research Methods?"

252. R. "No."

253. I. "Alright. Anything else you want to say about how you have found H.E.
254. so far?"

255. R. "Erm, no. That's it. That should explain it."

IW.

1. I. "Firstly what I'd like to ask, is how you're finding H.E. You've been here
2. for four weeks now."

3. R. "It's O.K. Doing alright really. Not done any work yet, a bit silly of me.
4. Got my evolution essay to do."

5. I. "What is your other subject?"

6. R. "Drama. Got a review to do for that."

7. I. "Right. But how are you finding things?"

8. R. "Coping. It's O.K."

9. I. "What's O.K.?"

10. R. "Living and stuff. On my own. Well, not on my own, it's with my mates.
11. But there's one girl who I don't like."

12. I. "Why?"

13. R. "Cause she's weird. Well, she's not weird. Selfish, inconsiderate. But
14. everyone in the house has noticed it as well."

15. I. "Do you feel any different now to what you did four weeks ago when you
16. first started?"

17. R. "Erm…a bit more at ease. A bit like…a bit timid, and watching what I was
18. saying in front of…er, and stuff. And very impressionable. I think I did O.K."

19. I. "In general, were things positive or negative?"

20. R "Positive."

21. I. "In what ways?"

22. R. "Cause, erm…got on with all my flatmates and we're all pretty close now.
23. Do lots of things together, like coming in and stuff in a morning. And
24. erm…erm…like sharing things, like work. And the kitchen and stuff. It's
25. getting pretty dirty, so we're all sticking to the erm…[stops]."

26. I. "Where are you from?"

27. R. "Manchester."

28. I. "Oh that's not too far. But you're living in?"

29. R. "Er…at Everton. In the halls."

30. I. "Right. Anything er…more negative?"

31. R. "Erm...well, the mornings. No, erm…it's just the girl in the flat that's
32. mostly negative. Like erm…'cause it all came to a head the other day. Last
33. week. 'Cause everyone just got fed up of her. And we didn't say anything
34. 'cause it all might hurt her feelings. So we all went out, chatting about what to
35. do about it."

36. I. "Is it resolved?"

37. R. "Er, more or less, yeah. But we're still not sure about her. Because…well,
38. she apologised. In fact, well, it was just like little things, like. Then it gets to
39. the er…tedious."

40. I. How are you finding the education in general?"

41. R. "It's O.K. It's erm…gone…erm…I don't know. 'Cause A levels were
42. pretty hard and now…I've only had erm…Psychology lectures. Pretty
43. interesting. I'm enjoying them I suppose. It's not above my head yet, which is
44. what I worry about. "

45. I. "Right. What do you find interesting about them?"

46. R. I did Biology at A level, but it was just like… I thought I'd be pretty good
47. at it but I wasn't. It was rocket science. Like we did…you know, were doing
48. Neurobiology, like Psychology, with [lecturer]. I thought his lectures were
49. really good. Just like…I've not done, like, that brain power work for a bit now
50. like. And it was pretty interesting."

51. I. "What about the lectures in general?"

52. R. "Er…OK. They are pretty interesting. It's just using the book and stuff,
53. relating it. The library exercise, that was pretty abysmal."

54. I. "What do you think lectures are for? What are they trying to do?"

55. R. "Erm, I think to try and get us to understand the subject more."

56. I. "What about seminars?"

57. R. "Erm…are they the big group ones? Yeah. The ones we have once, like
58. once a week?"

59. I. "Well it can vary. I mean it can depend how many there are in your subject,
60. or in the group you've been put in. Do you know the difference between a
61. seminar and a lecture?"

62. R. "It's one like…when I saw you on the Friday. And the others, seminars, the
63. ones in the big building?"

64. I. "Other way round!!

65. R. "Lectures are when you go to the main hall and there's lots and lots of
66. people. In the lecture, you just sit there and listen. Whereas a seminar, you
67. would get the chance to discuss things with other people."

68. I. "Yeah. Which do you feel more comfortable with?"

69. R. "Erm...probably the lectures."

70. I. "Oh. Why's that?"

71. R. "I don't know. Er, probably because you can just sit and listen and take it
72. all in. And compare like...to other people. Like everyone's getting the same
73. amount of information, but it's up to you what you do with it."

74. I. "Right. Do you take notes?"

75. R. "Yeah. A lot. I've not been doing that though, but lately, it's new. But like
76. er...with [lecturer], he'd go off and like after a bit, it would be easy to keep up
77. with him. He'd tell little stories. It was quite funny."

78. I. "Have you had any other lectures?"

79. R. "Erm...er [stops]."

80. I. "I mean apart from Psychology."

81. R. "Yeah, the Drama ones are O.K. as well. Doing some, erm...stuff on
82. Practitioners, they call them. "

83. I. "Are they any different in form?"

84. R. "Er, a little. It's more like, erm...'cause [lecturer] like usually asks
85. questions. Like er...to trigger everyone off."

86. I. " Do you get that in Psychology?"

87. R. "Erm, not as much. But I think the way [lecturer] was doing it...er, putting
88. it across to everybody so that they could understand it. Like, er...easier, I
89. thought."

90. "I. "Has there been anything that you hadn't been expecting?"

91. R. "Erm, Unique Learning."

92. I. "What about Unique Learning?"

93. R. "I just...didn't get it. Didn't know why we have to do it. Think it's

94. supposed to be for our benefit like, but erm...hmm."

95. I. "You didn't know?"

96. R. "No. I'm sure I read about it earlier in the thing [Prospectus], but I didn't
97. take it into account that we'd have twelve lessons, and do work on it
98. and stuff. And I just thought it was like, you'd go once a month or
99. something to er...check that you were doing well."

100. I. "What do you mean by that? You mean some sort of counselling session?"

101. R. "Ha, yeah. I thought it was like...ah, erm...see how you're getting on,
102. sort of thing. See whether you're doing your work or not. But it's...but
103. you've got to do work as well. And I know it's not hard work, but, mm."

104. I. "So do you think you're learning anything from it?"

105. R. "Erm, I don't know. I thought it was like, like just using the library and
106. stuff like that. Making sure you knew how to get a book out and that."

107. I. "Did you find that easy?"

108. R. "Don't know. Not done it yet. I did...erm...some stuff in the booklet."

109. I. "O.K. In general then, looking forward a little bit, what are you expecting
110. from H.E.? Not you yourself, I mean what sort of things...what do you
111. think you'll find? I mean as you move higher up?"

112. R. "Erm, trying to decide whether I'll struggle or not. 'Cause...erm, I'm not
113. very good at writing essays and stuff like that. Well, I can do, but it depends
114. whether I do a lot of work or not. I suppose I'm quite lazy. So I'll have to
115. overcome that somehow."

116. I. "Anything else?"

117. R. "Erm, I'll do my best. Because at A level I said that. But I was having too
118. much of a good time to do anything else as well."

119. I. "But was that any different to what you're doing now?"

120. R. "Erm...the workload was about the same. 'Cause when I started
121. off...erm, at A level, I didn't get much to do. Then it came all of a sudden.
122. And you had to ...oh!."

123. I. "Things can creep up, yeah?"

124. R. "Yeah."

125. I. "Alright then. What do you want to get out of it? While you are here?"

126. R. "Erm...knowledge. And like, make friends. Have a good time. Get a
127. degree at the end of three years hopefully."

128. I. "What do you want to do then?"

129. R. "No idea to be honest. Not...er...I've not spent much time thinking about
130. it to be honest. A lot...some people are like...having...know what they want
131. to be when they are a lot younger. But that never happened with me. It was
132. like, trying to get into different things. I enjoyed Drama a lot. Been involved
133. with Drama a lot since I was little. So I enjoy that. Erm...I was in a group, a
134. Drama group with my brother for a bit. It was only an amateur one. But
135. like...like 'cause I was one of the founder members, been in it since I was
136. about twelve or something. Then one of the directors like...one of my
137. friends like, so I was doing stage management like, and productions, and
138. stuff with the younger children which I enjoy. So I don't know whether I
139. want to go in for that kind of thing".

140. I. "O.K. Can I ask, what do you think education is? What do you think
141. getting an education means?"

142. R. "Broadening your learning experience."

143. I. "Could you expand on that?"

144. R. "Well, no. I made it up. Ha! Erm...well, it's better than getting a job,
145. 'cause I'm not ready for that yet. But I just wanted to go and get more
146. education so that I could get a better job. Supposedly. Well, that's what
147. happens supposedly."

148. I. "Do you think you will?"

149. R. "Don't know. Like to think so ."

150. I. "Alright then. Is there anything you'd like to ask? I mean, has anything
151. cropped up in Higher Education since you've been here? Something like, oh,
152. I wish I know more about that?

153. R. "Not yet. Get back to you on that one."

154. I. "O.K. But nothing, honestly?

155. R. "No. It's not been that bad really. "

156. I. "Nothing you're curious about?"

157. R. "No, nothing. Not yet. Can't think of anything."

158. I "What do you think you have learned so far?"

159. R. "It's different. 'Cause, erm...my brother's not gone to University, and

160. he's the same age as me. So, er, he's been asking me what I've been doing,
161. and I've been saying like, having a good time I suppose. He's been up to my
162. flat a few times and stayed over. Met all my flatmates and stuff, so he knows
163. that kind of stuff, what I've been doing. But I was telling him the other day
164. about the Psychology lecture, one on schizophrenia. And it said like,
165. identical twins have a fifty percent chance. And I was telling him like, don't
166. get schizophrenia, 'cause I'll get it too. He seemed interested, then started
167. taking the mick at me, 'cause I was talking about schizophrenia for no
168. reason."

169. I. "For no reason?"

170. R. "No. He just kept asking me what I do in my lectures, and I was telling
171. him we do like, genetics, and psychology and stuff. Didn't tell him about the
172. Drama ones, 'cause we've not done them yet. Just been doing stuff in
173. groups, but I don't agree with that in Drama a lot."

174. I. "What?"

175. R. "We're doing like, group work. Like she's just thrown us into these
176. groups. And we're off having to look up different subjects on group theatre
177. and erm...practitioners and different directors and stuff. It's like...I don't
178. know how...I don't think it's pointless, but I just don't agree with it for
179. some reason."

180. "Hold on, lets get this straight. You're getting put into groups."

181. R. "Yeah, she puts us into...separated into groups, and then we like, have to
182. discuss in a group. And we have to do a small presentation like, but we have
183. to do it in a group. And I don't...and I think it's like ...not original to do,
184. like. For some reason, we should do something different."

185. I. "What like?"

186. R. "Well, that's the thing you see. There's too many chiefs. And it's more or
187. less girls. There's only about four lads, and they're all...like...I mean, they
188. all sit together, and so do the girls. We have to sit in a circle, and all the girls
189. are just like talking all the time. And you know, we've all got a point of
190. view, but whenever we like, go to express it, someone else just says it before
191. us. Yeah. Or says something we don't agree with. So just keep our mouths
192. shut really. But all the girls like, just chatting away. There's one girl,
193. like...don't repeat this 'cause don't want to offend her or anything. She
194. keeps...there's a girl in my group and she keeps like, talking stuff about A
195. level, 'cause I did A level Drama and she keeps quoting things like
196. Stanislawski and stuff. And some of the people in there haven't done A level
197. stuff, so suppose it would be beneficial to them. But she's trying to make
198. herself sound clever by telling *us* stuff that we already know. And she's just
199. using that information, she's just showing off. But not getting away with it."

200. I. "But if there's people in the group who *don't* know?"

201. R. "There's only a few. But I think it annoyed me. 'Cause she was just
202. trying to make an impression."

203. I. "Well, she seems to have done that. Are there any mature students in the
204. group?"

205. R. "Yeah. There's er...I don't know her name. Yeah, there's one guy I think,
206. and a lady as well."

207. I. "So they're only a small part of things?"

208. R. "Yeah. Mostly, they're the just the same age as me."

209. I. "Right."

210. R. "Have you got any useful information off me? I feel like I'm just sitting
211. here, saying yeah, no, yeah, no [laughs]."

212. I. "I've got plenty. Is there anything else you'd like to mention?"

213. R. "Well I can't revise. I struggle. Three of us started taking notes from text
214. books and stuff, and that was O.K. But it didn't get me anywhere."

215. I. "What were your last results like?"

216. R. "Pretty low. But they would be anyway, 'cause I kind of struggle with
217. exams. But Drama, and practicals were O.K., ended up getting a B for
218. that.But getting an E for Theatre Studies at A level, my written work let me
219. down. My coursework was O.K., and practicals O.K., but exams just let me
220. down."

221. I. "How much weighting is on exams at A level?"

222. R. "Er...sixty prcent. Forty percent practical, something like that. "

223. I. "Do you know how much weighting is on exams here?"

224. R. "No. Not yet. Suppose it's in that booklet [student course handbook]."

225. I. "Yes, all details are in there. Although you seem worried about revision,
226. we aren't up to that yet."

227. R. "Hm. Haven't got a computer though. Got one at home, but it's just
228. getting it down here, that's all. So that's it. Hope I've been some help. When
229. do you want to see me next?"

