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LEARNING TO CONVERT IGNORANCE INTO UNDERSTANDING

John Baird

A PERSPECTIVE ON LEARNING: FROM IGNORANCE TO UNDERSTANDING

All schools have charters, or statements of aims, regarding the desired products of education - the young adults who leave school to make their way in the world. Many of these charters include aims to produce individuals who: enjoy learning; are responsible for their actions; make appropriate, independent decisions; have confidence in their abilities; are competent to manage their life; respect and care about themselves and other people. Few if any people would argue with such lists. As most teachers well know, however, the problem is not such a list, it is how to orchestrate normal, everyday classroom practices to provide an effective process to train for this product.

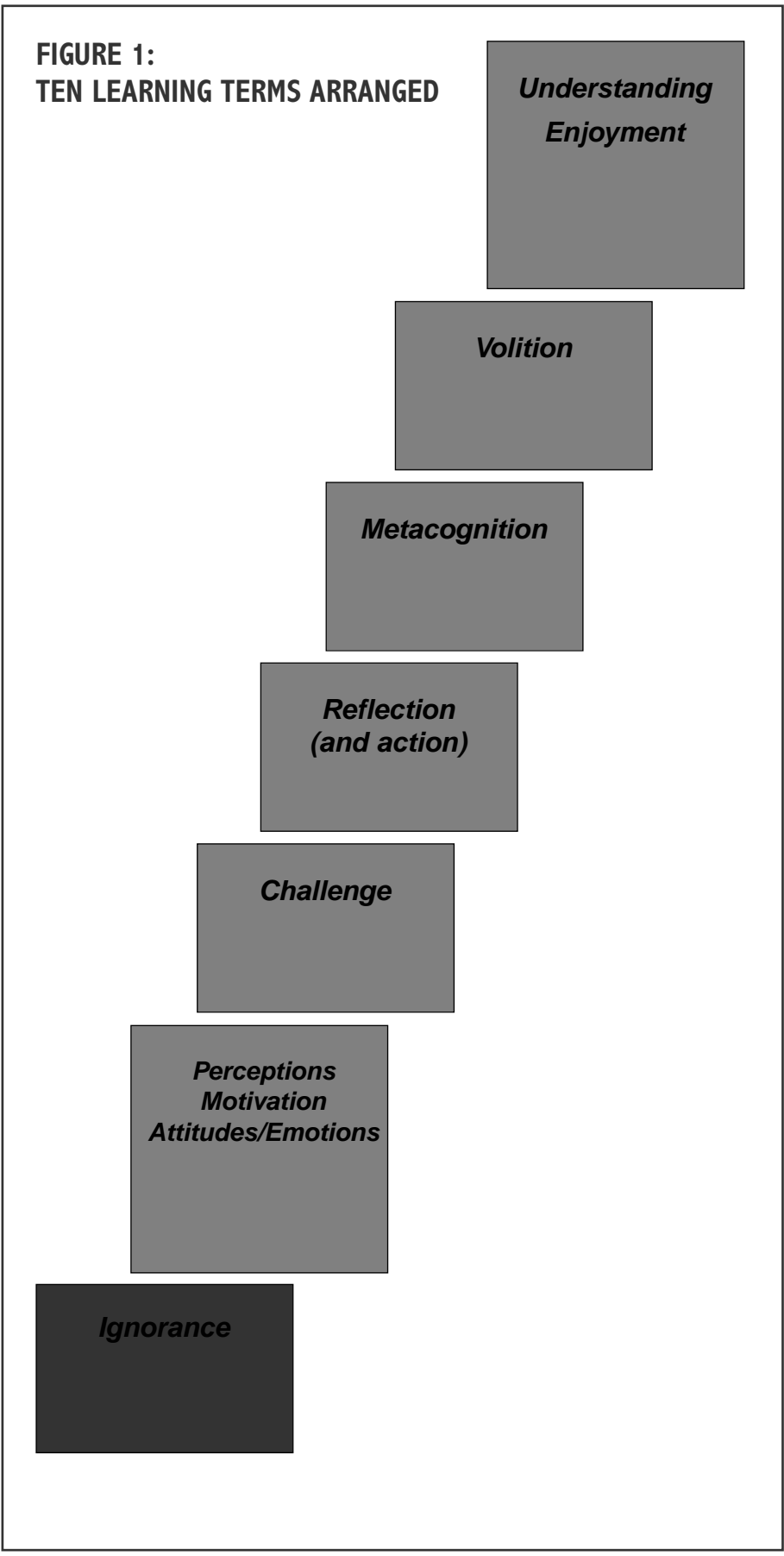
Year 10 chemistry lessons teach chemistry; Year 7 English lessons teach English; even primary school grade 3 lessons teach mathematics, writing, or whatever. Where is the explicit systematic, coherent and developmental classroom curriculum to achieve the

