

# What is learning?

**It is a bizarre phenomenon that what is, by common consent, the central purpose of education is so elusive and difficult to define. Regular searches of the academic and professional literature reveal a complete lack of any systematic, public and generally accepted definition of learning.**

On the one hand this can be explained by the complexity of the process, but on the other it is a manifestation of a historical legacy which has chosen not to address this central issue.

Common usage has tended to produce an implicit definition of learning as an essentially passive activity – learning is what happens as the result of teaching; successful progression through the curriculum or demonstrated success in public tests and examinations is offered as evidence of learning. The often-heard classroom instruction “learn this for tomorrow” in fact is an instruction to memorise. Few schools in our experience have anything approaching a shared definition of learning in the staff handbook, few have a learning policy, and few attempt to monitor learning as opposed to the impact of teaching. Most significantly, and worryingly, very few children have a firmly rooted understanding of themselves as learners; this is hardly surprising given that much of the success available in schools is in response to activities which are dominated by teaching rather than learning.

However, it would be wrong to pillory teachers for this gap in understanding. National strategies and policies offer little or no help in this respect. Ofsted focuses on teaching and its outcomes, talk of a government strategy for “lifelong learning” was rapidly abandoned, and the concept of the “learning organisation” remains conceptually flawed. Lifelong learning is a classic example of a failure to understand that to live is to learn, that it is impossible to go through life without learning – what the government actually meant was lifelong access to courses, training and qualifications – learning as the pursuit of commodities. The learning organisation is another classic misnomer: organisations can’t learn – people learn, and may be able to share that learning to common advantage.

We want to propose that there are two broad definitions available. Firstly the increasing understanding of neurological functioning means that we can use learning as a generic term to describe the changes in the brain in response to physiological, psychological and environmental factors. Learning is what the brain does all the time: to be sentient is to learn, and we cannot do otherwise. Learning to drive is not the process that leads up to the driving test; learning to drive happens every time we drive, as each journey is different. Learning is therefore a convenient label to describe a complex process of neurological adoption and adaptation.

The second definition, which we want to focus on in this article, is much more concerned with our cultural understanding, ie the psychological and environmental factors that influence neurological functioning. Although all brains are learning all the time, they do so with varying degrees of success. The increasing recognition of the importance of developing thinking skills and the emergence of the cognitive curriculum are significant indications of the awareness of the spectrum of effective learning.

However, for these trends to be really effective they have to be developed in the context of a much more sophisticated model of what learning is.

Figure 1 offers a model which attempts to provide not so much a definition as a testimony to facilitate understanding. The model is derived from a wide range of sources and makes a fundamental assumption: learning, in the context of public education, can be classified as shallow, deep or profound. There is not a hierarchy of significance here – modes are effective or non-effective according to purpose and context.

	SHALLOW	DEEP	PROFOUND
<b>Means</b>	memorisation	reflection	intuition
<b>Outcomes</b>	information	knowledge	wisdom
<b>Evidence</b>	replication	understanding	meaning
<b>Motivation</b>	extrinsic	intrinsic	authentic
<b>Attitudes</b>	compliance	interpretation	creativity
<b>Relationships</b>	dependence	independence	interdependence

Figure 1. Modes of learning

**Shallow learning** is characterised by the ability to memorise information, which is then replicated according to need. The motivation for such learning is extrinsic, and this mode results in compliance and dependence. This mode is exemplified in GCSE A-level and many first degree programmes. There is abundant anecdotal evidence to support this assertion, eg the inability of many students with a GCSE in a modern language to actually hold a spontaneous conversation in that language; the inability of A-level students to see the relationships between their various subjects; the dependence of many first-year undergraduates on teaching rather than autonomous self-directed study.

Shallow learning dominates schooling because it is easy to define, deliver, administer and assess. It exemplifies the bureaucratisation and commodification of education, valuing that which can be measured. It is important to stress that shallow learning has a place. We share shallow learning about what makes our cars work; we depend on the deep learning of others. However, in the school system the constraints of the shallow approach drive out the possibility of sustained and comprehensive strategies for deep and profound learning.

**Deep learning**, by contrast, shifts the emphasis away from the generic, processed experience to the creation of individual understanding. We would argue that the greatest challenge facing schools is to move from shallow to deep learning. Cognitive skills have a substantial contribution to make in this respect. The pivotal difference between shallow and deep learning lies in the level of personal ownership – the conversion of generic information into personal knowledge which is deep and sustainable because it is based on intrinsic motivation, ie it is personally significant and valued. Central to deep learning is the notion of reflection, ie the process by which information and experience are internalised and knowledge is created. Because this process is personal, it creates the confidence to interpret and so the confidence to act independently. The GCSE language student is now able to hold a conversation because the lists of vocabulary and rules of grammar are understood rather than replicated.

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**Profound learning** is a very complex process but it moves the learner into the highest levels of intellectual, cognitive and emotional learning. However, it would be wrong to see this in terms of a cultural hierarchy. This mode of learning is as possible in driving a racing car as it is in listening to Monteverde, reading Goethe or achieving a significant breakthrough in medical research. It explains the highly effective teacher, the skilled joiner and the hospice nurse. Nor is profound learning chronologically related. Children often display moral and social wisdom, and the ability to act with emotionally sensitive intuition.

Because profound learning is morally motivated, ie learning is self-legitimizing, it creates the capacity and willingness to challenge: to question prevailing orthodoxies, to question authority and to be comfortable with creativity. This in turn is reinforced by the level of personal security that allows interdependent working. Profound learning is best described through the process of creating personal meaning – the way in which we all make sense of ourselves, the world in which we live, the people with whom we interact and the ideas by which we interpret all those competing realities. Profound learning can never be the result of teachers delivering and assessing a curriculum (although that plays a part). It is the result of a process which is as socially and culturally complex as the brain's neurological functioning. Profound learning is about the many expressions of the existential self.

**A way of extending our attempt to clarify the nature of learning is to offer a pen portrait of a learner:**

“*The autonomous learner knows how to learn and has a disposition to do so. She can identify, on her own and/or with others, a problem, analyse its components and then marshal the resources, human and non-human, to solve it.*

*She continuously questions herself and others as to whether she is employing the best methods. She can explain the process of her learning and its outcomes to her peers and others, when such a demonstration is required.*

*She is able to organise information and, through understanding, convert it into knowledge. She is sensitive to her personal portfolio of intelligences.*

*She knows when it is best to work alone, and when in a team, and knows how to contribute to and gain from teamwork. She sustains a sharp curiosity and takes infinite pains in all she does.*

*She has that security in self, built through a wide and deep set of relationships and through her own feelings of worth fostered in part by others, to be at ease with doubt, and to welcome questioning and probing of all aspects of her knowledge.*

*Above all she delights in the growth of her increasing awareness of herself as a learner and in her capacity to make sense of her world.* ”

We would argue that this person has high levels of meta-cognition – the skills necessary for her to move beyond shallow learning into the creation of understanding and so, potentially, to personal meaning.

**In conclusion** we wish to offer a short definition of learning, distilled from the above, which might serve to inform management processes in schools.

**Learning is a unique and personal process through which individuals are able to create knowledge, deepen understanding and so take responsibility for their development.**

**Using this definition it might be of interest to consider your response to the following questions:**

1. What promise does your school make in respect of the learning of the individual pupil?
2. What definition of learning is in use in your school?
3. How is the responsibility of teachers for learning defined?
4. How is the responsibility of students for learning defined?
5. How much learning is taking place in school, and how do you know