SELF-REGULATION SKILLS IN DIGITAL LEARNING

Self-regulation skills (1/2)

Self-regulation is a vital generic skill and without the ability to self-regulate, it is very difficult to learn effectively.

"Self-Regulation refers to the self-directive process through which learners transform their mental abilities into task related skills" (Zimmerman, 2001). Thus, self-regulation is the ability to organize one's emotions and behavior and thoughts in pursuit of attaining a long-term goal

For students to be self-regulated, they need to be aware of their own thought processes and be motivated to actively participate in their own learning (Zimmerman, 2001).

Self-regulation skills (2/2)

Carefully planned online courses can help students with poor self-regulation skills to successfully complete the course.

Teachers can also help learners develop better self-regulation skills.

Self-regulation skills on online courses

Research has shown that students who have good self-regulation skills do better on online courses than students who have poor self-regulation skills. Many students who drop out of online courses have poor self-regulation skills (Vishwakarma & Tyagi, 2023; Wandler & Imbriale, 2017).

Students do now always recognize the skills needed to succeed in online courses.

Successful learners utilize plenty of different kinds of self-regulation techniques in online courses.

Self-regulated learning strategies

Poor self-regulation skills can explain why some students do not perform as well as we would expect them to perform in a digital environment.

Thus, high-achieving students can do well in their studies because they are able to effectively self-regulate their learning.

As language teachers, we need to teach self-regulation skills to our students explicitly.

Online courses are challenging for students with poor self-regulation skills. Thus, it is even more important to address these skills in an online course.

# Self-regulated learning: Reading example

Successful learners engage in continuous monitoring of their comprehension.

When a student who has strong self-regulation skills encounters a text and becomes aware of their lack of understanding, they will proceed to reread the material, questioning or summarizing the elements they need to understand.

Conversely, when a student lacking self-regulation skills reads a text and realizes their lack of comprehension, they are prone to either giving up entirely or persisting with the reading without recognizing the purpose of engaging with the text.

Students who lack self-regulation skills tend to adopt a passive approach to learning, frequently neglecting to assess and oversee their own learning progress.