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aims given? I believe that, in order to answer this question and to enact the required curriculum, teachers must undergo demanding professional development. This development requires on-going reflection upon themselves and the nature of their profession. It requires that they continually return to some key questions: ‘Why am I in this classroom?’, ‘What am I trying to do?’, ‘Why am I trying to do it?’, and ‘Am I doing it well?’. In this chapter, I provide some ideas to frame consideration of these questions.

In the process variously described as autonomous learning, self-regulated learning, or metacognitive learning, the learner assumes responsibility and control over personal practice in order to generate desirable outcomes of understanding, successful completion, and enjoyment. In this chapter, I consider action that is necessary in order that students become more willing and able to take such responsibility and control. But first, I develop a perspective on desirable learning. This perspective has arisen from research with which I have been associated, but it has clear links to the literature on learning.

The perspective builds interrelationships among the ten key learning terms arranged sequentially in Figure 1: Perceptions; Motivation; Attitudes/Emotions; Challenge; Reflection (and Action); Metacognition; Volition; Understanding; Enjoyment; Ignorance. Including ignorance within the group may surprise the reader but, as I describe next, ignorance (a state of not knowing something or not knowing how to do something) is central to willingness and ability to learn.



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LEARNING: THE ROLE OF IGNORANCE

Ignorance is commonplace for all of us; indeed, it is more commonplace to be ignorant of something than to truly understand it. Yet ignorance brings with it some important problems. One problem involves situations in which you realise that you don't know, but you do not want to act to remedy the situation. The second problem involves situations in which you are unaware of your ignorance. I will consider each type of problem in turn.

There are at least two underlying causes of the first problem - not acting on recognised ignorance. Both causes reflect shortcomings in the educational system. The first cause is that you know that you don't know something, but you don't want to know. In the classroom situation, this low level of curiosity or interest may indicate that the learner perceives the work to be done as unimportant or irrelevant. Another cause of not acting is because the learner mistakenly associates ignorance with stupidity. In this situation, people hide their ignorance because they fear appearing stupid, 'dumb' or foolish. Thus, a common avoidance strategy is not to ask questions, because this will alert others to the fact that you don't know. Dismissing, avoiding or not acknowledging personal ignorance is especially concerning because to know *that* you don't know and to know *what* you don't know are central to effective learning. A term that is relevant to this discussion is *metacognition*, defined as knowledge about, awareness of, and control over, personal learning practice (e.g. Baird, 1991). To know that you don't know and what you don't know - to be *metacognitively* aware of the nature and extent of your cognitive ignorance - is clearly desirable rather than undesirable.

The second problem with ignorance relates to situations in which you are metacognitively *unaware* of the nature and extent of your cognitive ignorance. Such situations involve what has been described as secondary ignorance (e.g. Brown, 1978). Compared with metacognitive awareness just described, secondary ignorance or metacognitive unawareness will more directly diminish a person's willingness and ability to achieve desirable learning outcomes. One type of metacognitive unawareness is when you don't realise that you don't know or can't do something. This unawareness may arise from inaccuracy - for instance, when you think you know what you are doing when in fact you don't. This situation results in the setting of