CL.

1. I. "The first thing I'd like to ask you, quite generally, how are you finding
2. H.E.?"

3. R. "Enjoying it. It's quite hard. I thought it was going to be hard, but there's a
4. lot of work. It's hard to keep on top of it after having so long off, doing work."

5. I. "Where did you come in from? A level or Access?"

6. R. "A level."

7. I. "O.K., so you're enjoying it. Although the work's heavy, you're enjoying it.
8. What are you enjoying?"

9. R. "I enjoy the Psychology, but not so keen on the English. I do like it, but...I
10. don't know. Doesn't interest me as much."

11. I. "Why?"

12. R. "Just find it boring reading all the time".

13. I. "Don't you need to read in Psychology?"

14. R. "Yeah, but...it's something that always interested me. Sometimes with
15. English, I don't understand it. So I don't find it interesting. Don't get it."

16. I. "How are you finding the teaching?"

17. R. "Yeah. It's a lot different than A level. With A level they teach you stuff.
18. They give you handouts, but it's lot off your own back at University. It's
19. not...it's erm...I don't know. You've got to do your own research. With
20. essays at A level, they give you the material. They give you the books, you
21. just write it from that. But it's helpful. The lectures as well. They're helpful."

22. I. "The lectures as well? What was the other?"

23. R. "Seminars."

24. I. "Ah. Which do you find you get most out of?"

25. R. "Lectures."

26. I. "Why?"

27. R. "Well seminars...I don't know if it's because I've just started, but they're
28. more...just basic stuff, like essays. Whereas, I thought we'd go in and they'd
29. tell us about different psychologists and theories. But it's more to do with how
30. you write your essay."

31. I. "What were you expecting to find? What else was different?"

32. R. "Well, I was expecting it to be more like A level. Like where they'd talk
33. about schizophrenia, and er...depression and that. But it's more basic than
34. that. They just tell you what to read up on and come in to the seminar
35. prepared."

36. I. "You've had a seminar then. How did that go?"

37. R. "Not very well. We had to do a debate on Intelligence, and no-one had
38. really done the work. And then not saying anything. So it was a bit of a waste
39. of time."

40. I. "Did you get anything out of it?

41. R. "Not really, no. Well, a little bit. But it was something you can think of
42. yourself. We only skimmed over the basics of it.

43. I. "What do you get out of the lectures?"

44. R. "Erm...a lot more detailed note-taking. And understand it more. The
45. lecturers know what they're talking about, and then they explain it to you so
46. you understand. Well, the Psychology ones do. The English ones, I don't
47. understand some of it."

48. I. "Anything else you wanted to say about lectures?"

49. R. "Erm, no."

50. I. "O.K. What about your tutors?"

51. R. "Personal?"

52. I. "Well, no, I mean what do you think is the role of a tutor?"

53. R. "Keep you doing your work. Help you along. Be there for you to help you."

54. I. "Anything else?"

55. R. "I think they're there as a guide as well. Guide you along your course, three
56. years.

57. I. "Is there anything else you can think of that you might not have been
58. expecting?"

59. R. "Yeah. I thought when we were given an essay that we'd be helped with it.
60. Go to our tutors and they'd help us. Tell us what kind of information we need
61. to put in. But they're not. They tell you the essay question, and then they tell
62. you to go and read up the information. They just tell you references and books.
63. Which bits to read, off what, and that. And I thought they'd be there to help

64. you write the essay. Don't know if it's me being lazy, but it's a lot different
65. to what I'd thought."

66. I. "In terms of the work."

67. R. "Not the workload. It's just the amount of work...no, not the amount,
68. the...all the notes in your lectures are good, but when they give you the essay
69. titles – no help! I suppose if you went up to them and asked them, but I
70. thought they'd be there in the seminars to help you. Write the essay."

71. I. "Anything else?"

72. R. "No."

73. I. "So apart from that, everything is more or less as you expected it to be?"

74. R. "Mm."

75. I. "What are you expecting to gain from the course yourself? The whole
76. thing?"

77. R. "I think er...it's surprising, because they tell you to do things off your own
78. back all the time. And because you're doing that, you're learning it. Really
79. well! At A level, I didn't really understand some things, but I still got good
80. grades 'cause I memorised it. But with this, it's different. 'Cause you go off
81. and learn it, so that you come out of the degree *with* a degree, but also with the
82. knowledge."

83. I. "Could you say anything else about that?"

84. R. "Can't really think of anything else. "

85. I. "O.K. Where do you see yourself in three years time?"

86. R. "I don't know. 'Cause I was going to another University and study
87. Psychology and Criminal Justice, but I never got in there. And now I've
88. changed my decision and changed the course, so that I don't know. I want to
89. take up something to do with Psychology, but I honestly don't know what's
90. going to happen. I've took English as well now."

91. I. "Do you live round here?"

92. R. "Ellesmere Port."

93. I. "Suppose you went out with a group of friends who have never been to
94. University. What might be one thing...one thing, anything at all that's stood
95. out for you that you wanted to tell them about your experience. Or what you
96. have learned so far?"

97. R. "Erm...hm. Hm."

98. I. "Isn't there anything?"

99. R. "I think there *will* be."

100. I. "But not yet?"

101. R. "I feel at a disadvantage as I still live at home. And it's hard, because I
102. haven't been out once at night time. I mean, I go out at home, with all my
103. friends from home, but everyone else is enjoying it. Like doing the work and
104. going out at night, going into Uni with the...the stuff and that, but I'm not
105. like that. I go home every day. I've got to travel home, and if I do go the pub
106. before I go home, I end up falling asleep on the way home because it's such
107. a long way. So I think if...if I did move to Liverpool next year, then I think
108. there would be lots more things that I'd like to tell my friends. But at the
109. moment, I'm spending time with my friends and I haven't really changed.
110. Haven't really changed.

111. I. "Do you think you will change?"

112. R. "Probably."

113. I. "How?"

114. R. "Probably learn to socialise with everyone a bit more. I mean, I have
115. made friends, but not really in a little group, and not really going out with
116. anyone."

117. I. "Well, it's quite early on yet, isn't it? Just five weeks?"

118. R. "Yeah. Good thing is that I haven't spent all my money yet, like
119. everyone else has."

120. I. "It *is* good then!"

121. R. "It is good living at home because I can go home and do the work. And
122. I've got a part time job as well, so I can work. Whereas most people moved
123. away, they haven't got a job, got no money, and they never do the work. Not
124. that that's bad or anything, but...but that's all part of going to Uni, isn't it?
125. Socialising. But...don't know. Got advantages as well, 'cause I can stay
126. home, do my work, but I can still go out on the weekend."

127. I . "O.K., but can I just go back? You go home tonight say, and you meet up
128. with someone you haven't spoken to for, say six months before you came to
129. University. In a sentence or so, describe what it's been like so far. What's
130. your reaction?"

131. R. "Ah...can't think of anything."

132. I. "Suppose they came to you and asked you what it was like?"

133. R. "I'd just say it's really good. It's different, a good experience. Everyone
134. should go. Well, not everyone. My boyfriend, he's got a full time job and he
135. always says to me oh, University's a waste of time. You can't get jobs. And
136. most people come out of Uni without having a job. I might come out of Uni
137. without having a job, but at least I'll have the experience. And a degree
138. behind me. That's what I 'd say. Erm...it's the experience."

139. I. "Is there anything else you'd like to mention? Any other concerns?"

140. R. "Erm...no. It's going really well."

141. I. "Good to hear. So you're just taking things pretty much as they come?"

142. R. "Yeah."

1. K.B.

1. I. "In general, how are you finding H.E. so far?"

2. R. "Er...a bit strange so far. 'Cause I'm not really involved in Uni life yet,
3. 'cause I'm not on campus, right, and I've never been to the Union at all,
4. anything like that. Never met anyone from the Students Union. And the
5. lectures themselves, they're scary! At the moment, er, in Psychology, its all
6. about Biology and I haven't done Biology. Not at G.C.S.E. or A level. Er,
7. and I haven't done Psychology either, so, right, and its all a bit overwhelming
8. really at the moment. And I'm doing American Studies as well, ah, and that's
9. a bit better at the moment".

10. I. "At the moment? How?

11. R. "[Laughs] Yeah, 'cause we're doing T.V. at the moment, and Hollywood,
12. and everybody can relate to that [laughs]. No – you *can*! And I'm getting
13. loads of work from everywhere, and 'cause I've had that break of over 10
14. weeks, 'cause my exams finished earlier than other peoples".

15. I. "What were your exams? A levels?"

16. R. "Yeah, Politics, Geology, and Tudor History. I'm...and it's a bit weird too,
17. 'cause everything I've done so far has been different, I've never done the same
18. course. And after my G.C.S.E's, I thought right! And chose a completely
19. different set of subjects. And I've done the same [in Higher Education]" .

20. I. "That's an interesting approach!"

21. R. "Yeah, 'cause nothing's ever caught my attention. Like...I want to do this,
22. ah, and I've always been interested in Psychology, since I was little. And you
23. know, people say that...and its like 'yeah, right!', but actually I have really
24. been interested. 'Cause when I was younger, I used to tell my dad that wanted
25. to work with criminals. That, and go into prisons, and find out like, what made
26. them do that. And it was like, can't you just go and play with Barbie
27. dolls? [Laughs]. Or something like that. And I was like, no, I want to do that
28. when I'm older".

29. I. "How old were you?"

30. R. "Eight. 'Cause my sister used to have loads of Barbie dolls and I had...she
31. used to decorate the room with them and I had like, Action Man. Yeah, like at
32. ten, I'd throw them out of the window, being nasty"

33. I. "So you say it's been a bit strange so far?

34. R. "Yeah, so far. I don't think I've settled down yet. I've only wrote one
35. essay, and I just got to get into the rhythm of doing homework again, er,
36. paying attention in actual lectures."

37. I. "Is there anything in particular that's stuck in your mind? Something
38. positive, or even negative?

39. R "Hmm...negative. Er, well, there's not really all that much one-to-one. Like
40. in High School, you could discuss with the teachers on one-to-one, where you
41. don't understand. And you don't get that here. And I'm, *well, I know you cant*
42. go and ask everything, but in the lecture and that, well, there's three hundred
43. of them, and everyone else understands. They just don't seem to have a
44. problem, its just you. And if you put your hand up and ask a question, and
45. you're doing it consistently, well...a bit of an idiot really".

46. I "Anything positive?"

47. R. " Erm...trying to think. Well, nothing I could really pick on
48. really, its just a new experience and I'm getting used to it. Until I really get
49. used to it, I wont be able to pick anything out good about it."

50. I. "Okay. Well, I suppose that's reasonable. Can I just go back to lectures, you
51. mentioned before how you were finding them. What about other teaching
52. methods?"

53. R. "Hmm...ah...no. Er... a little problem. I've actually missed a couple of
54. seminars in American Studies which isn't good, but its first thing on a Monday
55. morning. God, that dragging yourself out of bed...yeah, not used to that, so
56. yeah. Only been to two seminars, but there's mature students in my...and
57. there's quite a few in the American Studies one. And they seem to dominate
58. the group. And I know they have got a right to be there and everything, but it's
59. like, because they have been there, and lived, and experienced, their questions
60. have to be heard. Regularly. Yeah, even in the Psychology workshop, you can
61. tell the mature students. When you're put in a group, a small group, they just
62. take over! 'Cause like, we had this debate yesterday on Intelligence and that.
63. There were three mature students in our little group and there were some
64. people who were disagreeing with the opinion of...ah...we were on Nature.
65. And they didn't agree with that, they wanted to be on the other side, so they
66. just sat there in silence. And when a few of us tried to get our point across,
67. they like...just shot us down, just like, before we could explain why. And I
68. really just wanted to scream at them. Like let me speak, let me finish! But in
69. a big group and that, you cant do it. And then even when it's like, in a big
70. group discussion, you don't...I don't at first, er...want to say anything in case
71. it's the wrong thing, but by the time I've built up some courage to say it,
72. someone else has already said it. And I've got to think of something else
73. now!"

74. I. "What was it like when you were doing A levels?

75. R. "Well, it was like smaller groups then. Smaller classes. And that was dead
76. good, 'cause there was only five of us doing it. And the teachers used to get us
77. really involved with the subject. And we actually went to Manchester
78. University to see what it was like in History. What was his name now – oh, a
79. big massive lecturer who goes round the country! We went to a few of his

80. lectures, but I've never actually experienced a lecture as big as that yet. It was
81. just, he was just so confident and got us all involved. Kept pointing to us and
82. asking us questions. He asked me, it was like...*oh*! Actually got a few of us up
83. on stage too. Did experiments, showed you."

