University of Brighton

# Centre for Learning and Teaching

# Study Pack

# Module Design

**2014 edition**

# Contents

# Module design

## Introduction

The main aim of this study pack is to enhance your understanding of the general principles, processes and decisions involved in the design of modules. This enhanced understanding will support your professional development in several ways. It is common practice now for modules to be evaluated after each iteration, often as part of the course review or Academic Health Report processes. Following your work on this pack you should be able to make an enhanced contribution to evaluative reviews of this kind. Moreover, the adaptation of established modules and the creation of new ones are such frequent occurrences now that it is very likely you will be involved in one or other of these activities quite soon, if you are not already. Furthermore, because most courses now comprise a large number of modules, even lecturers who are quite new to teaching are often asked to take on the role of module leader. You may already have this responsibility. If you don't, you probably will before very long. Having worked on this pack, you should be able to undertake these activities and responsibilities in a more confident, competent manner.

Most undergraduate and postgraduate courses in the UK are now 'modularised' and in most cases modules will be designed according to the general principles and processes discussed in this pack, some of which derive from the national higher education qualification framework developed by the Quality Assurance Agency (QAA). However, it is important to note two points. Firstly, there are often subtle differences in the ways in which particular universities implement these general principles and processes. To evaluate existing modules or design new ones in a fully informed manner, we therefore need to be familiar with all the relevant institutional and local (Faculty/ School/course) regulations and requirements – especially, perhaps, those that relate to assessment. The materials in this pack deal mainly with the general principles and processes, so you will probably also need to ask colleagues about specific institutional and local details. The University's General Examination and Assessment Regulations (GEAR) are available on staffcentral at http://staffcentral.brighton.ac.uk/documents/gear.shtm. Secondly, some people in higher education express serious concerns about the principles and procedures considered below, and a summary of these concerns will be offered in the final section of the pack.

This pack, then, has been designed to help you to:

1. enhance your understanding of the general principles, processes and decisions involved in the design of modules
2. evaluate the design of current modules, and identify potential improvements
3. contribute to the design of new modules (including: writing clear educational aims and unambiguous learning outcomes appropriate to a specific academic level, and selecting appropriate teaching, learning and assessment strategies).

The pack is organised into four sections, as follows:

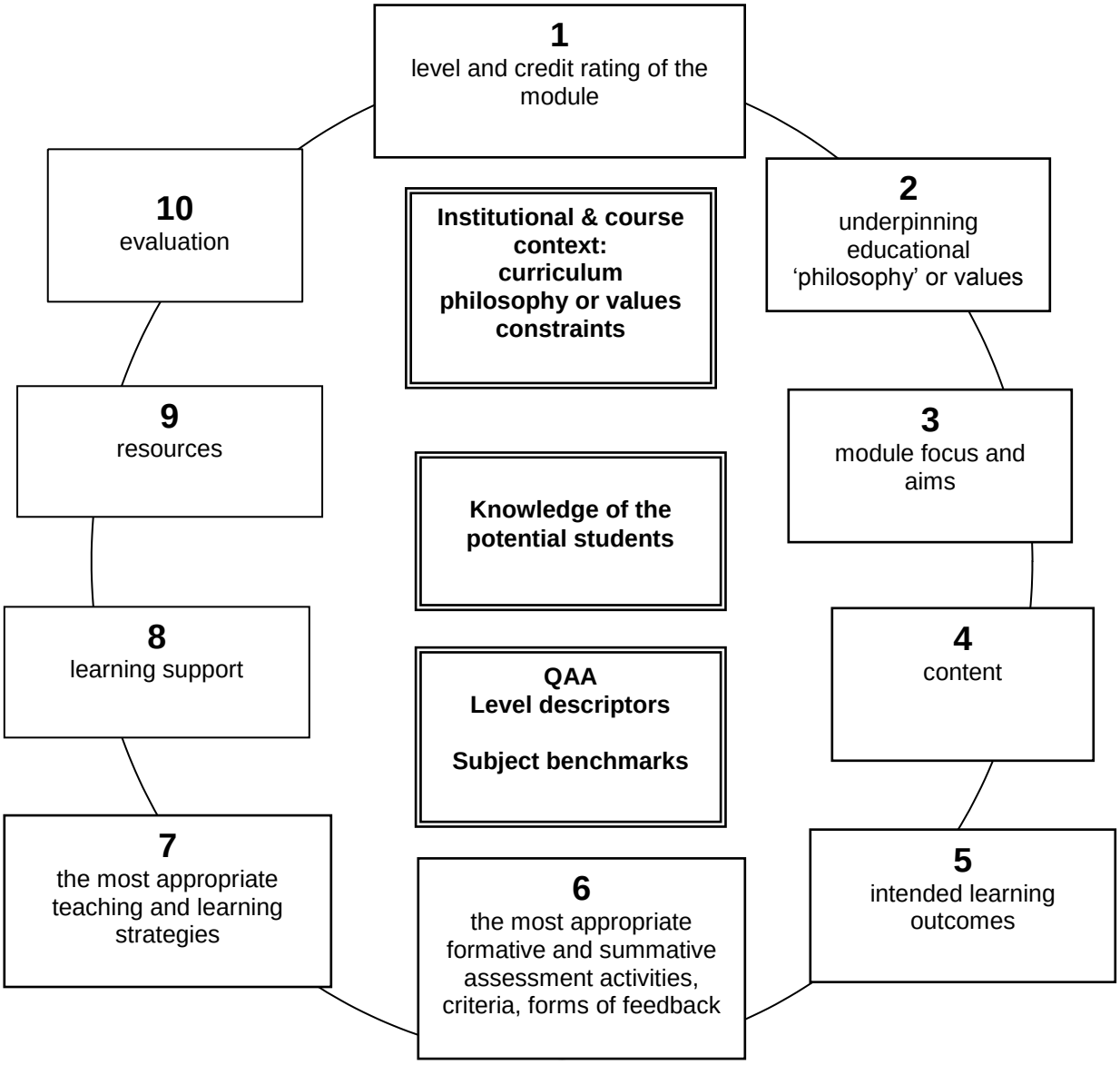
1. a brief overview of the module design process
2. two specified readings, both brief, the first by Susan Toohey, the second by Raf Salkie.
3. a set of activities
4. a brief summary of concerns about the principles and processes discussed in the pack.

