Scoring Key for the
Approaches and Study Skills Inventory for Students *(ASSIST)*

A. What is learning? – Conceptions of learning

This first section can be omitted. It is still at an early stage of development, but it is based on the conceptions of learning described by Marton & Saljo (1996) and extended by Hattie (1996). The categories can be seen as a hierarchy, although not all the steps or categories are generally agreed. The first four, to a decreasing extent, tend to relate to an instrumental approach and can therefore be combined to indicate a conception of learning as reproducing knowledge, while the remaining four cover a view of learning involving personal understanding and development.

g. Getting on with the things you've got to do.
c. Building up knowledge by acquiring facts and information.
a. Making sure you remember things well.
e Being able to use the information you've acquired.
f. Understanding new material for yourself.
h. Seeing things in a different and more meaningful way.
d. Using all your experiences in life.
b. Developing as a person.
i. Being able to relate to people better.

B. Approaches to studying

Approaches to studying derive from Marton & Saljo's (1976, 1997) ideas on approaches to learning, combined with Entwistle & Ramsden's (1983, see also Ramsden & Entwistle, 1979) descriptions on a strategic approach to studying. The first three sub-scales in each approach are most consistently related to each other, and can be combined with confidence. Subsequent sub-scales are more likely to vary in their relationships across different samples. Relationships thus need to be checked in the particular sample used for the study. Descriptions of the development and use of this particular version of the inventory will be found in Tait & Entwistle (1996), Tait, Entwistle & McCune (1998) and Entwistle, Tait & McCune (1999, in press).

Scoring procedure

Students respond to items on a 1 - 5 scale (5 high). Sub-scale scores are formed by adding together the responses on the items in that sub-scale. Scores on the three main approaches are created by adding together the sub-scale scores which contribute to each approach. Scoring can be carried out by computer, using a program such as SPSS. Each item is set as a variable (e.g. D04 = Deep item 4), and then a sub-scale total is produced by creating a new variable by summing the items. For example, Seeking Meaning (SM) = D04 + D17 +D30 + D43. Then the approaches can be created in the same way Deep Approach (DA) = SM + RI + UE + II.

Deep Approach

Seeking meaning

4. I usually set out to understand for myself the meaning of what we have to learn.
17. When I'm reading an article or book, I try to find out for myself exactly what the author means.
30. When I am reading I stop from time to time to reflect on what I am trying to learn from it.
43. Before tackling a problem or assignment, I first try to work out what lies behind it.

Relating ideas

11. I try to relate ideas I come across to those in other topics or other courses whenever possible.
21. When I'm working on a new topic, I try to see in my own mind how all the ideas fit together.
33 Ideas in course books or articles often set me off on long chains of thought of my own.
46. I like to play around with ideas of my own even if they don't get me very far.

Use of evidence

9 I look at the evidence carefully and try to reach my own conclusion about what I'm studying.
23. Often I find myself questioning things I hear in lectures or read in books.
36. When I read, I examine the details carefully to see how they fit in with what's being said.
49. It's important for me to be able to follow the argument, or to see the reason behind things.

Interest in ideas (*Related sub-scale*)

13. Regularly I find myself thinking about ideas from lectures when I'm doing other things.
26. I find that studying academic topics can be quite exciting at times.
39. Some of the ideas I come across on the course I find really gripping.
52. I sometimes get 'hooked' on academic topics and feel I would like to keep on studying them.

Strategic approach

Organised studying

1. I manage to find conditions for studying which allow me to get on with my work easily.
14. I think I'm quite systematic and organised when it comes to revising for exams.
27. I'm good at following up some of the reading suggested by lecturers or tutors.
40. I usually plan out my week's work in advance, either on paper or in my head.

Time management

5. I organise my study time carefully to make the best use of it.
18. I'm pretty good at getting down to work whenever I need to.
31. I work steadily through the term or semester, rather than leave it all until the last minute.
44. I generally make good use of my time during the day.