84. I. " So no-one has actually forced you to answer a question yet – is that what
85. you mean?"

86. R. "Yeah. Although I suppose I could if I wanted to. And the Geology class
87. was quite small too. The Politics one was quite big, he used to split you up in
88. little sessions and walk round, like just communicate with your little five
89. [group members] in each section. And he'd say like, do you understand that?
90. And I liked that yeah. Really small. Even with Unique Learning, its like ten".

91. I. "Some [groups] are, yes. Are there mature students in that group too?"

92. R."Yeah. Well, one. [laughs]. I find I'm a bit prejudiced against mature
93. students. I hate them. I think though, its perhaps just me and my confidence at
94. the moment and these huge groups, and not like one-on-one".

95. I. "Anything else you would like to say about groups?"

96. R. "No, that's it really. But erm...that...there's a lot people from Liverpool
97. here. But that's...I actually like that 'cause I've made friends with some of
98. them and that's good 'cause they'll show you round. I've found that really
99. helpful, considering I'm not on campus. Showed me around town, where to
100. get good bargains. Really helpful. I didn't expect that many people from
101. Liverpool to be here though. Yeah. 'Cause like in Manchester, I've got
102. about two friends who actually stayed at home and went to Manchester
103. University. Everyone else just moved away, couldn't
104. believe...well, like my mate, went to Birmingham and she was
105. like 'God! Its like...I can't believe it! It's Irish people, people from
106. Liverpool, and Mancunians!' There's no other people, so she's not too
107. impressed I think."

108. I. "I know you've sort of mentioned this, but what do you think is the
109. biggest difference between Further and Higher Education?"

110. R. "Basically just the size, and no contact. And like before, I went to the
111. same school for seven years, it was like everyone knew each other. From
112. being eleven to seventeen, so I've like grown up with the teachers. 'Cause
113. everyone stayed and like about five people left out of a hundred and fifty,
114. and I've been with them all for seven years. 'Cause like all the teachers, not
115. many of them leave, and if new ones come, well, you just make friends with
116. them straight away. Yeah, you're always friendly, like even when you went
117. into town, there was always somebody you knew, like oh, come over here,
118. I'll buy you a drink! And even if you're walking down the street, and you
119. see a group of people walking towards you and oh my God [indicates fear],
120. there'll be people walking past you who'll come over and see if everything
121. is alright, it's just dead close-knit, and family-like".

122. I. "You're missing that?"

123. R. "Yeah, it's like that, missing my big extended family. 'Cause when I first
124. went [to previous school] I had my oldest sister there, she took me round
125. and made sure I was alright. 'Cause I was really shy and quiet. Talking to
126. people, it was like oh God, I'm scared, and like all these older people
127. coming up towards me and talking to me all the time. And people my own
128. age, like how do you know all of them? 'Cause loads of people kept
129. making sure I was alright, and they [respondents friends] were like oh God,
130. she knows everybody! So I made friends all the time [laughs]".

131. I. "That support is really important to you then?"

132. R. "Yeah. Definitely. 'Cause when I go back, I'll see people I've known for
133. years, different year groups. 'Cause I've got friends of about fourteen, even
134. twelve. 'Cause I used to protect them, so now go back and see if they're ok."

135. I. "Do you think that might change during the time you're here?

136. R. " I don't think back home will change, lose contact or anything, because
137. nothing like that. As soon as I go back to Manchester, it's the same. We all
138. meet every year anyway, go back and see everyone again."

139. I. "How do you think you will eventually adjust? I mean you keep going
140. home, coming back again?"

141. R. "I don't know. It's going to take a lot of time to get used to, on my own."

142. I. "What about your studies? How are you finding the work?"

143. R. "Just a bit overwhelmed, like I said before. Got to get used to it, coming
144. back, getting back to working, not going the pub with everybody, sitting
145. down and doing some work. I've got every Thursday off, and it's like, oh, I
146. can do this, do that, do some work, read this. But I get distracted by people
147. coming into the flat. You get dragged off, carried away, doing all this, that
148. and the other, and I've just got to say no, I'm doing this".

149. I. "What about your tutors?"

150. R. "Umm…ah...well it's…I've not really spoken to any of them that
151. much. Like erm, my personal tutor, not really. Just, erm, 'cause you see
152. them in Unique Learning and that, then at the end, go out and do your work.
153. It's not really [different], cause we had personal tutors at College".

154. I. "Well yes, but I meant really, tutors in general. Lecturers?"

155. R. "Not really formed an opinion of them yet."

156. I. "What do you think, I mean in your lectures and seminars, what is it you
157. think they are trying to do? What do you think their role is?"

158. R. "Um, er, I don't know really. 'Cause in some lectures, everything they
159. say, they actually give you on a piece of paper. So like, you have got notes,
160. so what's the point? You're just stood there [the lecturer] and you're not
161. adding anything to it. You're just reading exactly what she's saying, so
162. what's the point in you [the lecturer] being there? You could just read it, go
163. away, and come back and ask questions if you don't understand. Rather than
164. just, well, like...no! Some of them are *really* good! There was,
165. er, one, the other day, and I was stood outside talking to him. It [the lecture]
166. was on Poetry, and when he said Poetry, it was like oh God, oh no! But he
167. made it so interesting, and so entertaining. I can't wait to go and do it, but I
168. can't do it until my second year, so I'm really looking forward to that. Like
169. at first, it was like, right! T.V., Film, that's going to be my favourite one!
170. And I have just been so bored in the lectures, 'cause it's not really hit me.
171. Nothing has. I mean, I need something to really jump out and hit me, like oh,
172. this is good! This is going to be fun! You are going to love doing this! And
173. the Poetry one did that. But the T.V. one didn't. It's one of those topics you
174. know, that you think is really boring and tedious. Like study it, translate it,
175. like for G.C.S.E,'s, what every word meant. And I thought, they've
176. probably been down the pub, had a couple of drinks and scruffed down a
177. couple of words and thought oh hey, look, it rhymes! Ooh! But some of
178. the stuff they write today is basically rubbish, got no meaning whatsoever.
179. And he was explaining this! Like, he made a poem up out of his shopping
180. list, and it was, 'this is what I should have bought at Asda this morning', and
181. then just like saying 'this is what people can do nowadays and say it's
182. Poetry – that's what we'll be looking into'. And it's just like anybody can do
183. it. It's not...when you break it down, it's not that difficult to understand".

184. I. "Is it something you would never have thought about doing?"

185. R. "No. I would never have picked up a book on Poetry and read it."

186. I. "What are you expecting from H.E.? I mean in the longer term, and on a
187. daily basis?"

188. R. "Umm. I want to find something I can get involved in. Really
189. involved in. Like I'm interested in it, I want to spend the rest of my life in it.
190. 'Cause I've never come across anything I so far that I'd like to do. I'm
191. looking for that. You know, that little bell, that light bulb, that one thing.
192. Like I could do this – spend the whole of my life doing that one thing. Then
193. I'd be happy. But I'm not...I'm hoping that one of my courses...there will
194. be a certain area, some subject that will just...you know".

195. I. "Hopefully it will".

196. R. " Well it has to do sometime".

197. I. "Maybe, yes. So, where do you see yourself then at the end of the course?
198. Once you have got your degree?"

199. R. "Umm... er, well, I want actually to do a postgraduate course, 'cause I'm
200. not sure, 'cause I've not checked this all out. I should have done all this
201. before I came to Uni [laughs]. 'Cause once I've done my Psychology degree
202. and that, 'cause I'm actually doing American Studies as well, am I actually
203. qualified to be a psychiatrist? I'm not, am I? I've got to go and do another
204. thing?

205. I. "Well, you wouldn't immediately be able to go into that kind of job. You
206. would need to do other things first, yes."

207. "R. "Yeah. So, if something like, kicks me, in the course and I want to, like
208. focus on that particular area...[nods]".

209. I. "Oh, so that was just an example? You mean that if this idea does get you,
210. say in the second year, then you would follow it up?"

211. R. "Yeah. It just depends on ...um...at the end of the three years and I have
212. no idea of what I want to do [laughs]".

213. I. "That's really helpful. Is there anything else you would like to mention? I
214. mean, is there anything you have learned, perhaps just one thing so far that
215. really stands out? Suppose you were going back home to people in
216. Manchester, what would you tell the you had learned so far?"

217. R. "I'd tell them that I'd learned to live on my own. Like everyone should do
218. that. 'Cause like I'd never cooked, never cleaned, never done anything
219. domestic, shopping. 'Cause like my mum, she's a housewife, so she
220. does everything for us, and through our whole lives. I don't know how to fill
221. a washing machine or anything. So I had to go and ask them [hall residents]
222. which was a bit embarrassing. So I'm learning to do it on my own, and it's
223. just the experience of that - *being* on my own. I mean, I know I could just
224. ring my mum up, but well, it's like half an hour to Manchester, an hour. I
225. could just ring up and say, Mum, come and bring me home, I don't want to
226. stay."

227. I. "What does keep you here then?"

228. "R. "Just determination. I want to go back home and say look! I just don't
229. need everything done for me. Don't want to be doted on my whole life. Not
230. useless, I can just do it."

231. I. "Is there anything else you want to mention?

232. R. "No, not really".

JM.

1. I. "How are you finding H.E.?"

2. R. "It's alright. Prefer it to school. But, um, I mean A level. Basically that
3. means the same thing to me, probably as I was in the same school. It's better
4. than...I'm doing something I'm interested in".

5. I. "What did you do at A level?"

6. R. "I did Physics, Geography, Music, French, English and Maths".

7. I. "You got six A levels?"

8. R. "No, sorry, I didn't do A level, it was Diploma, so it's different. But you
9. have to get a certain amount of points to pass your Diploma."

10. I. "So, what's better about H. E.? Is there anything else you could pick out that
11. you think is better?"

12. R. "Well, mainly because I'm doing what I'm interested in. And I don't have
13. teachers on my back all the time. I've been...what you might call a bit of a
14. model student. But teachers on my back just makes me worse, so...not
15. consciously, but I am. So when people start getting on my back I just do less.
16. So yeah. So now, it's just me and I'm doing what I want to do".

17. I. "Do you think it would be any different, I mean what about the different
18. subjects you mentioned before? If it was something you liked, something that
19. was important to you, would there be a difference in terms of whether it
20. [teachers hassling] was getting to you or not?"

21. R. " Well, for example, I did like Music and there were people on my back,
22. and that irritated me. And I did things like...no, well...I suppose it depends on
23. the context you put it in. But I wouldn't say it's necessarily what I like, it's
24. more the way they do it".

25. I. "O.K. Is there anything you have come across so far that you haven't sort
26. of...liked?"

27. "R. "Well, I don't think it's structured as well as it could be, and I think it's
28. slightly disorganised".

29. I. "What is?"

30. R. "The course. Psychology mainly. Umm, and...[shrugs]".

31. I. "What do you mean by structure?"

32. R. "Well, um, I don't think there's much co-operation between the lectures

33. and the seminars. And I don't think there's...they don't give you the spark to
34. encourage deeper thought".

35. I. "In seminars?"

36. R. "In both. And I think that's what seminars should be geared towards. But
37. they're not, at all. There's too much repetition between Unique Learning and
38. the seminars and it's just ridiculous. I don't find that the seminars helped me
39. at all. Whereas I feel you've got the chance when there's an interaction
40. between the tutors and students, and you can learn from other people. But
41. that's not happening at all."

42. I. "O.K. Anything else?"

43. R. "Hmm".

44. I. "But the seminars, they aren't all the same though?"

45. R. "You mean the workshops and the seminars?"

46. I. "Yes. What do you mean by seminars?"

47. R. "I just mean what they've assigned to us as seminars, which is basically
48. both. And what are the workshops in Unique Learning for? Er...[shrugs]".

49. I. "How do you feel about Unique Learning?"

50. R. "I think, er, it's a good idea, but it's not done well. It just takes up too much
51. time. And everyone's got a negative attitude towards it, everyone just goes in,
52. sits down, learns nothing and goes out again. No-one does any work and then
53. everyone ends up having to spend so much of their time on Unique Learning.
54. Some of the key concepts we're supposed to be learning I think are a good
55. idea, but the fact that it's just totally by itself, and it's just not linked with
56. anything else but...and the negative attitude everyone's got towards it makes
57. it, er...[shrugs]...well it's not really that much."

58. I. "O.K. How do you mean?"

59. R. "I think it could be much more concise and we'd learn a bit more. Basically
60. there's too much. And there's too much waffling in the book and it's not clear
61. what's meant by certain tasks. And you might have about five different tasks
62. with the same objective basically. And it's basically I think, a waste of time,
63. whereas it needn't be."

64. I. "I'm interested though, that you make a comparison between that and the
65. Psychology seminars. Is that how you find Psychology seminars?"