We recommend that you work through these sections in this order.

Finally, we should point out that, although this pack is concerned with the design of modules, much the same principles, processes and decisions are involved in the design of courses or programmes, and also individual teaching sessions. If you would like practical advice about the design of the latter, there is a supplement to this pack in the studentcentral folder which you may find useful.

**The module design process in outline**

*Fig 1: some key factors in the design of modules*



In Figure 1 above, we have tried to provide a simple model of the module design process. See Toohey chapter 2 for other models. We suggest that, in designing and evaluating modules, these factors should be considered in a logical sequence. However, it is important to acknowledge that the model is not definitive. It can be plausibly argued that the factors should be considered in a different order and that additional factors should be included. This section provides a brief commentary on the various factors in the model. The two specified readings discuss these factors in more detail.

**Institutional & course context: curriculum, philosophy or values, constraints**
**Knowledge of the potential students**
**QAA Level descriptors and Subject benchmarks**

The three boxes in the centre of the model are intended to remind us that the design of a module should take full account of the institutional and course contexts in which it will be located; the characteristics of the students who are likely to study the module, including any specific needs they may have; and also the relevant QAA level descriptors and subject benchmarks.
However, the University offers the following advice concerning subject benchmarks:

> *"The University views subject benchmarks as representing the distillation and summary of major academic debate within subject communities. However, in a University where the great majority of provision is subject to professional or statutory accreditation, or strongly vocational, it is essential that many courses meet a required national standard of 'fitness to practise' which may not always be identical to the QAA benchmark. Subject benchmarks are nevertheless expected to be a matter of discussion at validation and internal subject review, where the role of the panel is to examine the quality of the debate and rationale for the position adopted rather than to seek to enforce compliance. The aim is then to ensure debate and reflection rather than unquestioning conformity to the benchmark."*
> University of Brighton Self Evaluation Document, para. 16.3, p55

In the specified reading, Susan Toohey expands on the first and second of these matters. The QAA levels and benchmarks are explained below.