Alertness to assessment demands

2. When working on an assignment, I'm keeping in mind how best to impress the marker.
15. I look carefully at tutors' comments on course work to see how to get higher marks next time.
28. I keep in mind who is going to mark an assignment and what they're likely to be looking for.
41. I keep an eye open for what lecturers seem to think is important and concentrate on that.

Achieving (*Related sub-scale)*

10. It's important to me to feel that I'm doing as well as I really can on the courses here.
24. I feel that I'm getting on well, and this helps me put more effort into the work.
37. I put a lot of effort into studying because I'm determined to do well.
50. I don't find it at all difficult to motivate myself.

Monitoring effectiveness (*Related sub-scale)*

7. I go over the work I've done carefully to check the reasoning and that it makes sense.
20 I think about what I want to get out of this course to keep my studying well focused.
34. Before starting work on an assignment or exam question, I think first how best to tackle it.
47. When I have finished a piece of work, I check it through to see if it really meets the requirements.

Surface Apathetic Approach

Lack of purpose

3. Often I find myself wondering whether the work I am doing here is really worthwhile.
16. There's not much of the work here that I find interesting or relevant.
29. When I look back, I sometimes wonder why I ever decided to come here.
42. I'm not really interested in this course, but I have to take it for other reasons.

Unrelated memorising

6. I find I have to concentrate on just memorising a good deal of what I have to learn.
19. Much of what I'm studying makes little sense: it's like unrelated bits and pieces.
32. I'm not really sure what's important in lectures, so I try to get down all I can.
45. I often have trouble in making sense of the things I have to remember.

Syllabus-boundness

12. I tend to read very little beyond what is actually required to pass.
25. I concentrate on learning just those bits of information I have to know to pass.
38. I gear my studying closely to just what seems to be required for assignments and exams.
51. I like to be told precisely what to do in essays or other assignments.

Fear of failure (*Related sub-scale)*

8. Often I feel I'm drowning in the sheer amount of material we're having to cope with.
22. I often worry about whether I'll ever be able to cope with the work properly.
35. I often seem to panic if I get behind with my work.
48. Often I lie awake worrying about work I think I won't be able to do.

Preferences for different types of course and teaching Scored as the sum of the four items.

Supporting understanding *(related to a deep approach)*

b. - lecturers who encourage us to think for ourselves and show us how they themselves think.
c. - exams which allow me to show that I've thought about the course material for myself.
f. - courses where we're encouraged to read around the subject a lot for ourselves.
g. - books which challenge you and provide explanations which go beyond the lectures.

Transmitting information *(related to a surface approach)*

a. - lecturers who tell us exactly what to put down in our notes.

d. - exams or tests which need only the material provided in our lecture notes.

e. - courses in which it's made very clear just which books we have to read.

h. - books which give you definite facts and information which can easily be learned.

Recent analyses using *ASSIST*

A maximum likelihood factor analysis of 817 first-year university students drawn from ten contrasting departments in six British universities who completed *ASSIST.*

Table 1
Factor pattern matrix for conceptions, approaches, and preferences for teaching

(N = 817, 54.5 % variance) **Factor**	**I**	**II**	**III**	
(alpha)*	Deep	Strategic	Surface apathetic	
Conceptions of learning				
Learning as reproducing		(.20)	(.13)	
Learning as transforming	.41			
Approaches to Studying				
Deep approach				**(0.84)**
Seeking meaning	.72			(0.57)
Relating ideas	.79			(0.59)
Use of evidence	.77			(0.53)
Interest in ideas	.65			(0.76)
Strategic approach				**(0.80)**
Organised studying		.76		(0.54)
Time management		.87		(0.68)
Monitoring effectiveness	.45	.43		(0.62)
Achievement motivation		.73		(0.76)
Surface apathetic approach				**(0.87)**
Lack of understanding			.77	(0.57)
Lack of purpose			.42	(0.76)
Syllabus boundness			.42	(0.55)
Fear of failure			.73	(0.69)
Preferences for teaching which				
Encourages understanding	.61			(0.62)
Transmits information			.35	(0.69)