66. R. "Very similar. We do some similar work in Psychology as we do in Unique
67. Learning. I think it could easily be incorporated, each of our subjects. Say for
68. example, you could have an extra hour in each one, rather than two extra hours

69. in Unique Learning. Because then it could be more subject specific and you'd
70. get more from it and be more motivated to learn because it would be directly
71. helping. Helping in what you think you'd like to achieve. So it would help
72. more there, rather than doing things people don't want to do. And er...if you
73. have it totally...if it's something that's compulsory, something that you
74. haven't opted to do, you start to have a negative attitude towards it in the first
75. place. And then, even your tutors got the same thing, 'oh, but you have to do
76. it anyway'. No-one really gets too much from the experience. Whereas if it's
77. linked with something you do in your course, it would be much more
78. profitable I think. People would pay more attention to learn more in a shorter
79. space of time".

80. I. "Aren't the tutors enthusiastic about it? Would that make a difference?"

81. R. "Probably. Basically, if you live in, on campus, in residences, then you've
82. got all the students going on, oh, this Unique Learning – waste of time. And
83. then all the students from the year before going on, saying you shouldn't be
84. bothering with it. So you go, and it's just waiting to get your name on the
85. register and that's it. So it wouldn't really help if your tutor was enthusiastic.
86. In fact, some people, it would probably make them worse. Just because over-
87. enthusiasm can make some people worse."

88. I. "Oh, that's interesting."

89. R. "Yeah, but especially if you're not interested in the first place. Like what's
90. that idiot doing there?"

91. I. "But weren't you expecting to do it? What were you expecting of Unique
92. Learning, and what were you expecting of Psychology? And how much have
93. they measured up to that?"

94. R. "Well I wasn't really expecting that much. I didn't come to University with
95. a clear idea of what I wanted to do...um...I...it was just a spur of the moment
96. decision for me to choose Psychology."

97. I. "You prefer EBS? [students other option]".

98. R. "Oh no. That was an even more spur of the moment thing. Psychology at
99. least, I did have some psychometric tests and they said I was more towards
100. that area, like Psychology and Law. But Psychology was more my
101. personality. But EBS, that was just a matter of pressing the wrong key on the
102. computer. But then I got in and I thought oh well, I might as well do that
103. instead of Geography. I'll give it a go."

104. I. "So it's not like Geography?"

105. R. "Well, no. It's more like Biology, Geography, Chemistry, everything, a
106. holistic approach to the environment".

107. I. "Yes, but O.K. When you signed up for the course, lets say Psychology,

108. the course you have experienced is or is not...or, how far has it been
109. different to what you were expecting? You must have had some kind of
110. picture about it."

111. R. "Well I've never done Psychology before so I didn't have much of an
112. idea about what to expect. Not really. I can't think of what it was I was
113. expecting. Um...I really don't know."

114. I. "Alright then. Could I ask then what you do get more out of; seminars or
115. lectures?"

116. R. "I would have thought I'd got more out of seminars than lectures.
117. Although, um...in EBS I have been doing that. There's a few more mature
118. students in our class, so we have quite heated discussions with these mature
119. students and you get a wider...er...I get more from it and I'm learning from
120. other people. And you get...and I'm thinking on my feet as well...and I'm
121. giving. So what, with the balance of the tutor...so that I find I'm enjoying
122. it."

123. I. "What do you think lectures are for? Why have two different methods of
124. teaching?"

125. R. "Well, there's time I think, as well. You can't...you can't really cover all
126. concepts in detail, you have to do that yourself. And...but I think lectures,
127. basically to give you the fundamentals of what...a certain subject, an
128. introduction. And hopefully, get you interested, catch your attention, so that
129. you'd be interested, do more research. And...but just to give you basic
130. information and guidelines so that you can go away and do your own.

131. I. "Has any particular lecture inspired you?"

132. R. "Um... well, I'm more attentive in the Social [psychology] lectures, but
133. that's probably got a lot to do with [lecturer] because he uses all sorts
134. of different things, all sorts of slides and things that keep grabbing your
135. attention. Um...but I find that...I think I understand what he's saying. I
136. normally find that if I do try to listen and understand, then I do understand.
137. Not necessarily all of it, but the main parts of what they are trying to say.
138. Say, apart from the first lecture, I er...[shrugs and stops]".

139. I. "O.K. Do you live locally?"

140. R "Well, my parents are in Swaziland. But my sister's round here and my
141. grandparents as well".

142. I. "Did you know anyone when you first came here [College]?"

143. R. "No."

144. I. "How did you find that?"

145. R. "Well, I've been in England since...I've been in England most of this
146. year, and by myself, or with old fogeys. Basically people over seventy. So,
147. er, I'm kind of used to being by myself. Um...but I was looking forward to
148. University because I was very bored and looking forward to interesting
149. discussions and things. And I came here, and I found that all anybody cares
150. about is going out and getting drunk, and talking about guys, so I just
151. thought that... and yeah. And I found that I didn't have much in common
152. with anyone. The fact that I don't drink, and the fact that I took a year out as
153. well, I found that makes a big difference. And also I've lived half my life in
154. different countries so I've got more...a totally different view on everything.
155. And a wider view I think, on everything. So people just don't understand
156. where I'm coming from. Or they just don't know. And I don't know what to
157. say, because anything I say just stops dead the conversation".

158. "Really? Can you give me an example?"

159. I. "Well, just when people are talking...in our kitchen. People are talking in
160. the kitchen and they're just talking about anything. And I don't know what
161. I'd say, but I'd just make a comment, and either someone, either they don't
162. understand...I can't, I can't think now. I must have started to change, they
163. must be able to understand me more. Maybe, maybe it's just the way I
164. express myself, I don't know. But I'm saying something, and it either stops
165. the conversation dead, or they ask me what I mean. So either they don't
166. understand my accent or maybe it's how I expressed it, I don't know. I
167. thought my accent was fairly clear...compared to others, but anyway. It's
168. my unique accent [shrugs]".

169. I. "Yes. Perhaps some students have similar problems. Could I ask now, if
170. there was one thing you would tell somebody about what University was
171. like...if they asked you what it was like?"

172. R. "Well I don't know anybody."

173. I. "Well O.K. then. Suppose somebody, anybody came to you looking for
174. advice. You know, what is it like?" What might be the things that have had
175. the biggest impact on you so far?"

176. R. "I don't think it has had that much of an impact on me. I think the main
177. thing that has had an impact on me was ...the anticipation of coming
178. here...er...sorry, I apologise!"

179. I. "No - there's no need to apologise!"

180. R. "Er...sorry [laughs]. It's just an African thing. But because I haven't done
181. very well...well, because I haven't done as well as I should have done in
182. school...basically in an academic environment...um... also...I mean, one
183. other reason that is, is because I was in the same school and it was kind of
184. like, a downward spiral. And every time I tried to turn over a new leaf, it
185. was like...couldn't happen because...yeah, same people, same teachers etc.,
186. etc. Even if it was a new person they would have heard of me before they

187. came to class and etc., etc. But, ah, I knew that if I was going to come to
188. University then I was going to have to make an effort because I'm used to
189. doing nothing. But, er...up to G.C.S.E. standard I was up to doing nothing
190. and passing well. And when it came to A level standard I just couldn't. I
191. did more, but it just wasn't enough. I did worse because I had to do *more*
192. than that, you know what I mean? And I got used to it...was basically lazy,
193. and had no motivation to do anything. And I knew I was coming here, I'd
194. have to change that. And that space of nine months or so, or whatever, when
195. I wasn't in school and just doing nothing, it gave me time to reflect on those
196. past seven years and...and basically I knew I'd have to pull my socks up".

197. I. "Was there anything else though, that you'd rather have done?"

198. R. "Well, that's one of the main reasons for coming to University because I
199. didn't know what else I wanted to do [laughs]. But I also know that when I
200. wasn't in school, University, I was bored. Also because I was in England,
201. and I find the people are very narrow-minded. Sorry [laughs]. I...it's...yeah
202. [laughs]. Er...it's probably my fault, part of it, but also...if...I find people
203. are very narrow-minded and prejudiced. About things they know nothing
204. about! That as well. And that kind of thing got to me. But anyway, I had no
205. stimulation, no conversation, no-one like-minded".

206. I. "Did you take that personally?

207. R. "No. It's just...umm...[shrugs]"

208. I. "It's probably just that person?"

209. R. "No, it's probably not. But whenever I put my input into a conversation,
210. it's either disregarded or it's criticised. And it's criticised without a base!
211. Whereas I may have more experience about what I'm talking about. And it
212. just gets to me. But...um...yeah. Where were we now?"

213. I. "We were talking about other things you might have liked to have done,
214. you said..."

215. R. "Ah, yeah. I find I need a more stimulating environment. Like I was
216. working at Mc. Donalds – of all places! But anyway, and I was coming
217. home to either my grandmother or my great aunt. And I wasn't
218. stimulated...and um...I was bored, and I didn't get on with anybody which
219. I've never encountered before. I'm a very sociable person and I get on with
220. very different types of people. But I need a challenge in a way. But I find I
221. need to be stimulated, need to be doing something, need to be thinking, but
222. I...[stops]".

223. I. "There's a difference between thinking and doing?"

224. R. "Yeah. Yeah. But I don't...don't want to be like...if you sat me behind a
225. desk all day, I would go mad. I wouldn't...I would...like, um...I think my
226. ideal situation is a group of three or something. And feeding off each other.

227. Once I've got that spark, I can go on for ever, But me starting something off
228. in the first place is an absolute nightmare. Um...and I enjoy people, talking
229. to people. Sharing, rather than just staring at a piece of paper. I enjoy that
230. stuff, but...like for example, I do my work much better if there's someone
231. in the room, even though they're not talking to me. Because I'll actually sit
232. down and do it. Otherwise I'll just end up doing something different.
233. But...um...although I do work well on my own though as well, it's
234. different."

235. I. "But then again, you say you don't like to sit behind a desk?

236. R. "Well for short spurts yes. But for the whole day, day in, day out, it's that
237. type of thing that would drive me mad".

238. I. "Where do you see yourself in three years time then?"

239. R. "I have no idea. No idea."

240. I. "Really?"

241. R. "No idea whatsoever".

242. I. "Alright then, where do you see yourself at the end of the year?"

243. R. "By the end of the year? Academic year? Um...hopefully still interested
244. in my course. Because I kind of told myself that if I hadn't changed, and if I
245. hadn't ...O.K., it's a process of change and if I haven't started,
246. nothing done, doing other things, then I'll leave. Not much point me being
247. here. Because like for example in A levels I just didn't really do much, I
248. kind of, in a way, wasted two years. O.K., so I did get a diploma, that's
249. good. But I nowhere near achieved my potential. And if I'm going to do that
250. here, I might as well get out now. What...because, well, I could be doing
251. something more valuable with my time".

252. I. "But you have a choice, in how much you do, or don't do".

253. R. "Yes. But it's getting over...starting things. It's a habit...a habit of not
254. doing things. That going with the flow of not doing things. Just floating,
255. basically".

256. I. "But you have a choice".

257. R. "Well, yes. But once you've formed a habit it's hard to break it. And I
258. know I can...that's why I have to make a conscious decision to actually
259. change, which is what...the only reason I came to University.

260. "I. "Do you think you will change?"

261. R. "Maybe so".

262. I. "What do you think might change you?"

263. R. "Myself".

264. I. "Any other factors?" Anything else you think might change you? If you
265. came to University you said that might help you – unless I read that wrong."

266. R. "Well I don't know. I came...I came...I didn't come to University so
267. that University would help me to change. I came to University because a
268. degree might help me in life. And...but there's n point coming to University
269. of I'm not going to change".

270. I. "It's your decision though".

271. R. "But I don't feel...I feel I could be doing something better if I'm not
272. going to change. Basically I should be doing my best. And if I'm not, it's not
273. good enough. I'm not a perfectionist, I genuinely am not. But it's got to a
274. point where I'm just doing nothing. And I've wasted so much time and it's
275. pointless".

276. I. "Maybe. But you may have learned some things".

277. R. "I'm sure I've learned all sorts of different things. But I could be doing a
278. lot more than I have done. Maybe I wasn't ready to. But I do feel that if you
279. make a conscious decision to do something, you'll learn".

280. I. "Well it's not easy as you say – at first".

281. R. "And it's a habit which I've got to break out of, which is one of my main
282. things".

283. "But it seems you're not sure whether you'll be able to change or not."

284. R. "I'm sure I will if I'm determined enough. But I don't know if I am"

285. I. "Do you think if you had made a different choice about where you were, if
286. you hadn't come to University...whatever, do you think you might have felt
287. differently? Perhaps a different kind of environment would change the way
288. you direct yourself?"

