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Education Brief

Empowering Schools
in Self-Regulation of
Media and Information
Literacy processes

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Self-regulated Learning in Digital Reading

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Who are self-regulated learners?

Self-regulated learners are motivated individuals who independently pursue their learning goal and take control of the process of their learning.

What does self-regulated learning mean?

Self-regulated learning is a learning process in which readers are motivated enough to take ownership of their own learning process. This means that they actively use their cognitive resources to execute their task. Self-regulated learners plan their learning task, set goals for their learning result, and engage in strategies to enhance their goal achievement (Broadbent, 2017). Findings have shown that self-regulated learning is a significant predictor of school success (e.g. Dent & Koenka, 2016). Compared to learners who don't exhibit self-regulated skills, self-regulated learners have a tendency of achieving better positive academic outcomes. This mainly due to their ability to carefully plan their learning process, closely monitor their progress and taking concrete actions to overcome any shortcomings along the way.

Are children self-regulated learners?

Self-regulated learning emerges in early childhood, but it becomes even more important in adolescence. In secondary school learners are expected to be more independent and self-sufficient in the learning process. This mainly because their workload increase and they are expected to manage a larger number of subjects involving complex tasks. They read complex texts from different domains and are expected to make inferences to understand their message. This shift from

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supportive environment to a more demanding secondary school environment can be difficult for adolescents lacking self-regulated learning skill. However, through adequate support and scaffolding, teachers can help students improve their self-regulated learning.

What is the theory behind self-regulated learning?

According to the SRL cyclical model of Zimmerman (2009), self-regulated learning occurs in three cyclical phases: forethought, performance, and self-reflection.

In the **forethought phase** the learners analyse the task and set the goal for the task achievement. They also make a plan of how to reach this goal.

The **performance phase** involves the actual execution of the task by the learners. In this phase the learners continuously monitor their own performance in the task by applying self-control strategies.

The **self-reflection phase** involves the learners self-assessment and self-reaction. In this phase learners assess their performance and take actions to improve it, which may lead to increase of self-satisfaction or decreases in self-satisfaction.

How do learners self-regulate their learning during digital reading?

Self-regulated learning plays a crucial role in reading comprehension. It allows readers to maintain their reading goal, activate their background knowledge, and use suitable strategies to make inferences (Cirino et al., 2016). It becomes even more important in digital reading when learners encounter non-linear information through different nodes presented for example in hypermedia. These nodes may include sentences and paragraphs but also images, sounds and video. Thus, the ability to self-regulate their own learning can aid learners' attempt to actively control and assess their navigation through these texts. For example in the performance phase as learners search for necessary information about a particular topic they must select a source to read, connect different information from different web pages and also evaluate this information. Learners who lack prior knowledge on the topic they are reading, may use extensive cognitive resource to process information from the text which could have been used for their self-regulated learning strategies (Moos & Azevedo, 2008).

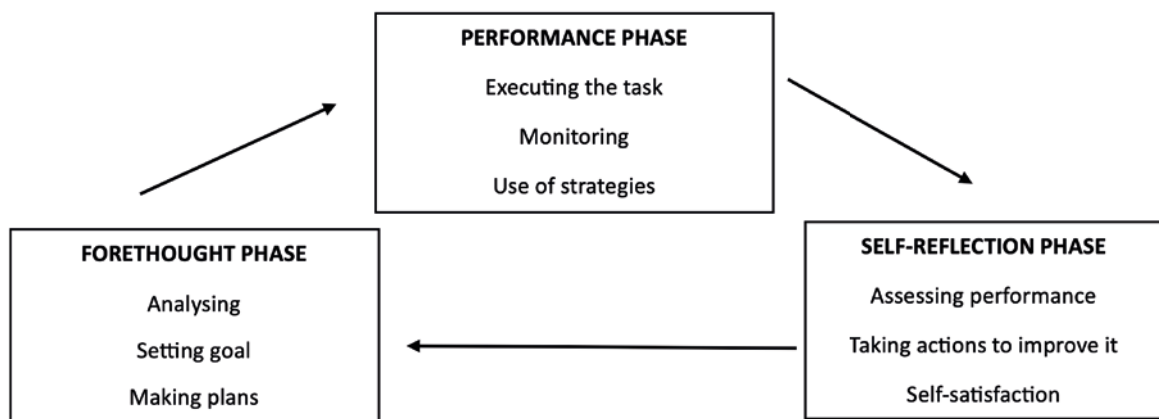
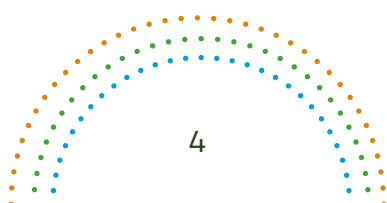


Figure 1. Cyclical model adapted from Zimmerman 2000.



Practical tips

- Self-regulated learning is highly important for effective learning and performance in digital environments.
- Learners should be continuously supported in the use of the specific self-regulated learning processes, especially when learning a new topic.
- Educators should explicitly promote the use of note-taking during complicated

digital reading to reduce cognitive resources which could be used for learning strategies.

- Learners who exhibit difficulties in reading comprehension in digital environment may very well struggle with their self-regulated learning processes, at least in one of the three cycles described by Zimmerman (2000).

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