Correlations between factors *

	I	**II**	**III**
Factor I **(Deep)**	1.00		
Factor II **(Surface Apathetic)**	- 0.20	1.00	
Factor III **(Strategic)**	0.35	- 0. 22	1.00

Note: Rotated maximum likelihood analysis with delta set at zero.
Loadings less than 0.3 have mostly been omitted. * from a subsequent analysis of data described for Table 3 below

This development from the *ASI* includes additional scales intended to extend the description of studying and reactions to teaching. The definition of the strategic approach has also been broadened to include an aspect of metacognition and self-regulation - monitoring effectiveness. The surface approach puts more emphasis on ineffective studying through the inclusion of a scale indicating a 'lack of purpose', and the scale is now called 'surface apathetic'. The sub-scales included in this analysis were those contributing to the three main factors described above, supported by items describing students' conceptions of learning and their preferences for different kinds of teaching. Three factors produced eigen values above unity and that solution also provided the best balance between interpretability and the percentage of variance explained.

The original version of the *ASI* explicitly included Pask's two styles of learning. In *ASSIST*, however, these have been subsumed within the definition of the deep approach, which is taken to require both ways of thinking - relating ideas (holist) and using evidence (serialist) - or a versatile style in learning. The factor analysis confirms that these two processes link closely with both the intention to seek meaning and interest in ideas (an attitudinal correlate of intrinsic motivation). Linkages between approach and motive are also clear-cut within the strategic approach, where achievement motivation (Atkinson & Feather, 1966) is strongly associated with both organised studying and time management. Similarly, the 'surface apathetic' factor brings together syllabus boundness and lack of understanding with both lack of purpose and fear of failure.

As in previous studies, the deep approach is linked with a conception of learning as 'transforming' (e.g. Meyer, 1999), and also with a preference for teaching which encourages and challenges understanding (Entwistle & Tait, 1990). A parallel finding indicates that students with a reproducing conception, adopting a surface apathetic approach, prefer teaching that transmits information and directs learning towards assessment requirements, although this is less marked in the analysis shown in Table 1. Other research has indicated that students who show a deep strategic approach are also better able to discern and utilise the aspects of a learning environment which will support their way of studying (Meyer, Parsons & Dunne, 1990; Meyer, 1991).

Versions of *ASSIST* have been used in studies with rather different purposes. One recent study was designed to investigate reasons for poor performance in the first year at university. Deep, strategic and surface apathetic approaches were treated as single scales, but the motive components were kept separate. The items describing conceptions were not used, but additional items indicated how well-prepared for university students judged themselves to be, and what had influenced their studying. The inventory was given to 604 first-year students from six departments in a technological university.

The analysis (Table 2) showed separate factors describing strategic and surface apathetic approaches. The strategic approach in Factor I linked the achieving motive with high academic performance and, more weakly, with a lack of interference in studying from social or sporting activities. The surface apathetic approach in Factor II was associated not just with fear of failure, but also with inadequate prior knowledge (particularly in mathematics) and, less strongly, with the effects on studying of doing paid work or of personal relationships. This combination, not surprisingly, was negatively related to academic performance. The final factor showed its highest loadings on interest in academic content and deep approach, but it also showed elements of both strategic (positive) and surface apathetic (negative) approaches, together with a similar pattern for teaching preferences.