Zimmerman's (2000) cyclical model of self-regulation
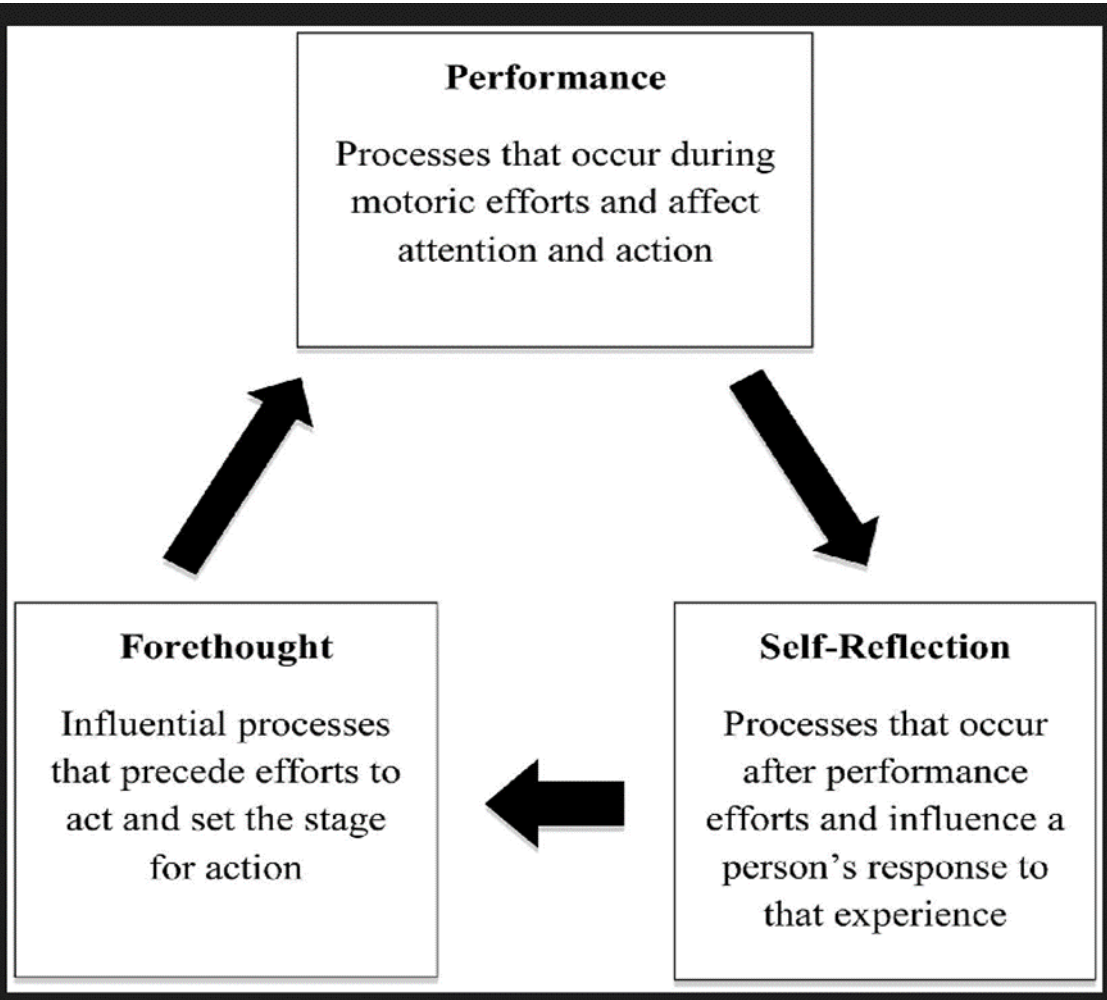
FORETHOUGHT	PERFORMANCE	SELF-REFLECTION
Task-analysis	Self-control	Self-judgment
Goal-setting	Self-instruction	Self-evaluation
Strategic-planning	Imagery	Causal attribution
Self-motivational beliefs	Attention focusing	Self-reaction
Self-efficacy	Task-strategies	Self-satisfaction
Outcome expectations	Self-observation	Adaptive-defensive
Intrinsic interest	Self-recording	
Values	Self-experimentation	
Goal-orientation		

Zimmerman's cyclical model

This self-regulated learning (SRL) model is organized into three overarching phases: **forethought, performance, and self-reflection.**

1. During the **forethought phase**, learners evaluate their work activities, establish ultimate objectives, and devise strategies to achieve them.

2. In the **performance phase**, learners actively engage in their tasks while monitoring their progress and employing specific methodologies to stay mentally focused and motivated to complete the task.

3. Finally, during the **self-reflection phase**, students assess their performance and make ethical judgments regarding their strengths and weaknesses.

(Vishwakarma &Tyagi, 2022)

Forethought Phase Processes and Descriptions

What effective learners do before they start to learn

Goals: The establishment of goals is a crucial aspect of self-regulated learning, whereby learners recognize the significance of both short-term and long-term objectives.

Strategic planning: In the pursuit of self-regulated learning, learners engage in strategic planning to effectively manage their learning processes, regulate their emotions, and guide their actions.

Self-efficacy: A key component of self-regulated learning involves the belief held by learners in their own self-efficacy, indicating their confidence in their ability to attain their desired goals.

Outcome expectancies: Self-regulated learners possess outcome expectancies, which refer to their belief that the assigned task is both realistic and attainable.

Task interest/value: Task interest and value play a significant role in the self-regulated learning process, as learners perceive personal interest and intrinsic value in the assigned task.

Goal orientation: Self-regulated learners exhibit a goal orientation that centers around mastery, indicating their focus on acquiring knowledge and skills rather than solely achieving performance outcomes.

