

Skills Teaching

By Mike Davis

Among the many strengths of life support courses is the 4 stage approach to teaching psychomotor skills. The purpose of this short paper is to examine once more the utility of this approach and to emphasise its component elements in order to provoke some discussion about its attributed effectiveness both from a theoretical perspective and from that based on experience.

The reason for this is a concern that has been expressed by a number of educators and faculty colleagues over recent months: a deterioration in the teaching of the four-stage approach. This concern seems to be widespread. There are a number of explanations made for this: time pressures and better approaches to skills teaching have both been mentioned but I think this might be more a consequence of skill decay – the further away someone is either from their GIC or from regular good practice with other competent colleagues, the more likely that skills will be taught sub-optimally.

There may be some value in thinking why this approach was adopted by all of the major life support courses. Consider a hierarchy (Simpson, 1966) of psychomotor skills acquisition:

- Perception
- Guided response
- Mastery
- Autonomy

and how these relate to the novice to expert continuum articulated by Dreyfus and Dreyfus (1986):

- Novice
- Advanced Beginner
- Competent
- Efficient
- Expert

The following table maps the four stage approach onto these two models of skill acquisition within the context of continuous assessment (i.e. involving repeated successful practice over the duration of the course):

	Psychomotor hierarchy	Performance	Learning style preference (Davis & Forrest)
Stage 1: Real time demonstration	Perception	None	Predominantly visual
Stage 2: Demonstration + instructor commentary	Perception	None	Visual; auditory (knowledge and comprehension from the cognitive domain)
Stage 3: Demonstration + learner commentary	Guided response	Novice	Visual and auditory
Stage 4: Learner demonstration + commentary	Guided response → Mastery	Advanced Beginner	Kinaesthetic and auditory
Ongoing observation and practice	Mastery	Competent	Kinaesthetic
Repeat exposure (within scenarios)	Mastery	Efficient	Kinaesthetic
Repeated practice in workplace	Autonomy	Expert	Kinaesthetic and auditory (if teaching juniors)
Caveat: absence of practice in work domain	Decay over time		

The four stage approach has been used to teach psychomotor skills as varied as log roll and x-ray interpretation and virtually any other skill in between, all within a relatively short allocated time. What the approach demands of the instructor is adherence to a systematic approach that makes clear distinctions between the phases. Is this the time to explore our shared understanding of this and our commitment to it?

In exploring answers to this question, we will lay the foundation for next month's topic on continuous assessment.

Bibliography

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