Table 2

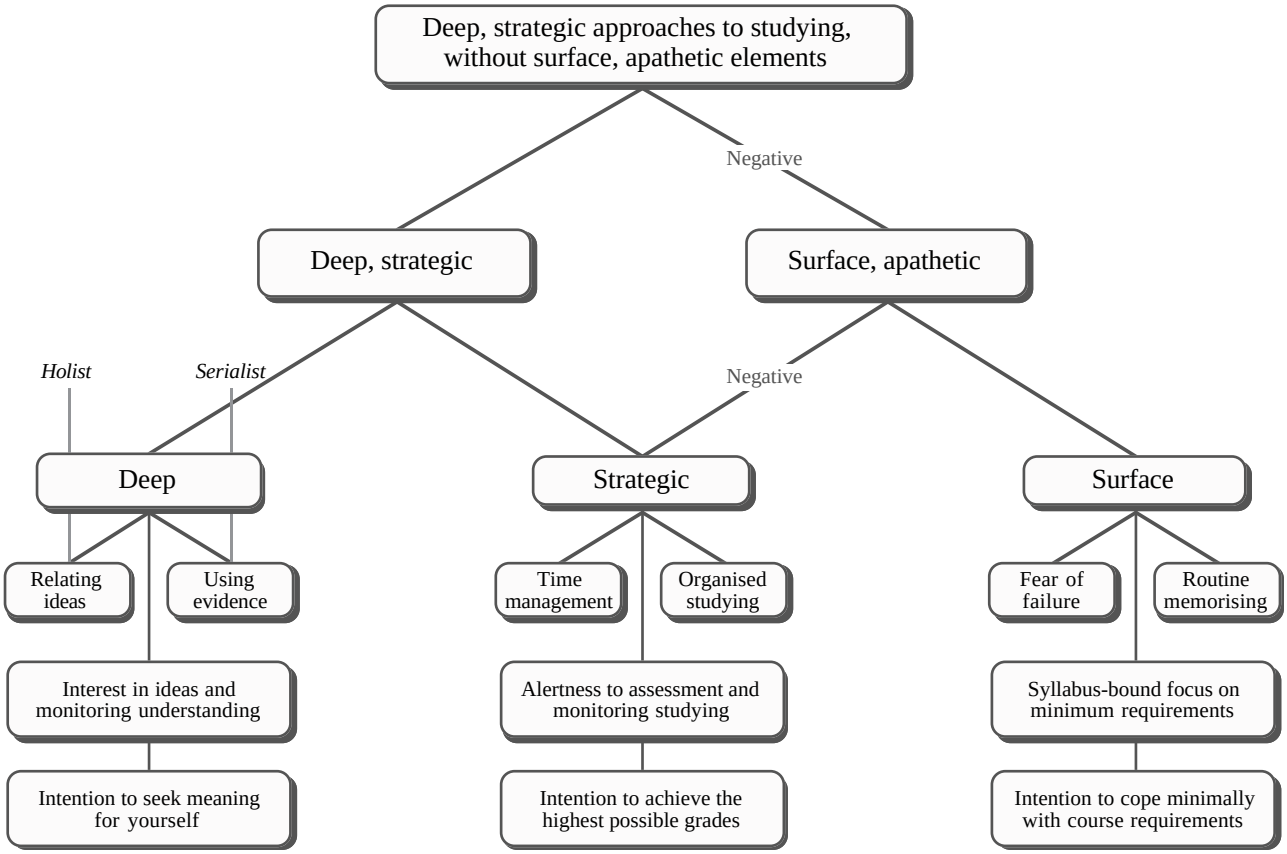
Factor pattern matrix for variables derived from a modified version of *ASSIST*

(N = 604, 46.0% variance)	**Factors**	**I** Strategic	**II** Surface apathetic	**III** Deep, non-apathetic
Preparation for higher education				
Choosing courses out of interest				.42
Experience in studying independently			(- .25)	
Having adequate prior knowledge			- .46	
Approaches to studying (excluding motives)				
Deep approach				.70
Strategic approach		.75		(.27)
Surface apathetic approach			.53	- .39
Motives for studying				
Interest in the content				.75
Achieving high grades		.81		
Fear of failure			.78	
Influences on studying				
Social or sporting activities		- .31		
Doing paid work			.31	
Personal relationships			.39	
Difficulties with maths			.38	
Teaching preferences				
Encouraging understanding				.55
Transmitting information				(- .26)
Academic performance				
Average first term marks		.43	- .46	

Rotated maximum likelihood analysis with delta set at zero. Loadings less than 0.3 have mostly been omitted.
The low percentage of variance explained is partly due to the presence of seven single item variables.