**Level descriptors**

The QAA (Quality Assurance Agency – see http://www.qaa.ac.uk/Pages/default.aspx) has recently (2008) updated the set of *qualification level descriptors* (see http://www.qaa.ac.uk/en/Publications/Documents/Framework-Higher-Education-Qualifications-08.pdf ), which apply to Higher Education qualifications in England, Wales and Northern Ireland (there are separate ones for Scotland, available from the relevant section of the QAA website: http://www.qaa.ac.uk/Scotland/Pages/default.aspx ). These identify five levels of higher education qualification and describe in general terms what is expected of students at the different levels.
The levels are:

- *Certificate of Higher Education* (now referred to as level 4; roughly equivalent to one year of full-time undergraduate study)

- *Foundation degree* (now referred to as level 5; roughly equivalent to two years of full-time undergraduate study)
- *Bachelors degree with honours* (now referred to as level 6; roughly equivalent to three years of full-time undergraduate study)
- *Masters* ( Level 7)
- *Doctorate* (Level 8)

Some schools in the University also use the *credit level descriptors* developed by SEEC (the Southern England Consortium for Credit Accumulation and Transfer). These are similar to the QAA's qualification level descriptors (see http://www.seec.org.uk/academic-credit/seec-credit-level-descriptors-2010 ).
To gain a particular qualification, students are usually required to complete a specific number of units or modules at the requisite level(s). Consequently, course handbooks increasingly often provide students with an explanation of the system of levels.

**National subject benchmarks**

The QAA *National subject benchmarks* set out in detail what students might be expected to know and be able to do in order to gain an Honours degree in a specific subject. They can be accessed from the following page: http://qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx. There is a separate benchmark statement for Foundation degrees (also available from the above page). These are a part of the wider *UK Quality Code for Higher Education* (the Quality Code) that "sets out the Expectations that all providers of UK higher education are required to meet" (http://www.qaa.ac.uk/AssuringStandardsAndQuality/quality-code/Pages/default.aspx). From the academic year 2012-13, The UK Quality Code replaces the previous QAA national reference points which were known as the Academic Infrastructure. The Code is divided into three parts:

Part A: Setting and maintaining threshold academic standards
Part B: Assuring and enhancing academic quality
Part C: Information about higher education provision

For more details, visit: http://www.qaa.ac.uk/AssuringStandardsAndQuality/quality-code/Pages/default.aspx.

The QAA website also has an Information and Guidance section, where the latest publications are listed (http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/default.aspx) – it is useful to check these regularly.

### *1. Level and credit rating of the module*

Each module should be located at a particular level of study and the intended learning outcomes should be consistent with the descriptor for that level.

The module should also have a specific credit value attached to it. In the standard national HE algorithm, 1 credit is equivalent to 10 hours of notional student learning time. A 10 credit module therefore assumes 100 hours of student learning. However, do note that the actual number of 'taught hours' per module (in which the student is in contact with a lecturer) can vary widely. For example, in a 10 credit module where students carry out an individual project, each student may

have a total of only 3 hours contact with a lecturer. The remaining 97 hours will comprise independent study of various kinds. Many universities have decided that a standard undergraduate module is worth 20 credits. Very often, only the undergraduate Level 3 (or final year) project/dissertation is worth 40 credits. An undergraduate degree therefore often comprises about 30 modules.

2. ***The underpinning educational 'philosophy' or values***

Often overlooked, this is a commitment on the part of the module planners to a set of 'educational' beliefs and values. The underlying philosophy will often be influenced by the subject, discipline or field of study. It will frequently inform the choice of learning and teaching approaches, the roles accorded to the student and teacher, and the assessment practices. See Susan Toohey for a discussion of these matters.

3. ***The module focus and aims***
4. ***The content***
5. ***The intended learning outcomes***

Briefly, *aims* are statements of broad educational intent, indicating the purpose(s) of the module. *Learning outcomes* should state unambiguously, and in language the student understands, what it is intended the student will know, understand and be able to do at the end of the module. Outcomes should also indicate the nature and level of the learning that should take place. It is a main principle of module design that we should clearly articulate for ourselves and for students the aims and intended learning outcomes of the module. In the specified reading, Raf Salkie explains the advantages of doing so and also offers detailed guidance about how to write clear, coherent aims and outcomes in the forms usually expected by validation panels. There should be a consistent, coherent relation between the aims, intended learning outcomes and content.