289. R. "Definitely".

290. I. "Which one?"

291. Um...say for example I'm working with an N.G.O., a non-governmental
292. organisation. Basically if I'm working with...something like U.S. Aid, it's
293. organised, it's got it's own...you've got all sorts of spheres of thought. It's
294. got all sorts of people, maybe intellectual people, but in the context of trying
295. to help people. And maybe you're going to have to change the way you
296. think. I mean it's challenging, but you're *doing* something. I like helping

297. people. I do other peoples work more than I do my own! I mean right now,
298. I'm going to go back and help somebody out with a Business report. Never
299. done Business in my life. But anyway...it's...I work better when I'm
300. helping people than when I'm doing stuff for myself. A *lot* better. And just
301. 'cause I get down there and do it. And also if I'm working *with* people, one
302. person is doing one part of the jigsaw, and I'm doing another. And if I'm not
303. doing that, then I'm not going to break down the whole puzzle. But if I'm
304. doing it, I'm working towards a big whole, which is actually achieving
305. something. Whereas University is a means to an end".

306. I. "A means towards getting a job?"

307. R. "Well, getting the knowledge that you can, to get a job. But depends on
308. how you define a job."

309. I. "Go on then."

310. R. "Well basically, using your qualities as effectively as you can to...
311. um...make something or do something"

312. I. "Is that the same as career? Would you get paid for it?"

313. R. "Not that much interested in that, though. Well, yeah, obviously I want
314. enough to live off, but...um...yeah, O.K., perhaps I want a career more than
315. a job."

316. I. "Any specific one?"

317. R. "No idea. Absolutely no idea. I'd like to work with an N.G.O., but doing
318. what, where, absolutely no idea. Never know, I may make up something of
319. my own. I'm flexible at the moment, we'll have to see".

320. I. "What do you think getting an education is all about?"

321. "Developing your qualities, and also gaining an understanding of ...other
322. qualities. Ah...er...I mean basically...oh I can't explain it. Like for
323. example, you're going to Primary Education and you're doing everything.
324. You go to Secondary Education and you're doing more....refined...so
325. it's...and you're developing different ways of thinking. And then you
326. develop things so you can appreciate what other people are doing. Or...and
327. it's also, find out what *you* should be doing, you know, how you can
328. develop. And use what other people have learned in the past to develop your
329. own things. And then, well, education is your whole life, it's just changing.
330. Like...I don't know. But that's not just academically, it's socially as well."

331. I. "What do you think you have learned so far? I mean since you have been
332. here?"

333. R. "That it's not easy to change! But, er, well, I have changed a lot actually,

334. definitely changed a lot, but there's a long way to go. I've started going
335. downhill again now actually. I've changed a lot in the past year, but it's in
336. my doing things, rather than what I think. I was changing, but I'm lapsing
337. into not doing things again. It's just motivating myself to do things".

338. I. "How do you feel when there's an essay you have to hand in? You haven't
339. done it, and it's the deadline?"

340. R. "Oh, I've done that already [laughs]".

341. I. "But how do you feel?"

342. R. "Here we go again".

343. I. "Did you hand it in late?"

344. R. "Yeah, I handed it...the latest you can hand in is a week late, and get
345. marked. I thought oh well, that's not too bad then, just 10% off. It's...but I
346. think what my problem was, I just wasn't interested in it. And I couldn't
347. motivate myself to do something that I'm not interested in. Which is what
348. you've got to do, because you've got to take the bad with the good.
349. Um...that's something I need to work on, motivating myself to do things
350. I'm not interested in [laughs]. Er...but yeah. Er...it's just I thought I should
351. have done it but I haven't. So obviously a bit disappointed with myself. But
352. not to a particularly great extent. The problem...*my* problem is that I just
353. don't care. It has been my problem in the past. I think I care a lot more now,
354. and I don't get stressed out...which isn't a problem because I don't study.
355. But other people's problem is that they get *too* stressed out".

356. I. "Is there anything else you would like to say? Anything particular that has
357. stood out for you since you came here?"

358. I. "I've become much more introverted. Probably because I'm not interested
359. in the same things as people around me."

360. I. "Well, if you don't talk to them?"

361. R. "Well, I've started to, yeah. Now, like, a lot of people are just focussing
362. on getting drunk and messing about."

363. I. "Well , you'll get to know then that way".

364. R. "I don't drink, so all they do is...I just sit in the toilet while people are
365. throwing up, fetching them glasses of water. Not much talking gets done. Or
366. listening. But yeah. I'm finding it better with the mature students, getting on
367. with them. I find they have different lifestyles, they don't have much time
368. for going out, getting drunk, so...[nods]".

369. I. "That's been really helpful [name]. If there's nothing else you'd like to
370. say?"

371. R. “No”.

LH.

1. I. "You've been here for four weeks now, how are you finding H.E.?"

2. R "It's different. I'm one of those people who need a kick up the backside to
3. get things done". Somebody there to do it. But now I've go to...er...figure it
4. out myself what I've go to do."

5. I. "Where did you come in from, Access, or H.E?"

6. R. "Well, I'm from A level, but I only just scraped in."

7. I. "How did you find it there? Were you happy?"

8. R. "Well it was more structured there. I knew specifically what I had to do."

9. I. "Anything else you think is different?

10. R. "Er, not really. It's more like on the basis of friends, and...teacher-pupil
11. thing".

12. I. "What do you mean?"

13. R. "Well, whereas at school, it's like yes sir, no sir and that. Here it's like
14. well, oh do I really have to do that Miss?"

15. I. "So what you're saying is there's no pressure on you here to do anything?"

16. R. "Yes".

17. I. "You find that difficult?"

18. R. "Yes'.

19. I. "Do you think you will get used to it?"

20. R. "Er...well, if I force myself to do it".

21. I. "How have you found the teaching?"

22. R. "Well, the lectures...[stops]".

23. I. "What about the lectures?"

24. R. "Er...can't get used to them."

25. I. "Why?"

26. R. "Well, just sat there and expected to understand everything that's said. And

27. then to go away and read a book. And it's like no-one can understand every
28. word, which I suppose is what the readings for. But if you don't understand it,
29. then you don't know what you've got to read, what you're reading about
30. anyway. If you don't totally understand it, you probably wont ever do."

31. I. "Right. But you mentioned that you were under more pressure at A level to
32. do the work. How do you find your tutors?"

33. R. "Actually my personal tutor, she's alright. She's like, oh you've got to get it
34. done". Whereas seminar tutors, it's like, oh it's up to you. They're not
35. really...you know."

36. I. "What are your seminars like?"

37. R. "Alright. I quite like them actually. Like I said, they're
38. structured...thing...you've got to do something".

39. I. "How many are in your group?"

40. R. "Don't know. Four I think. But I've not been to some of them. So...[stops]"

41. I. "And you prefer that? You get more out of them than lectures?"

42. R. "Well, I'm not sure. I think...[stops]".

43. I. "Are you working at all?"

44. R. "No".

45. I. "Is there anything you have come across so far that you haven't really been
46. expecting?"

47. R. "The workload".

48. I. "Go on".

49. R. "We always go told that, oh you're first years, you don't have to do
50. anything really. But we got here and it was like, oh, you have to pass
51. everything to get to second year. I've got an essay already that's go to be in
52. next week. And all the other lots of little tasks all the time. And time, it's just
53. so quick."

54. I. "Is that anything like you had expected? What did you expect?"

55. R. "Don't know really."

56. I. "Is there anything causing you problems?"

57. R. "Er, no. I mean I wasn't expecting, well, I applied to live off campus, but I
58. wasn't really expecting how far off campus it was. Other than that, no".

59. I. "Do you feel you're settling in?

60. R. "Mm, so far. But I like to go home at weekends if I can, so...but yeah.
61. Have settled into lectures and that, so...[stops]".

62. I. "What are you expecting to find later on [in the course]?"

63. R. "I expect things to kind of back off a bit. Like once I've done some work,
64. get a bit easier rather than harder. Because it'll hopefully be the case that I'll
65. start understanding it. Start knowing what to do, get in the swing of things".

66. I. "What do you want to get out of it all?"

67. R. "A degree."

68. I. "Well, yes. But where do you see yourself in three years time, once you
69. have got your degree?"

70. R. "Hopefully...actually, I want to go and do another course, thing".

71. I. "A Masters?

72. R. "Don't know. Think it's got something to do with teaching, and then
73. um...something to do with Psychology".

74. I. "You mean a P.G.C.E.?"

75. R. "I don't know. But come out of it with two boots, so I can either, say
76. become a teacher or a psychologist, or whatever."

77. I. "O.K. What do you think lecturers and tutors are trying to do? I mean in
78. your lectures and seminars?"

79. R. "Trying to make us go out and find our own way of understanding
80. whatever it is we're supposed to be learning".

81. I. "Is there anything else you want to say about that?"

82. R. "No. It was weird [being interviewed]".

SD.

1. I. "Generally speaking, how are you finding H.E.?

2. R. "Hmm, I'm not the most motivated person in the world. So, like teachers
3. used to say I just used to wander through coursework. Not pay too much
4. attention, just do enough to get by."

5. I. "You have submitted your work though?"

6. R. "Oh aye. Submitted it."

7. I. "So there's some motivation then."

8. R. "Well yeah, but like doing just enough to get by. But I wouldn't be too
9. worried whether It's an A or a C. As long as I pass".

10. I. "What has Psychology been like so far?"

11. R. "Only handed in one essay. Well, I've handed in two, but only had the one
12. mark. 42%. It was a night before job."

13. I. " Do you think you could have got a better mark if you had put more effort
14. in?"

15. R. "Yeah."

16. I. "What didn't you do, do you think? What made you fall down?"

17. R. "Just started the night before. It was all rushed, no time to read it. All my
18. quotes were taken from the one book. Didn't even check the grammar and
19. punctuation was correct. Whatever came into my head, I just wrote it down
20. and handed it in. Never checked it".

21. I. "Some people can't do that. Work often doesn't get handed in at all. So it's
22. not all bad, you have handed something in. More generally though, so far,
23. have things been anything like you had expected?"

24. R. "Er...I wasn't really expecting anything. I've found Psychology interesting.
25. I've got a friend back home, you know, in Belfast. She's doing Psychology
26. and we er...talk about things, you know. It's interesting. I'd like to keep going
27. with it."

28. I. "Keep handing the work in!"

29. R. "Yeah! It's different over there though. Smaller classes, about fifty people
30. in a lecture. But they do a lot more work."

31. I. "Did you come to H.E. from A level?"

32. R. “A level”.

33. I. “How did you do?”

34. R. “Got two C’s and an N”.

35. I. “What’s an N?”

36. R. “It’s a non-grade. Got that in Maths”.

37. I. “Was this College your first choice?”

38. R. “ Well, I wanted to go to the same one as my mates. But basically, my
39. uncle, who’s careers officer there told me I wouldn’t make the grades. Told
40. me nobody would want me with those grades. But the only reason I didn’t
41. want to come here was that I didn’t know anybody. Would have been the first
42. time in my life. But I’m glad I did come over now. Back in Belfast it’s not the
43. same. They’re not having the same experience as me really”.

44. I. “How did you feel about it at first?”

45. R. “Well it made me worse because nobody understood what I was saying
46. [has strong Irish dialect] and I had to keep repeating myself. Feeling really
47. frustrated. And the size of the place, so …something I really wasn’t used to.
48. Because I come from a small town. You could walk down the street and know
49. everybody. Here, I hardly know anybody for the first time in my life. Just
50. intimidating.”

51. I. “Yeah. But you have friends now?”

52. R. “Well I’m settling down, got friends in the flats and from the town. Met
53. more people from where I’m from”.

54. I. “Yeah, I know. There’s a lot of Irish students around this year”.

55. R. “Met one lad from John Moores, he’s from Belfast, in the pub. He popped
56. in and said hello, in the flat. I said, I didn’t even know you were here, going to
57. John Moores. And then I was back home a few weeks back and I met this lad,
58. he works at this nightclub. And he goes to John Moores too and I didn’t know.
59. So it’s becoming a bit smaller than what it was”.

60. I. “How are you finding the teaching? Are the methods any different to what
61. you have had in the past?”

62. R. “At A level, you were…er…guided through the course, it was all given.
63. Here, you have to do it yourself. And in lectures, sitting there and they’re
64. talking, and it’s oh, what’s he going on about? Or what’s she going on about?
65. But I’m starting to get a grasp of things, take notes more. I think I’m adapting.
66. Hopefully I’m adapting”.

67. I. "Do you think other people might not understand as well? Or do you think
68. it's just you?"

69. R. "Er...a lot of it... it is a bit harder than A level. And I think a lot of people
70. think like that. 'Cause at A level, teachers, they have to focus on us to keep
71. their job. But I don't know what it's like here. But...um...I don't know".

72. I. "When you say you don't understand what teachers are saying, do you mean
73. lectures or seminars?"

74. R. "No, lectures are alright, because notes and everything are up on the
75. projector. And you can just take them down. Seminars basically, like you're
76. reading through the book and there's all these tasks written out, and I was
77. wondering when you do them, or what s the point in having them. There's one
78. laid out each week. And I wasn't sure whether it was just for your own
79. benefit. Then I realised that they've all got to be done, and handed in, in a
80. portfolio, after Christmas".

