Helping your learners to find their way in to your subject

One of the most important tasks for a teacher is to invite learners in to their subject, not only to become familiar with the content and skills but also to help them to understand it at a deep level and develop ways to think and talk about it. Some teachers are very welcoming; others less so. This is not just a matter of the teacher's personality or style; it's something we can all develop. If you recall learning in any subject or discipline at any stage of your life, but particularly within an educational institution, you will remember that you didn't know everything at once. Some elements; a few key concepts; some key words might have been familiar to you, but the big picture will have been indistinct and potentially, alienating. You will also, no doubt, recall gradual realisation and piecing together of a more complete understanding. Teachers can help learners to do this; we can help them find 'ways in.'

In Chapter 5, Learning Theories, we considered some of the theoretical underpinning of effective learning, particularly the use of advance organisers to help learners understand the 'big picture' and constructivist learning theory which emphasises the role of previous learning and the development of personal understandings and schemas. Here, we will look at how we can make learning more relevant and how we can use 'threshold concepts.

Relevance

Students will find it easier to get into a subject if they can see its relevance. How does it relate to real life? How does it relate to their previous experience and can teachers help them to make connections? Learners often feel that they are thrown in at the deep end of a subject rather than being given an opportunity to splash about in the shallow end and gradually develop the confidence to move up. In some areas of learning, for example, maths, science and engineering, teachers may have been used to filling learners up with content prior to applying and analysing it. Kember, Ho and Hong (2008: 254), writing of first year teaching at university suggest that:

> "It was not just that the abstract theory aroused little interest, it was also hard to understand in many cases. Without seeing an application which put the theory in context it became hard to grasp the meaning. It was also difficult to frame suitable questions to advance understanding."

If students' first experiences of a subject are of seemingly unconnected bits of theory and unusual terminology, they are likely to feel confused and de-motivated. Supplying reasons and contexts for learning from the outset will increase motivation. Relevance can be established by, for example:

- using real-life examples
- drawing cases from current issues
- giving local examples
- relating theory to practice.

In subjects such as Sociology and Health and Social Care, new students will probably know about a range of social issues but will be unfamiliar with the concepts and language the subject specialism uses to understand and discuss these things. Northedge (2003: 173) gives an example of how we can begin with the familiar and use it as a way into the subject and its language and concepts. The first step is to capture students' attention and establish a common focus for understanding and meaning making. He illustrates this by an example from a social work training in which students are introduced to, and discuss, a case study of two homeless drug users. By this everyday, 'common-sense' discussion students can relate to a real-life scenario and start to tease out some of the key issues. The discussion would not necessarily include subject-specific language and concepts. The second step leads from familiar to subject specialist discourse by discussion and questioning and the introduction of specialist concepts. A further advantage of this process, implicit in Northedge's work, is that students can develop their critical thinking skills as they move from 'common-sense' understandings and opinions to more rigorous and objective, academic understandings. Northedge's ideas seem to challenge conventional wisdom that students need to acquire theory and content before they can apply it to problems. Sometimes introducing problems first can be a stimulating introduction and increase motivation to develop the understanding of theory.

Threshold concepts

Threshold concepts' are particularly associated with the work of Meyer and Land (2003) (see also Land, Meyer and Smith: 2008) who suggest that 'threshold concepts may be a way of overcoming the 'stuffed curriculum'. They refer to "A tendency among academic teachers is to stuff their curriculum with content,

burdening themselves with the task of transmitting vast amounts of knowledge bulk and their students of absorbing and reproducing this bulk." This may be true of vocational teachers as well as academic, concerned to give their learners everything they need for the assessments. Focusing on 'threshold concepts' can help to teachers to identify what is fundamental to the students' grasp of the subject.

Three of the key features of threshold concepts are that they are:

- transformative – they make a difference to who we are and how we perceive the world. They change our ways of understanding

- irreversible – once understood they are unlikely to be forgotten. Teachers can find it difficult to recall a time when they didn't understood these concepts and, therefore, may not find it easy to empathise with students who are struggling with them.

- integrative – they help students to make connections. As Cousin (2006:4) points out, "mastery of a threshold concept often allows a learner to make connections that were hitherto hidden from view." There is a clear link here to constructivist theories of learning.

'Socialisation' is an example of a threshold concept from sociology. Initially difficult for students to grasp, once mastered it provides a basis for understanding much of sociology. It is transformative, irreversible and integrative. Stokes, King and Libarkin (2007: 436) provide examples of threshold concepts in other disciplines:

Economics   - opportunity cost; elasticity

Pure Mathematics   - complex numbers; limits

Electrical Engineering - frequency response

Statistics - sampling distribution

Computer Science - object oriented programming

Law - precedence

Activity

Can you identify any 'threshold concepts in your subject specialism?

For example, in sociology and media studies, 'ideology' can be a really difficult concept to grasp. Equally, using concepts such as 'horsepower' or 'torque' in motor vehicle courses can be challenging.

In what ways can you help your learners to understand these concepts? Don't be frightened of 'dumbing down'; use a picture, a diagram or a model.

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