6. ***The most appropriate formative and summative assessment activities, criteria and forms of feedback***
7. ***The most appropriate teaching and learning strategies***

It may be helpful to rehearse here the distinction between *formative* and *summative* assessment. In general, *summative* assessment is carried out at the end of a process or stage of teaching or learning – e.g. at the end of a module, term, semester, or year of study. It is designed to assess whether or to what extent learning outcomes have been achieved. *Formative* assessment is typically carried out in the interim and is designed to assess progress towards the overall learning outcomes. *Formative* assessment may not contribute to the students' formal submitted marks for the module or course; *summative* assessment almost always does.

Another main principle of module design is that there should be a clear, logical, coherent relationship between each of these elements:

- educational philosophy or values
- module aims
- intended learning outcomes
- content
- teaching and learning strategies
- formative and summative assessment activities, criteria and forms of feedback

Put another way, these elements should be '*aligned*' (Biggs & Tang, 2007), so that each is consistent with and supports the others. For example, the content needs to be organised and introduced in a logical, integrated sequence which relates clearly to the stated aims and

outcomes, and the assessment strategy. Similarly, assessment activities should provide opportunities for students to demonstrate that they have achieved the learning outcomes of the module. The ways in which they do this should be consistent with the other elements in the module design, so that assessment is an integral part of the learning process.

***8. Learning support***
***9. Resources***

The learning support and resources provided should be clearly consistent with the preceding considerations and decisions.

***10. Evaluation***

It is important that we evaluate the effectiveness of our modules and courses, and it is generally argued that views need to be sought from all 'stakeholders'. This information can then be used to inform decisions regarding changes and improvements. Increasingly, Faculties and Schools use standard evaluation procedures for all modules and courses. However, these need not preclude lecturers from also developing their own procedures.

**Begin your engagement with this study pack by reading the references below.**

1. Chapter 2, The course design process, in Susan Toohey's *Designing courses for higher education.* Although this chapter is concerned with course design, the principles and considerations also apply to module design.

2. The extracts from *How to design world class modules* by Raf Salkie. This guide is available from the CLT webpages at http://www.brighton.ac.uk/clt/resources/study-packs/.

***Activity 1***

This activity is designed to enable you to evaluate the design of a module, drawing on the ideas in section 1 of the pack and in the specified readings referred to in section 2. Having carried out the activity, you should also be able to contribute effectively to the design of modules. We recommend that you evaluate two modules:
one module on which you teach. (You may find you are able to be more objective in this case if you evaluate the other module first.)
one module from a subject, discipline or field that is quite different from your own. If you are participating in the PGCert or MAAP you will probably find one of your co-participants is teaching on such a module and can provide the documents you need. If so, we suggest it will be valuable to discuss your evaluation with her or him, once you have carried it out. You could, of course, do the activity in collaboration. Alternatively, modules from a variety of courses can be accessed on the intranet via *studentcentral*.

Continued ...

***Activity 1 (continued...)***

In carrying out this activity, it is probably best to use the module description provided to students. This will usually be found in the Student Course Handbook, or in a separate module handbook. You will also need access to the QAA level descriptors and subject benchmarks. The hyperlinks for these are given above.

We also recommend that, if possible, you should discuss your evaluation with the module designer(s) once you have completed it.

Once you have the various documents you need, we suggest you work your way through the following questions, making brief notes as you go.

***The potential students***

Are you able to discern ways in which the design of the module has been influenced by knowledge or assumptions about the potential students in terms of :

1 personal characteristics - for example, age; gender; life experience; ethnic identity; life circumstances and commitments; aspirations; motives for study?

2 prior learning and educational experience?

***Generating interest***

Is there an indication of:

- how the module may be relevant to the students' wider studies and aspirations?
- how the module will generate their interest and commitment?

***Educational 'philosophy' or values***

- are you able to discern the educational philosophy or values which underpin the design of the module? If so, make brief notes describing these.

***Aims and outcomes***

- Does the module have clearly stated aims and intended learning outcomes?
- Are these written in the way suggested in Raf Salkie's booklet? If not, does it matter? Are they expressed in language the students will understand? If not, can you rewrite them so that they are?

- Can you discern how the intended outcomes take account of the relevant level descriptors and subject benchmarks?

***Learning and teaching strategies***

- Is there a clear indication of the learning and teaching strategies to be adopted?

- Is there an indication of how much student time should be allocated to:
  - Contact
  - Private study
  - Assessment
  - 'Specialised' time – e.g. lab time, IT access, field work?

- If not, are the students provided with any other clear indication as to how much time they should devote to the module and the activities this should include?