✖ (Wandler & Imbriale, 2017)

Performance Phase Processes and Descriptions

What effective learners do while learning (1/2)

1. Task strategies: Individuals who possess self-regulated learning abilities use specific strategies that facilitate the student's successful completion of the assigned task.

2. Task volition: Self-regulated learners use strategies to maintain their elevated levels of motivation and commitment.

3. Self-instruction: Self-regulated learners use verbal statements to direct their attention towards achieving mastery goals rather than performance goals.

4. Imagery: Self-regulated learners employ mental imagery techniques to structure information and concentrate their focus.

5. Time management: Self-regulated learners effectively manage their time to efficiently accomplish the task by avoiding the tendency to delay or postpone.

6. Environmental structuring: Self-regulated learners modify their physical environment to create a setting that is more conducive to the completion of the task.

(Wandler & Imbriale, 2017)

What effective learners do while learning (2/2)

7. Help-seeking: Self-regulated learners actively seek guidance and support from individuals who possess greater expertise and knowledge.

8. Interest enhancement: Self-regulated learners perceive challenging tasks as opportunities for personal growth and development.

9. Consequences: Self-regulated learners establish clear positive or negative outcomes as a result of their actions and behaviors.

10. Metacognitive monitoring: Self-regulated learners consistently monitor their cognitive processes as they strive to attain their desired objectives.

11. Self-recording: Self-regulated learners engage in appropriate levels of self-documentation to track and evaluate their progress.

(Wandler &Imbriale, 2017)

Self-Reflection Phase Processes and Descriptions

What effective learners do after learning

✖ Self-evaluation: Self-regulated learners can conduct thorough self-evaluations both during and upon the completion of the task.

✖ Causal attribution: In contrast to attributing failures to uncontrollable factors such as ability, self-regulated learners attribute their failures to insufficient effort, thus demonstrating a more proactive mindset.

✖ Self-satisfaction: Self-regulated learners possess the resilience to not allow failure to deter them, instead finding solace in success and deriving satisfaction from it.

✖ Adaptive/defensive: Rather than adopting a defensive stance and attributing failures to uncontrollable causes, self-regulated learners embrace an adaptive attitude, actively seeking ways to improve their future performance.

(Wandler &Imbriale, 2017)

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Advice on how to teach self-regulation skills in an oline course

1. Teaching self-regulation skills

The teacher should highlight the importance of self-regulation skills for successful learning, and make students aware of them at the beginning of each course

Courses can, for example, start with a discussion on what self-regulation skills are, why they are important, and how they can effectively enhance learning.

Students can analyze their own strengths and weaknesses when it comes to the use of self-regulation skills.

Teachers can prepare materials or modules on self-regulation skills and embed them into their teaching.

2. Students keep a study journal (1/2)

Requiring students to keep a journal on their course progress may encourage better reflection on their self-regulation skills.

Setting up an online spreadsheet, form, or other data entry component can allow students to enter and track their study habits.

This strategy specifically targets assisting students with the self-reflective components of self-regulation, especially in the areas of self-evaluation and causal attribution (Zimmerman & Campillo, 2003).

2. Students keep a study journal (2/2)
Implementation. Students could be required to log their goals once per week:

Assessing goal achievement from the previous week	Establishing goals for the upcoming week	Time allocated toward the goal for the upcoming week	Question where students can improve their learning
Question students on what motivates them	Dates when studying for the class took place	Assignments completed	Amount of time committed
	Where the study took place	With whom studying was completed	Predicted scores for upcoming tests, quizzes, or other assessments.

3. Prompting students to self-regulate (1/2)

Prompting students to consider their actions in relation to their courses will provide reminders as to what is necessary to succeed in their class. This strategy emphasizes the forethought phase of self-regulation that prompts students to strategically plan how they will approach a class (Zimmerman & Campillo, 2003).

The teacher can ask the student to write a study plan where they document the learning strategies they are going to use in the course

3. Prompting students to self-regulate (2/2): Teachers can use a questionnaire on self-regulation skills

Am I concentrating on learning the material?