The factor analyses shown in Tables 3 and 4 suggest an even broader construct summarising the components of effective studying. It bridges the combination of holist and serialist modes of thinking, and also includes a strategic awareness of the rules of the academic assessment game and of how to use relevant aspects of the learning environment. Figure 1 presents a conceptual mapping of these relationships, building up a hierarchical pattern from the sub-scales of *ASSIST* to a broader, idealised view of the successful student. It also indicates some of the other linkages identified in the factor analyses, suggesting that the approach to studying is affected both by the student's conception of learning and by the type of teaching experienced. The negative relationships shown in the concept map indicate that low scores on the strategic approach are related to the apathetic approach, while low levels of surface approach contribute to being a successful student.

Figure 1
Conceptual mapping of components of effective studying from ASSIST



Dissonance in approaches to studying

The factor structure of *ASSIST* is clear-cut and has been confirmed with other samples and at different levels of performance. These factors, and the aspects of studying they have been designed to tap, then provided a well-established analytic categories for describing general tendencies in studying and their correlates. Factor analysis describes the relationships between variables in ways which show the broad overall pattern clearly, but cannot identify different patterns of relationship which may exist in sub-groups within a population (Meyer, 2000). For this reason, alternative methods of analysis have been used, such as cluster analysis, which groups together individuals who have responded to items in similar ways. By considering how the samples differ on additional variables not included in the cluster analysis, a clearer picture of the nature of the clusters can then be obtained. In a recent analysis (Entwistle, Tait & McCune, 2000) data from *ASSIST* was obtained from 1284 first-year students from three long established and three recently established British universities covering a spread of areas of study. A k-means relocation analysis was carried out. This method allows the fullest possible description of the clusters. As the defining features of clusters vary as increasing numbers of clusters are selected, it is important to check the stability of these features both through the cluster levels and from split-half solutions at the same level (Entwistle & Brennan, 1971; Entwistle & Ramsden, 1983). For these purposes, the six, twelve and eighteen cluster solutions were examined, with the eighteen level giving the clearest differences. The full sample was then split randomly into comparable halves using the appropriate SPSS procedure, and the eighteen cluster solution repeated for samples of 665 and 619 students respectively.

To illustrate the kinds of variation which can be obtained using this technique, Table 3 compares two high achieving groups and two whose self-rating of their academic progress was much lower. Group 1 is the usual pattern of responses found among highly successful students – a deep strategic approach with low scores on surface apathetic. Group 2 differs somewhat (as indicated by the figures in bold) in that these students, more of whom were female and from non-science courses, combined deep, well-organised and well-motivated studying with relatively high levels of anxiety and syllabus boundness. Group 4 shows the opposite characteristics of Group 1 and also have the lowest self-ratings of academic progress. Group 3, with almost equally poor levels of performance, respond in ways which suggest a 'dissonant' pattern of responses, with the surface apathetic approach being associated with indications of a relatively strong deep approach.

Table 3 Pattern of means describing the centroids of clusters with contrasting self-ratings on academic progress within the 18 cluster solution

