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## Paper:

Sandars, J (2013) When I say ... self-regulated learning. Medical Education, 47 (12). 1162 – 1163.

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### When I say ... self-regulated learning

John Sandars

"We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn." (1)

Peter Drucker

I recently met an undergraduate student who had failed their first examination at medical school. He was surprised by his failure since he had attended the same lectures as everyone else and read the same handouts.

Have you ever wondered why some people struggle to learn? An important reason is likely to be their approach to learning. Self-regulated learning (SRL) theory offers a useful perspective that can help tutors understand learners' difficulties and offer structured support. The importance of this perspective has been long acknowledged in childhood education and its importance is now increasingly recognised in medical education. (2)

SRL theory considers the extent to which learners are active participants in their own learning processes. The basic tenet of SRL theory is that effective learning is achieved by the continuous and dynamic adjustment of specific motivational and cognitive components to achieve learning goals, both academic and clinical. (3)

Prior to learning, effective learners assess the learning task and consider how they can use strategies to successfully achieve the task. An important aspect of SRL is that successful learners adjust their motivational beliefs, such as making a given topic relevant to their personal interests or thinking about previous times when they were successful with similar learning tasks, and select appropriate cognitive strategies, such as deciding to use the study technique of reading each paragraph in turn or having a clear sequence of initial questions for a clinical history. During learning or clinical performance, effective learners self-monitor through increasing their awareness of whether they are on track to achieve their intended goal. Checking allows constant adjustments to their chosen motivational or cognitive strategies to ensure that these strategies are working. After the learning task, highly selfregulated learners reflect on their performance and consider whether their approach to the task might need to be modified if and when they face future attempts at learning. An important aspect of this phase is that highly self-regulated learners generally attribute their successes to factors that are within their control, such as the choice of specific strategies, while ineffective learners tend to attribute their lack of success to factors outside their control - for example they might say "the contents of the chapter was not clear" or "the patient was not typical". It is important to note that learners may be highly self-regulated in one context but not another. Like most academic skills, SRL is context specific.

In the example above I was able to provide the student with an insight into how they approached learning by using SRL micro-analysis. SRL micro-analysis is a structured interview process where focussed questions are used to help identify the key SRL processes (while the learner is actively engaged in an authentic learning task). (4) I gave the student a few pages of lecture notes and asked the student to study them. As expected from SRL theory, the student was not adopting a strategic approach to their learning. I was able to find out that the student did not have a specific study technique, that they did not check understanding during the task and that they attributed their lack of success to the content being "too difficult". These findings allowed me to provide focussed feedback to the student so that they could improve the SRL processes that were being underutilised.

Many scholars believe that SRL theory has the potential to develop lifelong learners who can successfully respond to the variety of learning challenges that they will face in their careers. It is now time to ensure that this potential can be fully realised.

#### References

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