81. I. "So do you think Unique Learning seminars are the same as subject
82. seminars? Which ones are you having most difficulty understanding? Also,
83. what do you think is the main difference between lectures and seminars?"

84. R. "Well, um...seminars are poorly laid out. I don't want to be disrespectful
85. but...um...I feel like you don't need one every week. One every two weeks
86. perhaps. I mean, one only lasted twenty three minutes. And first thing on a
87. Tuesday morning? Well that's why a lot of people don't show up. There
88. would have been more I think, if...if the seminar backed up the lecture.
89. Whereas basically, we're given the essays we haven't done".

90. I. "So you can't see a link between them?"

91. R. "Well, I'd like to see more of a link. You know, I've no problem with what
92. we're doing in class, I enjoy it. Everybody speaks their mind and it's a good
93. atmosphere, but er...I'd just like more psychology from the lectures to be in
94. the seminars."

95. I. "Do you think there might be some strategy behind it, the ways that lectures
96. and seminars are organised?"

97. R. "Er... in Psychology...um...in Sports, the seminars do back up the
98. lectures."

99. I. "Well, yes. But you do have those two things which are different, the lecture
100. and the seminar."

101. R. "Actually in Sport, there's not much difference to be honest. Basically,
102. what you do in a seminar is basically the same as a lecture. Same type of
103. thing. Like the first three weeks I had the same topic in both."

104. I. "Is there any particular one you feel more comfortable with?"

105. R. "Well at A level, we were always given the same things over and over, so
106. it's always stuck in your mind. In the Psychology seminar, I'm always
107. wondering should I be doing this? Am I doing this right? And I'm not too
108. sure if what I'm doing is what's required, if you know what I mean."

109. I. "Yes I think so. What do you think getting an education is all about?"

110. R. "Hm. Er...I think an education gives a person more confidence. And
111. um...knowledge is the most powerful thing you can have. And I think, at the
112. end of the day, you do go to University to get a nice job, basically to get the
113. money. But I was never set on going to University. It was my mum and my
114. uncle, 'cause basically I didn't know what I wanted to do with myself. But
115. I'm glad I came, like. Thinking of sticking it out and doing a Masters. But,
116. um...[stops]".

117. I. "Yes, just keep handing the work in though. But where do you see
118. yourself at the end of the course? You mention a Masters. Is that something
119. you'll be working towards?

120. R. "I'd like...that's what I'd like. Qualifications. Show people outside, like,
121. I've done this...but I don't know. I would really *love* to be a
122. psychotherapist, but um...I really wouldn't be too sure about how to go
123. about getting there".

124. I. "Well that's a start. Have you asked anyone?"

125. R. "I've asked a few, but they were before I came to University. Back in
126. Ulster when I was choosing the subjects I wanted to do. They said there
127. were plenty possibilities with the subjects I wanted to do. A Sports
128. psychologist...so, er...it would be nice to find out."

129. I. "But you'd like a Masters first?"

130. R. "Most important thing now is to get through the first year. Getting off
131. *that* ladder. Because back home...I don't know what it's like here, but you
132. have to have a Masters before you can do...it's not enough to have a degree
133. now, for any opportunity. But then again, if somebody were to offer me
134. something in Psychology after the degree, I'd more than likely take it.
135. 'Cause, erm...I'm struggling through holidays now, and I don't like it. So,
136. erm...but I couldn't see myself working in...at the same job for the rest of
137. my life."

138. I. "But you might like it. You see a job as some sort of grind, and it might
139. not be like that."

140. R. "That's true."

141. I. "You might find the right job."

142. R. "Yeah. As long as you're happy. I never really thought of it like that."

143. I. "O.K. What do you think you have learned so far?

144. R. "Well, in Psychology I've learned about the mind. And biological topics.
145. Erm...I've...why people do certain things, the reasoning behind that.
146. Learned about theories, where they come from. I'm not too sure. I feel I've
147. learned more. Erm...I don't know."

148. I. "O.K. Suppose you had to tell people back home who had never been to
149. University, what it was like. What would you tell them?"

150. R. "That is was fun. And interesting. Erm, I feel that er...again, it depends
151. on the lectures, who the lecturer is. 'Cause I know, the second lecture, it
152. was, er, more fun. People were more interested. Laughing. Certain people,
153. but I'd say try it out! You'd be surprised at how much you'd enjoy it."

154. I. "Is there anything more negative you've found that stands out?"

155. R. "About the nine o'clock starts on a Tuesday. Ah, no. As long as you're
156. interested, you'll be more than happy in the subject. It's interesting, the
157. whole thing. Honest. I'm enjoying it."

158. I. "Anything else you'd like to say? Any comments?"

159. R. "About Psychology?

160. I. "Anything you think is important in your experience so far."

161. R. "No. I can't think of anything."

. NH. (*f*).

1. I. "Would you like to start by telling me a bit about how you have found H.E.
2. so far?"

3. R. "Well, um...it's actually been a strange week in a lot of respects. If you'd
4. have asked me on Monday...[laughs]...I would have felt completely different
5. about it. Um, I've found it a little bit overwhelming to be honest. And because
6. I've moved up from South as well, so everything's new. And ...um...I've
7. found it a little bit...um...I don't know what...I think I let the work go a little
8. bit as well. I had a friend come over at weekend, and, um...didn't do any work
9. and that was getting on top of me. And then I was speaking to some people,
10. some doing the Psychology and the English...and I'm doing a P.G.C.E. in
11. English after. And I was speaking to some of the girls in the English class who
12. are just doing English, er, and going straight into the teaching. And they seem
13. to be locked...locked together, and it seems to be more of a team thing.
14. Whereas...ah...doing English in one and Psychology in the other, it's sort
15. different angles and it's quite hard to get your head round. You know, you're
16. in one mode, and then the English Lit. And toward the beginning of the week
17. I was thinking I'd done the wrong thing, going into Psychology as well.
18. And...um...thought I should have just gone for the English."

19. I. "Can you do single honours in English?"

20. R. "No I don't think so. But I hoped I could have gone on to the other course,
21. the er...get into the teaching. But that's not possible anyway and um...I was
22. going to pull out altogether. Um...I spoke to a few people and, um...go next
23. year and do English Language which would be better in...I thought...and
24. um...as soon as I did that, yesterday I was working on an essay on how and
25. why Psychology is a valuable thing. And I was looking in all the books and
26. um...[stops]".

27. I. "Is that for Unique Learning?"

28. R. "Yeah. And I started getting absorbed, and remembered all the reasons why
29. I find Psychology fascinating. All the things next year, you know, different
30. choices. And I became quite excited again. And it all came into...I could see it
31. more clearly, and I don't want to leave now. I've been working really hard the
32. past two days [laughs]".

33. I. "Has it been like that, up and down since you began?"

34. R. "Yeah. Um...yeah. As well as...I think because I'm a mature student...I'm
35. er, thirty four. And you know, sort of, the younger ones get together and it's
36. all a bit different. I haven't really....I hoped to move up here and meet a load
37. of people, and it be really...um... I haven't actually met that many people at
38. College. I speak to people...like you do, but not as such as clicked with any,
39. you know. Nothing that was such a big thing, where...[shrugs]."

40. I. "Aren't there a lot of mature students on your groups?"

41. R. "Not really, no. I mean, there's one or two in Psychology and there's one or
42. two...a lot of them I haven't really spoke to. We all sit in our seats and they are
43. put into those groups. Well, it's early days, um...but, um, now I've got my
44. head into my work and I can, um...see *that* progressing, then I can...um...that
45. will be a secondary thing. Whereas it was quite foremost at the beginning...of
46. the course. So, um...I'm feeling quite good about it all. Um...[stops]"

47. I. "Did you...is there something else you wanted to say about that?"

48. R. "No. Just saying that I was excited about all I've got to learn."

49. I. "How are you finding the teaching?"

50. R. "Well, it's different...than what I'm used to. 'Cause, um, at the lower level,
51. you get a lot more help and a lot more indication of which way you are going.
52. And to be honest, the last two lessons in Psychology have been a bit naff.
53. Well, in my opinion...because, um....we went one day and did a lot of stuff in
54. the library. That was last week, which I thought was a bit...you know, should
55. have been done a week before and pretty much nothing to do with it. And we
56. were all ready to get into it and then they told us to go away and um...find out
57. about...what was it, the nature nurture debate. And we had a two hour session,
58. which finished early *again,* and um...sat in groups discussing it. And it was all
59. quite apparent that we all felt the same...we had all looked at it the same [the
60. debate] and then that was it! And then, this week we've got...um, well, *next*
61. week...so from that, we've go to do two essays. And the next weeks session is
62. how to write an essay, which to me is a bit bizarre, as we haven't really had
63. any indication of what's needed, or how to go about it. You know, he [tutor]
64. did give us a briefing to be fair, but we haven't actually had a lesson. So he
65. sent us home early that week. Half an hour early. And I think it was half an
66. hour early the week before, and I thought well, what's the point of coming in
67. really? It seemed a bit...you know."

68. I. "Did you not get anything out if it?"

69. R. "No."

70. I. "Fair enough."

71. R. "[Laughs]. No, definitely not this week, and last week, um...no. He did go
72. over the essays a little bit. I mean, that was sort of ten minutes out of two
73. hours. It isn't really...well, I didn't think it was very useful to be honest".

74. I. "Well, O.K. So you can pull out two things there. One, the class session, and
75. the other, the seminar, but wondering how you fell about the different
76. sessions, different kinds of structures such as that."

77. R. "What do you mean?"

78. I. "How do you feel about classes, and how do you feel about seminars? I

79. mean, you could have a seminar within a class?"

80. R. "[Laughs]. Well I don't really know...ha...what a seminar is. Seminar
81. means...[stops]."

82. I. "Well, you say you've just had a debate on I.Q. That is, you have...you get
83. students into two groups who have two opposing viewpoints. You have a
84. discussion or debate, and try to resolve a set question. That would be a
85. seminar and...well...if you agreed, if everyone agreed then you couldn't really
86. *have* a seminar."

87. R. "No we didn't. Maybe that why it seemed a bit pointless, if everyone
88. agreed".

89. I. "Yes, you can't have a debate; if you all agree then there's nothing to
90. debate. Have you had a seminar as such in English?"

91. R. "Um, well we do discuss things. You know, he puts us into groups and we
92. have to go round discussing little bits of a story."

93. I. "What about your lectures?"

94. R. "Lectures are *very* interesting [laughs]. But that's a personal viewpoint!"

95. I. "How? Why?"

96. R. "[Laughs] Um...[stops and shakes head]".

97. I. "It's O.K., you don't have to mention any names."

98. R. "Well one, I felt was really droll. And she was very aware that we didn't
99. have the book because it was waiting to be...er, done, or something. And
100. um...um...er...she was talking about these poems which we couldn't
101. see. And she hadn't read them out. And, um...she discussed them
102. before she had read them out, so I didn't have a clue what she was
103. talking about. And, um...I don't think I was the only one. And
104. um...she was very droll, the whole thing was very droll. So by the end
105. of it, it was like can we get out of here? God, can we?"

106. I. "By droll, are you meaning flat?"

107. R. "Flat? There was no...er...it was like duh, duh, duh, duh, duh. Well so
108. and so did this, so and so did that. There was no enthusiasm, or gumph! You
109. know, there was only...[stops]".

110. I. "Enthusiasm. Do you think that helps?"

111. R. "Definitely. It inspires people to...[shrugs]".

112. I. "Does it?"

113. R. "Well, It's definitely, well...enthusiasm inspires enthusiasm I think. I
114. believe, especially in teaching, if a teacher isn't enthusiastic, it doesn't
115. really, um...do a lot for the pupils really. Because you're gonna look up to
116. them and sort of believe that...well, if they're bored with their subject then,
117. well, it gives you...[pauses]. Well, why should you believe that ...get
118. inspired about it?" It's kind of off-putting."

119. I. "O.K. In general then, what do you think a lecture in general...what are
120. lecturers trying to do?"

121. R. "Just open your mind really, to a lot more different types of....well, in
122. English, different types of writing. And different types of Psychology, and
123. what's gone on, and what there is to know about. And things to go and have
124. a look for."

125. I. "O.K. So would you prefer not to have seminars?"

126. R. "No. I think they are a good thing. Sort of encourage people to...view
127. their point. And if it's er...it might be wrong, but it might open their eyes to
128. other things and to know what everyone else is thinking. And if you've got a
129. good point, well, they can see it's not a good point, and vice versa."

130. I. "Is that, you think, the role of a lecturer?"

131. R. "A lecturer? Yeah, I think so. To encourage, to enthuse. And...teach. So
132. that...um...what you learn goes in, really."

133. I. "What do you think you have learned so far? If you could perhaps pick
134. out one thing that you have leaned so far? Suppose you were going out with
135. a group of friends who had never been to University. What would you say
136. was the one thing that you had picked up...learned?"