Cluster means					
Sub-scales	**1**	**2**	**3**	**4**	
(N = in 1284 sample)	(60)	(73)	(43)	(22)	
Deep Approach					
Seeking meaning	17.2	15.7	**13.4**	9.1	
Relating ideas	16.3	15.1	**14.4**	9.2	
Use of evidence	16.6	15.7	**14.5**	9.8	
Interest in ideas	16.9	15.9	**13.0**	6.6	
Surface Apathetic Approach					
Lack of understanding	7.9	9.9	14.2	12.2	
Lack of purpose	5.0	5.8	14.1	15.8	
Syllabus-boundness	8.7	**12.3**	16.5	18.0	
Fear of failure	8.8	**14.1**	17.1	13.4	
Strategic Approach					
Organised studying	16.4	14.4	8.7	7.3	
Time management	17.2	14.9	7.1	6.2	
Monitoring effectiveness	16.8	15.8	**11.5**	7.6	
Achievement motivation	18.0	16.5	9.2	7.9	
Preferences for learning environments					
Deep (Encouraging understanding)	17.4	15.6	13.4	10.2	
Surface (Transmitting information)	16.2	17.5	17.5	18.6	
Descriptive statistics (not used in forming the clusters)					
Self-rating of ac. progress (out of 9)	6.8	6.7	4.0	3.5	
% of cluster who were					*(% in total sample)*
in pre-1990s university	80.0	**71.3**	**48.8**	59.1	(68.7)
in science and engineering	56.6	**48.0**	**62.8**	77.3	(55.8)
male	46.7	**34.2**	**58.1**	68.2	(54.0)

Defining a deep approach

Research using the ASI and interviews looking at approaches to studying allow a fuller picture of the defining features of the deep approach to be presented (Table 4 - from McCune & Entwistle, 2000). The core aspect of a fully developed deep approach is the intention to form a personal understanding of the topic under study, this is then combined with a range of conceptually related learning processes. Unsurprisingly, students taking a deep approach also tend to show active engagement and interest in their studies.

Table 4 Elements of the deep approach

Intention to understand
Active interest and personal engagement
Relating ideas
Gaining an overview
Creating outlines and structures
Questioning and using evidence critically
Seeking the central point
Drawing conclusions
Seeing the purpose of a task or seeing it in its wider context

While this research has confirmed and extended our understanding of patterns of study behaviour in relation to academic achievement, and indicated the general influences of methods of teaching and assessment, it is much less successful at providing full or detailed descriptions of individual students' learning. Approaches to learning and studying provide analytic abstractions which summarise research findings and simplify the complexity of everyday studying. While such concepts have proved useful, observed behaviour and interviews leading to case studies (McCune, 2000; McCune & Entwistle, 2000) suggest the importance of the idiosyncratic details of students' learning and the complex effects of differing learning environments.

References

Entwistle, N. J. & Ramsden, P. (1983). *Understanding student learning.* London: Croom Helm.

Entwistle N. J , Tait, H. & McCune, V. (2000). Patterns of response to an approaches to studying inventory across contrasting groups and contexts. *European Journal of the Psychology of Education*, (in press).

Richardson, J. T. E. (2000). *Researching Student Learning.* Buckingham: Open University Press & SRHE.

Tait, H. & Entwistle, N. J. (1996). Identifying students at risk through ineffective study strategies. *Higher Education,* 31, 99-118.

Tait, H., Entwistle, N. J., & McCune, V. (1998). *ASSIST:* a reconceptualisation of the *Approaches to Studying Inventory.* In C. Rust (ed.) *Improving students as learners.* Oxford: Oxford Brookes University, The Oxford Centre for Staff and Learning Development.

Marton, F., & Säljö, R. (1976). On qualitative differences in learning. I. Outcome and process. *British Journal of Educational Psychology*, 46, 4-11.

Marton, F., & Säljö, R. (1997). Approaches to learning. In F. Marton, D. J. Hounsell, & N. J. Entwistle (Eds.), *The experience of learning* (2nd ed.). Edinburgh: Scottish Academic Press.

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

Tait, H. & Entwistle, N. J. (1996). Identifying students at risk through ineffective study strategies. *Higher Education,* 31, 99-118.