Do I understand all the key points of the material?

Are the study strategies I'm using helping me learn the training material?

Am I setting goals to help me remember the material after I finish the course?

Would I do better on the next test if I studied more?

Am I setting goals to ensure I have a thorough understanding of the material?

Do I know enough about the material to answer the questions correctly on the next assessment for this module?

(Sitzmann and Ely, 2010)

3. Scaffolding

✖ One method involves establishing a framework for time expectations as in the case of students enrolled in online courses, procrastination can prove to be a significant challenge.

✖ By breaking down larger projects into smaller segments or sub-assignments, students are compelled to complete each section before the project's overall completion.

✖ For instance, if learners are required to write a research paper, the instructor may request an outline, a bibliography, and multiple drafts prior to the submission of the final paper.

✖ A clear rubric that aligns with the desired grade can assist students in setting objectives for themselves. This scaffolding strategy can be particularly beneficial when applied to the grading rubric.

✖ Another approach involves the establishment of a collaborative discussion support framework. For instance, learners at different levels can be encouraged to pose collaborative questions to one another. This fosters increased discussion and inquiry among students regarding the course material.

✖ Real-life examples of tasks that achieved good grades can potentially facilitate the process of goal-setting and self-assessment.

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How to integrate self-regulation skills into vocabulary learning in an online course

Forethought: Questions for the students about metacognition

1. What type of a task is this?

2. What is my goal and how do I know I have reached it?

3. How many words about this topic do I already know?

4. Do I need some additional information/words?

5. How should I study the words/Which strategies should I use?

6. What strengths can I use when studying the vocabulary

7. Do I have any weaknesses that might make studying challenging? How can I make up for them?

Forethought: Questions for the students about metaemotional skills

1. How motivated am I to learn these words and how can I motivate myself more?

2. Why and how are these words relevant and important to me?

3. Do I believe in my ability to learn these words? If not, how can I increase my belief in my own skills?

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Forethought: Questions for the students about the study environment

1. What is the most suitable environment for studying these words?

2. Is the space quite enough and otherwise suitable?

3. Have I slept enough, and can I concentrate?

4. Have I eliminated all possible distractions?

5. How much time will I need to allocate for learning the words?

6. When and how will I start?

7. For how long will study at a time? How often do I need to repeat the words?

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Performance phase: Questions for the students about metacognitive skills

1. I am sure that I know what I am doing?

2. Does my approach make sense? Do the learning strategies I have chosen work?

3. Should I make any changes to my learning strategies or plan?

4. Am I focused on the task?

Performance phase: Questions for the students about metaemotional skills

1. Have I managed to maintain the motivation? If not, how could I remotivate myself?

2. Have I reminded myself about the reason why it is useful for me to study the vocabulary?

3. Do I still believe in my skills?

Performance phase: Questions for the students about the study environment

1. Should I make some changes to the study environment, or does it work well?

2. Have I managed to stay away from distractions? If not, how can I fix the situation?

3. Is there a balance between studying and breaks? Should I take more breaks?

4. Are the breaks effective or should they be somehow changed?

Evaluation phase: Questions for the students about metacognitive skills

1. How well did I reach my goals?

2. How many words did I manage to learn?

3. Do I still need to continue studying certain words?

4. Which words were difficult to learn and why?

5. How did my learning strategies work?

6. Which strategies worked well and why?

7. What will I do differently next time?

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Evaluation phase: Questions for the students about metacognitive skills

1. Am I satisfied with the result?

2. Am I happy with the way I worked?

3. If I am dissatisfied with the result, how do I explain it to myself? Do I blame my own abilities, or do I understand that it is due to insufficient effort, or poor learning strategies?

Evaluation phase: Questions for the students about the environment

1. Did I manage to avoid distractions? If not, what will I do differently next time?

2. How did the space work? Do I need to modify it somehow for future assignments?

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