137. R. "The theory of evolution!"

138. I. "Do you ...would you like to explain that? Where's that from?"

139. R. "From the lecture. He was talking about...er...the way that our genes are
140. so...er...selfish, and they could possibly...er...have a way of controlling
141. what we do in our lives and why we do them. And we think subconsciously
142. that we are doing it for a good reason, but really, we could just possibly be
143. being selfish. And things like that."

144. I. "How did you feel when you came out of that lecture?"

145. R. "Very excited. Because I thought it was very...er...don't know if that's
146. the word; poignant. But it was a good point and everything, and um...but
147. yeah. Er...and I do a lot of meditation, spiritual things, so it kind of made
148. that ...you know. Kind of gave it another edge really. And it sort of put...you
149. know, well if that's the reason we're here, it all seems a bit flat. Well,

150. personally...well, a bit....well I don't believe that's the end. I mean the end,
151. the end of ...[the whole explanation]".

152. I. "You mean the be-all and end-all?"

153. R. "Yeah...yeah. Mm. I think there could be a lot more to it."

154. I. "O.K., what are you expecting from H.E? As you move up the levels?"

155. R. "What am I expecting?"

156. I. "I know that's quite wide. I wanted ..."

157. R. "Yeah, hmm. Er, well, I was hoping that I'll grow in confidence. And
158. er...um...just open my eyes to a lot more, and absorb. *Lots* of knowledge!
159. And then...that...gain my own opinions and become...become educated I
160. suppose. I don't know what else."

161. I. "What do you think that is? You say you want to be educated; what do
162. you think that is? What does it mean to be educated?"

163. R. "Well, to have an *awful* lot of knowledge. Interesting...you know. What
164. you find interesting. And opinions. Hm."

165. I. "So then, where do you see yourself at the end of your course?"

166. R. "Er...proud. Hopefully. I've finished through and passed. And...where
167. do I see myself?"

168. I. What's your next step?"

169. R. "Er, well, I plan to go into a P.G.C.E, to a teacher training course. But
170. before that, er...I might actually go away for a year. Travel. Do other things.
171. Because I've still got lots of other things to do. If I get into teaching, then
172. I'll probably want to go straight into a teaching job. And then...we'll have to
173. see."

174. I. "Any concerns? Worries?"

175. R. "Well, maybe...if the course might be a little bit difficult. But, um...I
176. think that's just down to myself as well. Whereas this week, I was blaming it
177. all on...I noticed...that it was not the right course. It's not this...and
178. then...well I did have a lot of problems this week, but then I realised, once I
179. got my head down...and I think it was just the fact that I wasn't doing a lot
180. of the work. I wasn't putting it in, so wasn't getting it out."

181. I. "Do you think that might change?"

182. R. "Hm. Well, it won't be a personality thing, 'cause I'm quite scatty. And
183. once that happens, I get a little bit waylaid. So if I can keep focussed, and

184. er...um...that's my objective too. So as long as I keep reading, and keep my
185. time...I'm getting my time a bit more organised now which is helpful."

186. I. "I'm sorry, I think I missed this – are you from A level or Access?"

187. R. "Access."

188. I. "Access? O.K. Well...O.K. Is there anything else you want to mention?
189. Hopes, fears, worries, whatever?"

190. R. "No. Don't think so. Think I've...like I said, I've dealt with a bit lately,
191. this week. So...oh! I do hope to meet a few people, make a few ties. I think
192. that's the obvious thing...well, quite a big thing for me really. But it's not
193. really bothering me as such, not any more. Not now that I'm focussed
194. [laughs]".

MD.

1. I. "How are you finding H.E. in general? Your course?"

2. R. "Er...I wanted to do Psychology, er, at Liverpool Hope. I think it's...you're
3. getting a broad insight, nothing too much. With the seminars, there's nothing
4. too much going on. You know, I'm not getting too much from the seminars,
5. but the lectures, you know, think they're interesting.".

6. I. "Yes, but generally, have things been mainly positive, negative...?"

7. R. "Er, I think I've...I can relate to some of the staff and...er, if I have any
8. problems, I know that they're open for me to go with an essay if there's a
9. problem."

10. I. "Anything else?"

11. R. "I'm still coming to terms with, er...a lot of the work is independent. I
12. think...and hopefully as I get on, you know, it's self-discipline I need. And
13. I'm not putting the hours in on my own, and I just seem to be attending the
14. seminar...yeah, that's done. And the lectures, and getting the essays done,
15. and so...[stops]"

16. I. " Is that not what you were expecting? Did it come as a shock to you? I
17. know you're putting it across as a negative thing, but is that what you
18. expected to find?"

19. R. "No, no, I was expecting that. But if I'd known how many hours, sort of,
20. with the tutors and the lectures and that...um."

21. I. "What stands out for you so far? Just one thing? You don't necessarily have
22. to relate it to Psychology. I'm looking at the whole length and breadth of it,
23. the general experience."

24. R. "Oh well, about Psychology. I er, didn't study it at A level so it's all new to
25. me in a way. I like the fact that there's never an answer, ah...er, the *right*
26. answer. So you know, you can pick your own. Work on it yourself and
27. er...your answer".

28. I. "How do you find that way of approaching things? "

29. I think it's good, 'cause it's good to argue. Have your own opinions that you
30. can bring out. And what you're dealing with...well, *that's* the right answer."

31. I. "Did you get a good mark in your essay?"

32. R. "Er...I got 62%. But it was a bit scruffy. I was halfway through doing it on
33. the computer, started it on the computer the day before. And I already had it
34. up, but...and then it was too late. So I just handed in what I'd put down on

35. paper."

36. I. "You mean it was hand written?"

37. R. "Yeah."

38. I. "Half and half?"

39. R. "No, it was all hand written. But it was my handwriting. I don't think...it
40. starts off neat on the first page, but after, the other pages...um. And you know,
41. it was just the time limit, oh it's a bit too late and that. So, hand written."

42. I "Do you think it would have been improved if you had word processed it?"

43. R. "Er, I think presentation, and making it easier for the tutor to read maybe,
44. instead of just jumbling words around. And my grammar I don't think, maybe
45. isn't up to scratch. I'm learning how to do my essay planning, and how to
46. approach an essay. But yeah, the grammar, and...you know."

47. I. "Have you actually followed what they tell you to do in Psychology, or is it
48. your own individual style that you plan in your own way? Do you always plan
49. your essays?"

50. R. "Er, I always...you know, I'm a bit, er...I'm not totally focussed
51. sometimes and I've always got other distractions. And it's easy for me
52. to...when you're working upstairs in the bedroom, like, oh I'll have a cup of
53. tea, and that. The telly...you know what I mean? And I'm not...I've got to be
54. more disciplined, that's the thing I'm always trying to work on. But it...'cause
55. once the distractions are out of the way, I'm O.K. You know? But it's getting
56. there. Like through secondary school and A level, to be honest, I never revised
57. that much, ever. You know, I put it in, but it was always like, the night before.
58. And I always, er...I always seem to scrape by."

59. I. "Why revise the night before? Did you feel confident that you could do it?"

60. R. "No. No, it's just, er...it just hits me then. And the people that do well
61. started off about four weeks ago. Like, er...[laughs]"

62. I. "So can we just go back to the lectures and seminars you mentioned before?
63. You say you get a lot out of the lectures, but not the seminars?"

64. R. "I do get...probably the seminars, I do get bits out of the group. There's a
65. lot of focus on the group, but once you've done that, you know, seems every
66. seminar with the other groups, or...and it just doesn't sort of, seem to be
67. hitting it off."

68. I. "What do you mean, hitting it off?"

69. R. "We get into groups and we're meant to be putting an opinion forward,
70. but...and I know the teachers trying to get at for *all* of us to do it, but er,

71. well...like I think this, and this, and everyone's threw in. But because we
72. don't all know each other, well it's a bit like, well it *might* be that, and then
73. it's all quiet. And that's what it's been like."

74. I. "How different do you think it would be if there was someone you knew?"

75. R. "Er, it would be a lot different, yeah. Er, you sort of know the person...sort
76. of know that they think. How they think, in a way."

77. I. "It's nothing to do with say, perhaps giving the wrong answer?"

78. R. "Yeah, that's it. Yeah."

79. I. "Do you think that holds you back?"

80. R."Oh no. I wouldn't say myself. I do put my opinion forward. But sat as a
81. whole, as a group, yeah. Maybe if someone was a bit chatty and that. And the
82. content of the seminar...there was the one we did about labelling. Labelling
83. some birds, the penguin...and that was like, well it took about tem minutes.
84. And that's what we did, you know what I mean? And I suppose there's more
85. into it if you look into it. And maybe I'll sort of...but everyone thought they'd
86. grasped it, yeah."

87. I. "Did you?"

88. R. "Well I thought everyone...it's just about...you don't go to Chester Zoo to
89. see a sparrow!"

90. I. "Well, no. But what was the whole idea behind that? What was the theory?"

91. R. "Er, what you are familiar with. And what you identify objects with."

92. I. "So you didn't get a lot out of that one?"

93. R. "No. Maybe, er...if...because we had this discussion, doing the feedback
94. thing. And er...don't think it's the tutor we have, er [name], he's excellent
95. doing the lectures, he's got a lot to give. And I think that by following the
96. course, maybe he feels he wants to put his own piece in, but feels that,
97. er...[stops]."

98. I. "So what's good about the lectures then? You prefer lectures to seminars?"

99. R. "Well I wouldn't say I prefer them. But you know, you attend, and there's
100. always the overheads, the videos, and you sit back and just take it in. Digest
101. it."

102. I. "Do you?"

103. R. "Yeah. Sometimes go out of the lectures and like, what do I make of that?
104. But suppose the more...the most I've got out of Psychology is through the

essays. Been forced to look at the books, sort of thing."

I. "And what did you get out of that?"

R. "Well, it's er...I wanted to do Psychology. Had an interest in it. But not really thinking, believing. And then the interest comes with looking in the book. And, well then, so like that means that, and the researchers and that. And then, oh I can put that in the essay! And the experiment, and that one can argue with that one. And then, you know. But as I say, there's a lot more there, a lot more there to do and that. Yeah. I mean yeah, so basically just looking through the books. And I've stuck to like, Hayes like the bible. And looked on the internet, and other books. Cognitive Behaviour, is it?"

I. "Well, there's lots of Cognitive Psychology text books."

R. "Yeah. Can't remember. But putting in little bits and bobs to add. But what I find harder is when you read someone's research, and they have done this. You go to put it in your own words, and it's like...oh *I* was going to put that! And it sounds good, but you just can't think of anything for yourself. So that's...hm."

I. "Could you just use it as a quote?"

R. "Yeah. Mm."

I. "Is there anything you have found that you weren't expecting?"

R. "The Unique Learning seems to be a bit, er...well it seems to be, you do your lessons then you get Unique Learning as a bonus. In Psychology, you know, you're supposed to put in a bit of your time into that. But then Unique Learning comes and that takes up a lot of your time. As it should do. But at the moment it's a bit, er...[stops]."

I. "So what weren't you expecting about it? The fact that you have to do it?"

R. "Yeah, that you have to do it."

I. "Or is it the tasks you have to do, heavier than expected?"

R. "Yeah. Er...or well, I've sort of worked out now with Unique Learning, you only have to pass. I'm taking it as that. But at first, you had people in the lesson who were like, *ooh*, like, oh, what do you have to do for *this*? And the tutors were sort of like, just get it in, and that. And I realise now, just get it down, get it together. But surprised at like, not having a choice to do it."

I. "What's your other subject?"

R. "Sport."

I. "Well, even in Psychology and Sport, you only have to pass in the first

140. year. You'll get grades of course, but that's mainly for you. You just have to
141. pass."

142. R. "Well, to be honest, I'm re-sitting this year because I gave up in January.
143. Had to do my Sports exam in January, so don't have to do Sport until
144. February."

145. I. Have you had to do Unique Learning twice?"

146. R. "Yeah. 'Cause er...I didn't ...I gave up in January. But I suppose it was
147. down to me being a bit...ill. Er...only, er...a bit. You know. Had a bit of a
148. flare up then. But I'm dealing...it's getting better a bit. I suppose it was like,
149. well, I had all that, and I wasn't very motivated as well. Couldn't
150. find...where I was, sort of. Was it because of this, or was I just being a bit
151. lazy. Like a bit of a lazy git. So, er...you know, I had some time, needed a
152. part time job. Er...just sort a few things."

153. I. "Did that help you get straightened out?"

154. R. "Yeah. Yeah. I mean to be honest, I wish I'd...er...er...'cause at A level,
155. I had to re-sit my A level at third year, 'cause I had my operation that year.
156. And er...yeah. So I had to re-sit that year. Got a C, D, and E. Well, I didn't
157. really like the college, the sixth form. I was at [college name]. Er, yeah. So I
158. wish I'd sort of took a proper year out to do, er...what I really want. Like do
159. I really want to go to College or get a job?"