A S S I S T

Approaches and Study Skills Inventory for Students

(Short version)

This questionnaire has been designed to allow you to describe, in a systematic way, how you go about learning and studying. The technique involves asking you a substantial number of questions which overlap to some extent to provide good overall coverage of different ways of studying. Most of the items are based on comments made by other students. Please respond truthfully, so that your answers will **accurately** describe your **actual** ways of studying, and work your way through the questionnaire quite **quickly.**

Background information

Name or Identifier ..... **Age ..... years** **Sex** M / F

University or College ..... **Faculty or School .....**

Course ..... **Year of study .....**

A. What is learning?

When you think about the term 'LEARNING ', what does it mean to you?

*Consider each of these statements carefully, and rate them in terms of how close they are to **your own** way of thinking about it.*

		Very close	*Quite close*	*Not so close*	*Rather different*	*Very different*
a.	Making sure you remember things well.	5	4	3	2	1
b.	Developing as a person.	5	4	3	2	1
c.	Building up knowledge by acquiring facts and information.	5	4	3	2	1
d	Being able to use the information you've acquired.	5	4	3	2	1
e.	Understanding new material for yourself.	5	4	3	2	1
f.	Seeing things in a different and more meaningful way.	5	4	3	2	1

Please turn over

B. Approaches to studying

The next part of this questionnaire asks you to indicate your relative agreement or disagreement with comments about studying again made by other students. Please work through the comments, giving your **immediate** response. In deciding your answers, think in terms of **this particular lecture course.** It is also very important that you answer **all** the questions: check you have.

***5** means agree (√) **4** = agree somewhat (√?) **2** = disagree somewhat (**x?**) **1** = disagree (**x**).*

*Try <u>not</u> to use **3** = unsure (**??**), unless you really have to, or if it cannot apply to you or your course.*

		√	√?	??	x?	x
1.	I manage to find conditions for studying which allow me to get on with my work easily.	5	4	3	2	1
2.	When working on an assignment, I'm keeping in mind how best to impress the marker.	5	4	3	2	1
3.	Often I find myself wondering whether the work I am doing here is really worthwhile.	5	4	3	2	1
4.	I usually set out to understand for myself the meaning of what we have to learn.	5	4	3	2	1
5.	I organise my study time carefully to make the best use of it.	5	4	3	2	1
6.	I find I have to concentrate on just memorising a good deal of what I have to learn.	5	4	3	2	1
7.	I go over the work I've done carefully to check the reasoning and that it makes sense.	5	4	3	2	1
8.	Often I feel I'm drowning in the sheer amount of material we're having to cope with.	5	4	3	2	1
9.	I look at the evidence carefully and try to reach my own conclusion about what I'm studying.	5	4	3	2	1
10.	It's important for me to feel that I'm doing as well as I really can on the courses here.	5	4	3	2	1
11.	I try to relate ideas I come across to those in other topics or other courses whenever possible.	5	4	3	2	1
12.	I tend to read very little beyond what is actually required to pass.	5	4	3	2	1
13.	Regularly I find myself thinking about ideas from lectures when I'm doing other things.	5	4	3	2	1
14.	I think I'm quite systematic and organised when it comes to revising for exams.	5	4	3	2	1
15.	I look carefully at tutors' comments on course work to see how to get higher marks next time.	5	4	3	2	1
16.	There's not much of the work here that I find interesting or relevant.	5	4	3	2	1
17.	When I read an article or book, I try to find out for myself exactly what the author means.	5	4	3	2	1
18.	I'm pretty good at getting down to work whenever I need to.	5	4	3	2	1
19.	Much of what I'm studying makes little sense: it's like unrelated bits and pieces.	5	4	3	2	1
20.	I think about what I want to get out of this course to keep my studying well focused.	5	4	3	2	1
21.	When I'm working on a new topic, I try to see in my own mind how all the ideas fit together.	5	4	3	2	1
22	I often worry about whether I'll ever be able to cope with the work properly.	5	4	3	2	1
23.	Often I find myself questioning things I hear in lectures or read in books.	5	4	3	2	1
24.	I feel that I'm getting on well, and this helps me put more effort into the work.	5	4	3	2	1
25.	I concentrate on learning just those bits of information I have to know to pass.	5	4	3	2	1
26.	I find that studying academic topics can be quite exciting at times.	5	4	3	2	1
27.	I'm good at following up some of the reading suggested by lecturers or tutors.	5	4	3	2	1
28.	I keep in mind who is going to mark an assignment and what they're likely to be looking for.	5	4	3	2	1
29.	When I look back, I sometimes wonder why I ever decided to come here.	5	4	3	2	1
30.	When I am reading, I stop from time to time to reflect on what I am trying to learn from it.	5	4	3	2	1