- Do you judge that the learning and teaching strategies are likely to encourage a deep approach to learning?
- (*If the term 'a deep approach to learning' is unfamiliar, see Appendix 1)*

- Could any of the teaching and learning activities have potentially adverse consequences for people with learning difficulties or disabilities – e.g. dyslexia?

***Assessment***

- is there a clear description of the formative and summative assessment methods?

- Do you judge that the assessment activities or tasks are likely to encourage a deep approach to learning?
- (*If the term 'a deep approach to learning' is unfamiliar, see Appendix 1)*

- Could any of the assessment activities or tasks have potentially adverse consequences for people with learning difficulties or disabilities – e.g. dyslexia?

- If there is more than one assessment task, is it clear how they will be weighted?

- Is there an indication of when and how students will be introduced to the assessment criteria and standards?

- Is there an indication of the kinds of feedback students will receive?

- does the credit value of the module seem commensurate with the effort required of students to study the module and do the assessment tasks?

***Content***

In principle, the selection of content should be consistent with the:

- *credit value* of the module
- *level* of the module
- *course aims and outcomes*
- *module aims and outcomes*.
- *subject benchmarks*

- Are you able to discern that this is the case?

Continued ...

***Activity 1 (continued)***

***Coherence or 'alignment'***

- Are you able to discern a clear, consistent and coherent relationship between ***all*** of these elements:
    - the educational philosophy or values
    - the aims
    - the learning outcomes
    - the content
    - learning and teaching activities
    - the assessment activities or tasks, and criteria?
- Could you explain this relationship to a student or colleague?

***Diversity***

- Students at the University of Brighton are increasingly diverse in many respects. Given this diversity, could any of the aspects of the module listed below be a concern:
    - the overall subject matter
    - a focus on particular perspectives or approaches
    - the choice of teaching and learning activities
    - - the teaching and learning materials or resources (are they likely to display racial, gender or other forms of bias?)
    - -the assessment methods

- If the module requires particular abilities of students, are these indicated and is there an explanation of the support that will be available to those who need it?

***Activity 2***

Drawing on Susan Toohey's chapter and the questions, and using the notes you have made under Educational philosophy or values in Activity 1:

- Compare these with your own philosophy or values. Are they compatible? If not, in what ways do they differ? How would the module need to be adapted to make it compatible with your philosophy or values?

- If you teach on a module which appears to embody a philosophy or values different to your own, what might be the consequences of these differences for your students, your colleagues or you? How might you respond to the discrepancies?

***Activity 3***

In Appendix 1 there are descriptions of the characteristics of educational environments which are said to encourage a surface and a deep approach to study tasks (also refer to the materials from the Learning & Teaching study pack) . We recommend that you read Appendix 1 before you do this activity.

- Use the questions above and the materials in Appendix 1 to help you evaluate the 'educational environment' of the module. In what ways does the module encourage students to adopt a surface or deep approach to their study tasks?

- Are there ways in which the module might be revised to make it more likely to encourage a deep approach?

**Concerns about modularity**

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Although most undergraduate and postgraduate courses in most HE institutions now adopt a modular structure, 'modularity' is not universally approved. Some of the more commonly expressed concerns and objections are summarised below.

1. Modularity leads to the 'parcelling-up' of knowledge and learning into 'bite-sized chunks'. When this is combined with opportunities for students to take modules from several different degree courses, sometimes in quite different fields or disciplines, the programmes of study followed by individuals may lack coherence and depth or, put another way, they may be fragmented and superficial. As a result, students may know a little about a lot of discrete topics, but fail to develop an integrated, detailed understanding of a recognised subject, discipline or field of study.

2. A related concern, or perhaps a different version of the same concern, is that modularisation encourages students to 'compartmentalise' their learning. That is, it inhibits their ability (and their motivation) to make connections between their learning in different modules of their course. On much the same theme, some people argue that modularity leads students to develop a 'done and dusted' mentality. Once they have engaged with the themes of the modules and 'been assessed on' these, they have a tendency to think the themes are 'done and dusted', and can be put to the back of the mind - or out of it altogether.

3. Some people (and some institutions) insist that each module should have distinct intended learning outcomes which must all be able to be learned and summatively assessed within the 'lifetime' of the module. This insistence leads to the neglect of aims and intended learning outcomes which require a lengthy, complex process of maturation and thus are only achieved over periods of time longer than the 'lifespan' of single modules, often because they require the integration of experience, knowledge and abilities gained in several modules.

