

Deep and superficial learning

Effective learning is deep learning, marked by deliberate intention to learn, as well as individual and social orientations to learning. Orientations to learning may be academic, vocational, personal and social (Rhem 1995). The notions of deep and superficial learning derive from the seminal work of Marton and Säljö (1976) on surface learning and deep approaches, and the more recent work by Biggs (1987).

Superficial learning is built on behaviourist theories of motivation. A key factor in improving deep learning is motivation. However, this motivation, unlike behaviourism, is intrinsic, socially rooted, promotes autonomy and self-esteem, breaks learned helplessness, and is 'significant learning' (discussed later). Deep learning is promoted through *applying* knowledge, not just leaving it inert. This echoes the point about brain-based learning and how the brain learns through activity and applying knowledge. Effective learning, as brain-based learning reminds us, concerns the construction of knowledge rather than the reception of knowledge, which lies at the heart of constructivism as outlined in the very start of this chapter. For deep learning to occur, teachers have to 'let go' of students and give them freedom to learn and pursue knowledge.

Superficial learning is information-reproducing, and is characterised by:

- Excessive amounts of material and inert, discrete knowledge as facts.
- Relatively high class-contact hours.
- Lack of opportunity to pursue subjects in depth.
- Lack of choice of subjects and methods of study.
- Passive learning.
- Repetition, word for word, of material to be learned.
- Threatening and anxiety-provoking assessment systems.
- Fear of failure, and, therefore, attempts to avoid failure.
- Memorisation as an end in itself.
- Assessment that asks students to reproduce information rather than apply understanding.

Superficial learning tends to be encouraged by:

- Assessment methods that create anxiety and that emphasise recall or application of trivial knowledge.
- Cynical or conflicting messages about rewards.
- An excessive amount of material in the curriculum.
- Poor or absent feedback on progress.
- Lack of independence in studying.
- Lack of interest in, and background knowledge of, the subject matter.

References

Biggs, J. (1987) *Student Approaches to Learning and Studying*. Melbourne: Australian Council for Educational Research.

Marton, F. and Säljö, R. (1976) On qualitative differences in learning. 1 – outcome and process. *British Journal of Educational Psychology*, 46, pp. 4–11.

Rhem, J. (1995) Deep/surface approaches to learning: an introduction. *The National Teaching and Learning Forum*, 5 (1), pp. 1–5.