		√	√?	??	x?	x
31.	I work steadily through the term or semester, rather than leave it all until the last minute.	5	4	3	2	1
32.	I'm not really sure what's important in lectures so I try to get down all I can.	5	4	3	2	1
33.	Ideas in course books or articles often set me off on long chains of thought of my own.	5	4	3	2	1
34.	Before starting work on an assignment or exam question, I think first how best to tackle it.	5	4	3	2	1
35.	I often seem to panic if I get behind with my work.	5	4	3	2	1
36.	When I read, I examine the details carefully to see how they fit in with what's being said.	5	4	3	2	1
37.	I put a lot of effort into studying because I'm determined to do well.	5	4	3	2	1
38.	I gear my studying closely to just what seems to be required for assignments and exams.	5	4	3	2	1
39.	Some of the ideas I come across on the course I find really gripping.	5	4	3	2	1
40.	I usually plan out my week's work in advance, either on paper or in my head.	5	4	3	2	1
41.	I keep an eye open for what lecturers seem to think is important and concentrate on that.	5	4	3	2	1
42.	I'm not really interested in this course, but I have to take it for other reasons.	5	4	3	2	1
43.	Before tackling a problem or assignment, I first try to work out what lies behind it.	5	4	3	2	1
44.	I generally make good use of my time during the day.	5	4	3	2	1
45.	I often have trouble in making sense of the things I have to remember.	5	4	3	2	1
46.	I like to play around with ideas of my own even if they don't get me very far.	5	4	3	2	1
47.	When I finish a piece of work, I check it through to see if it really meets the requirements.	5	4	3	2	1
48	Often I lie awake worrying about work I think I won't be able to do.	5	4	3	2	1
49	It's important for me to be able to follow the argument, or to see the reason behind things.	5	4	3	2	1
50.	I don't find it at all difficult to motivate myself.	5	4	3	2	1
51.	I like to be told precisely what to do in essays or other assignments.	5	4	3	2	1
52.	I sometimes get 'hooked' on academic topics and feel I would like to keep on studying them.	5	4	3	2	1

C. Preferences for different types of course and teaching

***5** means definitely like (√) **4** = like to some extent (√?) **2** = dislike to some extent (**x?**) **1** = definitely dislike (**x**).*
*Try <u>not</u> to use **3** = unsure (**??**), unless you really have to, or if it cannot apply to you or your course.*

		√	√?	??	x?	x
a.	lecturers who tell us exactly what to put down in our notes.	5	4	3	2	1
b.	lecturers who encourage us to think for ourselves and show us how they themselves think	5	4	3	2	1
c.	exams which allow me to show that I've thought about the course material for myself.	5	4	3	2	1
d.	exams or tests which need only the material provided in our lecture notes.	5	4	3	2	1
e.	courses in which it's made very clear just which books we have to read.	5	4	3	2	1
f.	courses where we're encouraged to read around the subject a lot for ourselves.	5	4	3	2	1
g.	books which challenge you and provide explanations which go beyond the lectures.	5	4	3	2	1
h.	books which give you definite facts and information which can easily be learned.	5	4	3	2	1

Finally, how well do you think you have been doing in your assessed work overall, so far?

*Please rate yourself **objectively**, based on the grades you have been obtaining*

Very well		*Quite Well*		*About average*		*Not so well*		*Rather badly*
9	8	7	6	5	4	3	2	1

Thank you very much for spending time completing this questionnaire: it is much appreciated.