160. I. "Do you think you have made the right choice?"

161. R. "I have now, yeah, I think. Definitely. I want a job I enjoy. But I think
162. sometimes in College, people just do it for other people. Like with myself, I
163. thought, people are geared, you know, to go to Uni."

164. I. "But it is all your choice?"

165. R. "Yeah. It is now, yeah. And I suppose working these two part-time jobs,
166. sort of get on your nerves. Like in the shops, you know, and washing dishes.

167. I. "Why did you come to H.E.?"

168. R. "Er, I think now, to better, to get a head start. Get something behind you
169. and improve yourself a bit and that. Then after, see what happens. I mean, I
170. don't know what I want to be. Just er...just following my interests.

171. I. "Have you got any idea? Sort of, where it is you might want to be at the
172. end of the three years?"

173. R. "Er...it's erm...[stops]".

174. I. "Where do you see yourself?"

175. R. "I've thought of plenty of things. You know, go into the Police, be a
176. teacher, special needs. I don't know. I know my uncle's a Ranger in
177. Birkenhead Park, not in Birkenhead Park, like...hm."

178. I. "Oh, what do they do?

179. R. "What do they do? Nothing! [laughs]. No, I mean, they do, they look after
180. the park, do events. I suppose...I mean I don't want to be a Park Ranger, I
181. was just trying to look for something like that. Something I might enjoy."

182. I. "Do you think...even though you might not have a clear idea now, that
183. might change as you move up the three years?"

184. R. "Yeah. Like it will accelerate my thinking, into...er...'cause I've been
185. glancing at the noticeboard, you know, job opportunities. 'Cause normally
186. like, when you open the paper, you know, you don't see these jobs, do you?
187. So you need to know where to look."

188. I. "Right. A re you inspired by anything on the noticeboard?"

189. R. "Erm...there's bits and bobs. Some of them are like lecturers jobs though,
190. aren't they?

191. I. "That doesn't appeal to you?"

192. R. "No. Well not yet, anyway."

193. I. "Do you see yourself changing at all? Over the course? Would you like to
194. change at all? And in what ways?"

195. R. "Er...be more focussed on my work, you know. Be more studious or
196. whatever. Get it done. I suppose when you are set in one way...I mean I
197. know people who I've gone to school with, like friends, and they can get
198. things done."

199. I. "Alright then. What do you think you have learned so far?"

200. R. "Sort of like an insight into what to expect."

201. I. "But what might be one thing, one thing you might tell to someone who's
202. never been to University? Or two?"

203. R. "Erm...I don't know if they'd be interested."

204. I. "Lets pretend they are. Suppose they are going to be coming along next
205. year. What would you tell them? In your experience, what's it been like for
206. you?"

207. R. "Er...there's lots of opportunities for you. Er...like in Sport. And I've
208. picked up some leaflets on learning a different language. And at the start of

209. the year..er…and just different lessons you can have."

210. I. "So it's broadened your knowledge of opportunities. Is that what you'd
211. say?

212. R. "Yeah."

213. I. "Do you think you could have got that anywhere else?"

214. R. "Well, yeah, you probably could. I suppose I could tell you why I
215. chose…this…I didn't have many points really, higher points to select."

216. I. "I didn't necessarily mean this particular College. I meant anywhere at all
217. in life.

218. R. "It's a bit hard really."

R.C.

1. I. "How are you finding H.E.? In general?"

2. R. "Er…enjoying it. Er…it's hard work, but it's very enjoyable…in terms of
3. being able to get away and do my own work, rather then being pressurised into
4. doing the work in a set timetable. Like in school, it's nine till four, pretty
5. much. Every day, basically, stop and start the work when you want. It's
6. um…it's…I'm really enjoying it."

7. I. "Oh good. That's very positive."

8. R. "Yes, I haven't found anything negative at all".

9. I. "Honestly? Nothing at all?"

10. R. "Nothing comes to mind."

11. I. "O.K. What about…is there anything you weren't expecting?"

12. R. "Er…no. No, I came to…came to the conclusion that I was really interested
13. in doing Psychology. Hadn't had the opportunity to do it at A
14. level…er…um…the school I was at, unfortunately. Um…but I'm really
15. enjoying doing the course. Psychology I was mainly interested in, although
16. they…in the Sociology department wont be too chuffed that I didn't pick
17. Sociology to go *with* Psychology, as opposed to doing the two together.

18. I. "Well, students choose to do different subjects for all sorts of reasons.
19. No-one would be offended by it. Because at the end of it all, you will work
20. just as hard in any [subject], so that's jot an issue. Why couldn't you do
21. Psychology at school? Did you come from Access or A level?"

22. R. "I came from A level. And there was no facility, or desire for the facility to
23. do Psychology. I enquired, as I was going into the G.C.S.E. year and they said
24. there was no intention at all to take Psychology. There was no question in it. It
25. was a shame really. I was already meaning to stay on at that school before I
26. found out. So, yeah.

27. I. "I'm still surprised that you are finding everything so positive. It's a
28. refreshing thing."

29. R. "Well, I've had…I'd say at A level, an awkward two years. So I was
30. coming in, not exactly on a high, but I'm enjoying it here".

31. I. "O.K. How are you finding your lectures?"

32. R. "Enjoyable. Um, yeah. Um…ah…out of them, er…the tutorials are good.
33. Find them both useful."

34. I. "What do you mean by a tutorial?"

35. R. "The Psychology and the Sociology tutorials...the additional hour that they
36. have".

37. I. "Seminars?"

38. R. "Yeah...yeah. Finding them interesting and useful. 'Cause we're taking a
39. slightly deeper look at some topics, which is good, and...um."

40. I. "Do you prefer seminars to lectures then?"

41. R. "I probably prefer lectures to seminars, but not saying I don't like
42. seminars."

43. I. "What's good about lectures?"

44. R. "Er...the pace of them is easy, generally. But not much stopping for
45. questions. Although that does irritate me, you know. After a little while,
46. people keep sitting there, constantly putting their hands up. And just as the
47. lectures getting into the flow, you know? It can be quite irritating. So, I just
48. enjoy listening to them in general."

49. I. "What do you think the lectures are for?"

50. R. "Er...to give you...I wouldn't say er...complete understanding of the topic.
51. I'd say, er...the beginning of the topic; for you to go away and research the
52. rest. They are in-depth, but there's always more that you can do in each
53. topic...to analyse it."

54. I. "Right, That's in both of your lectures? Both subjects?"

55. R. "Yeah."

56. I. "How are you finding the staff? Your lecturers?"

57. R. "Very helpful."

58. I. "The teaching methods in general?"

59. R. "Er...the teaching methods in general are much different to what I've been
60. used to. Er...and I find I prefer them...er...there's a great difference between
61. the two of them and, er....I was in, er...there were thirty to a class. You sat in
62. silence as the teacher dictates the textbook to you. That's the kind of strict
63. school thing I was in, unfortunately. But er...yeah."

64. I. "O.K. What do you think you have learned so far?" I know you have only
65. been around for four weeks."

66. R. "Erm...erm...the way everything isn't entirely based upon...erm...don't
67. know. Hard to say. At the school I was at, er...they were academic motivated,

68. one hundred percent. But the teaching staff here are much more approachable.
69. I find...er...don't know really how to answer that question."

70. I. "No, It's not always easy."

71. R. "Erm...[stops]".

72. I. "Perhaps we could look at that a different way. Say if you were to...do you
73. live in [halls]?"

74. R. "Well, I live about a mile down the road."

75. I. "Right. So you are going out with a group of your mates. None of them have
76. ever been to University at all, and they ask you what it's like. What's the first
77. thing you would tell them? Just one thing?"

78. R. "Well, the first thing I'd say was it's great. That I'm really enjoying it and
79. it's interesting. Enjoyable."

80. I. "Heres another one too. What do you think learning is? Is all about?"

81. R. "Hmm...learning. Er...I think the taking in of information. Er...and
82. perhaps applying it to the situations you come across."

83. I. ""Mm. Could you then perhaps go back and tell me what you think you
84. have learned so far?"

85. Er...what I've learned so far? [laughs]. Er...I don't know."

86. I. "Oh, well that's fine"

87. R. "It's a good question.[laughs]"

88. I. "Can you answer it?"

89. R. "[Laughs] er...well, just learned that there's always different approaches to
90. everything. I mean, there's a vast array...example, the text books. At the other
91. school, it was very standard; you use this text book, and have done with it,
92. type approach. But this, you can look at it from different angles and
93. perspectives."

94. I. "Have you looked at the journal articles yet?"

95. R. "Mm."

96. I. "How do you find them?"

97. I. "Er...find some of them quite interesting."

98. R. "O.K. What do you think getting an education means?"

99. R. "Erm...[stops]."

100. I. "If someone mentions education to you, what is that? What does it mean?"

101. R. "Education is...preparing for later life. And...some of it depends on what
102. you do find useful in later life. But, I think, taking in information. To inform
103. your perspective and things. That's it, isn't it?".

104. I. "Right. And you yourself. What are you hoping to learn?"

105. R. "Er...well...reason I did Psychology was to try and get a perspective of
106. the kinds of human thinking. And I'm very interested in human behaviour,
107. things like that. Er...perhaps to use these new found skills in helping people.
108. And er, in general, work."

109. I. "Have you got a job in view at the end of it? Where do you see yourself in
110. three years time?"

111. R. "Three years time? Hopefully working towards a Masters and Ph.D.
112. Sounds silly, but I've already started looking around."

113. I. "Why's that silly?"

114. R. "A lot of people say well, you've still three years to go,. And you don't
115. know which school of Psychology you'll go into. But I've started looking
116. around and there's a few areas I'm interested in."

117. I. "What areas are you interested in?"

118. R. "Er..Cognitive. And er...there's a ...I'm interested in Parapsychology as
119. well. And so...yeah."

120. I. "How have you found your first essay?"

121. R. "Er...challenging."

122. I. "In what way?"

123. R. "Well, I've never done Psychology before, and I chose the...what people
124. would say was the do or die essay, on metaphor. I found it difficult.
125. Searched everywhere, through all the University libraries in Liverpool. Just
126. finding books on metaphor is something. Then, trying to take it all in. Got a
127. bibliography, it's a full page of A4. So...yeah. I enjoyed finishing it
128. [laughs]. Yeah. And erm...I've already been to the library and got some
129. more books out for the second Psychology essay."

130. I. "How do you think you have done?"

131. R. "Oh...er...well...I went to the seminar on Tuesday,. And there was...I

132. noticed on the notice-board there was a list of suggested essay plans. And
133. mine was...well, there were very few things on it that I had mentioned that
134. were on the list. But I took what I had done to [tutor] and he said it was fine.
135. Said it was probably best that I didn't mention everything that was on that
136. list. And er...well, we'll have to see."

137. I. "B you didn't really struggle with it as such?"

138. R. "No. Er...[stops]."

139. I. "Do you think you could have done any of the others more easily?"

140. R. "Well I looked at the others and they were all more...containing, kind
141. of...in the fact that there's more, from what I could tell, kind of scope for the
142. one I was doing. Than the one on free will, and evolutionary. And I just
143. found on the whole...my understanding, my interest in Cognitive and
144. that...and I just found it interesting. Have to see what happens".

145. I. "Anticipating your mark?2

146. R. "Erm...I haven't got a clue. Unfortunately. Hope it will be good. But,
147. 'cause it's my first essay in Psychology, and not really knowing what to
148. expect."

149. I. "But you have done Sociology before?"

150. R. "I've not done either of them before [laughs]. So it's a completely new
151. experience for me. Yeah. At A level, I did Maths, Economics and Spanish.
152. Mm. Quite how I ended up doing Sociology, I don't know"

153. I. "So your pigeonhole is really quite big, isn't it?"

154. R. "Yeah. Er...I like to diversify. But I like to focus very much on
155. Psychology. Just fascinated by it. I mean, even at A level, I was reading
156. books on Psychology. I found this second hand bookshop and got a load of
157. Psychology books. Introducing Psychology, the basics. So I know...there's
158. going to be people here who have done either one, or two of the subjects
159. before, so I might as well try to help myself along. Erm...and yeah. Think it
160. has probably helped. I know some of the information before we cover it.
161. Find it all fascinating."

162. I. "That's good, isn't it!"

163. R. "Fascinating!"

164. I. "No, I meant more that you can go into class, and know."

165. R. "Yeah, yeah. If you go in blank and...it's obviously no point in being
166. there. Er...but if you have a background, or just limited knowledge, then you
167. can do. "

168. I. "Anything else you would like to mention? I know you've only been here
169. four weeks and these aren't easy questions."

170. R. "Well, I'm really enjoying the course. I know that much so far. I've
171. learned Psychology is a very interesting subject, that I would like to spend a
172. lot of my life in it."