4. The precise formulation of intended learning outcomes and the requirement that they determine teaching, learning and assessment strategies is highly prescriptive. It denies students a meaningful role in the direction of their own learning and the allocation of attention. Moreover, if learning occurs which is not specified in the intended learning outcomes, this receives little acknowledgement or support.

5. The requirement that intended learning outcomes are framed in terms of demonstrable behaviour encourages us to commit what Derek Rowntree (1987) calls the 'Macnamara fallacy'. That is, it encourages us to focus on the things which are easily identified, articulated and measured, and to give these a high value. Instead, we should be trying to identify, articulate and find ways of assessing the things which are really valuable, but elusive.

6. The insistence that all intended learning outcomes must be summatively assessed within the 'lifetime' of the module, combined with the large number of modules many students study, leads to a situation where the 'assessment tail' comes to 'wag the learning dog'. Consequently, students tend to be over-assessed, to the detriment of their learning.

It is usually easy to find modules and courses which appear to bear out these concerns. But it is often just as easy to find others where the potential pitfalls seem to have been adroitly avoided. It may be possible to refute all of these objections; nonetheless, they refer to matters which require serious consideration when we are evaluating or designing modules and courses.

**Activity 4**
Consider the concerns summarised above in relation to a module on which you teach. Does your experience bear out any of the concerns? If so, does this point to the need to consider changes to the design of the module, or the ways in which it is 'delivered'?

Alternatively, for a different approach to module design, visit:
http://www.theory.org.uk/random.htm ☺

## Appendix 1

### Educational environments and student approaches to study tasks

Studies [1] suggest that different kinds of educational environment encourage students to adopt different approaches to study tasks. Most studies distinguish between what they refer to as a *surface* and a *deep* approach. The typical characteristics of each approach are summarised below[2]. *It is important to note that most students are reported to be capable of both approaches*.

**SURFACE approach to study tasks**

students are intent on memorising the surface detail of material with the aim of later being able to reproduce it more or less verbatim, typically for assessment purposes.

- memorising facts and procedures routinely

- accepting ideas and information passively

- concentrating only on task or assessment requirements

**DEEP approach to study tasks**

students are intent on understanding the meaning, logic and implications of material. They then relate these to their existing knowledge and understanding

- interacting vigorously and critically with ideas

- relating evidence to conclusions

- examining the logic of arguments

- relating ideas to existing knowledge and experience

- developing new understandings or ways of doing things

Some studies [3] also identify a third, '*strategic* approach'. The intention of students adopting a '*strategic* approach' is to manage their time and their studies as efficiently and effectively as possible whilst achieving marks which satisfy them. They do this by pragmatically adopting a surface or deep approach according to the demands of the task and the environment in which it is set.

[1] Ramsden 2003 and studies reported therein
[2] Adapted from Committee of Scottish University Principals (CSUP), 1992, p5 and Ramsden, 2003, p 47
[3] See, for example, Ramsden, 2003, p53

**Educational environments and *deep* approaches to study**

Research [4] suggests we will create educational environments which encourage students to take a ***deep*** approach to study if we do the following:

- clearly explain the purposes and intended outcomes of the session
- use a variety of activities and tasks with the following characteristics:
    - realistic, relevant, intrinsically interesting
    - active participation by students
    - opportunities for discussion and collaborative working
    - opportunities to try out new ideas and language with peers
    - time for reflection and consolidation
- give prompt feedback
- avoid an excessive amount of material. This applies to the content of the session, recommended reading and any assessment tasks
- respect diverse talents and ways of learning
- encourage students to take an independent approach to study

**Educational environments and *surface* approaches to study**

Ramsden (1992) suggests that the following factors encourage a ***surface*** approach to learning:

- previous experience of educational contexts that encourage a surface approach
- assessment methods which emphasise recall or the application of trivial procedural knowledge
- assessment methods that create anxiety
- cynical or conflicting messages about rewards
- an excessive amount of material in the curriculum
- poor or absent feedback on progress

[4] Reported by Ramsden, 2003; Knight and Trowler, 2000; Gibbs, 1998; Chickering and Gamson, 1989

- lack of independence in studying
- lack of interest in and background knowledge of the subject matter

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All the web links in this study pack were checked on 8th September 2014.