

Definition of Zimmerman's Self-Regulation Key Subprocesses

SRL Phase	Areas	Sub-processes	Definition	Reference
Forethought Phase	Task Analysis	Goal Setting	Student's initiated efforts in setting educational goals or sub-goals to achieve; target may not be completion of the course (i.e., may not have planned to complete); may include recognition of course requirements; may refer to desire to reach mastery.	Zimmerman (2013)
		Time management	Student's initiated efforts in sequencing and timing their activities to achieve their learning goals.	Pintrich (2004)
	Self-Motivation Beliefs	Self-Efficacy	Students' self-appraisal of one's ability to master a learning task; it refers to the level of learning goal challenge they set for themselves, the amount of effort they mobilize, and their persistence in the face of difficulties; could include confidence in one's ability in language; may involve "commitment;" may include personal health.	Pintrich, Smith, Garcia, & McKeachie (1991); Zimmerman, Bandura, Martinez-Pons (1992)
		Outcome Expectation	Students' beliefs that their efforts to learn will result in positive outcomes.	Pintrich, Smith, Garcia, & McKeachie (1991)
		Task Interest/ Value	Student's evaluation of how interesting, how important, how useful the task is, and how enjoyable the student perceives the experience; may include enthusiasm/enjoyment in the subject matter.	Eccles et al., 1983; Pintrich, Smith, Garcia, & McKeachie (1991);
		Goal Orientation	The degree to which the student perceives herself to be participating in a task for reasons such as grades, rewards, performance, evaluation by others, and competition; tends to be more external reinforcements/rewards.	Pintrich, Smith, Garcia, & McKeachie (1991)

Performance Phase	Self-Control	Self-Instruction	Student-initiated learning project, without teacher intervention; could involve use of provided course materials, prepared FAQs, examples of prior student work; may be referred to as "self-regulation."	Jones (1998)
		Imagery	Student-initiated efforts to form mental images of text materials while reading or listening	Dunslocky et al. (2013)
		Attention Focusing	Student-initiated efforts of using various learning strategies to help focus or direct attention to a given learning activity.	Cleary (2018)
		Task Strategies	Student-initiated efforts of using various learning strategies to achieve the learning goals.	Zimmerman (2013)
		Environmental Structuring	Student-initiated efforts to select or arrange the physical setting to make learning easier; may relate to Internet access or use of tools.	Zimmerman (2013)
		Help-Seeking	Student-initiated efforts to solicit help from classmates or instructors; interaction or social aspects of courses.	Zimmerman (2013)
	Self-Observation	Metacognitive Monitoring	Student-initiated efforts to mentally track his/her performance processes and outcomes.	Zimmerman (2013)
		Self-Recording	Student-initiated efforts to create formal records of learning processes and/or outcomes, such as a graph of one's generation of text regarding each section of an outline.	Zimmerman (2013)

Self-Reflection Phase	Self-Judgment	Self-Evaluation	Student-initiated efforts to evaluate the quality or progress of his/her work.	Zimmerman (2013)
		Causal Attribution	Student's perceptions of the student about the causes of their performance; may relate to matches between course design and learning preference and quality of course (not time, environment).	Zimmerman (2013)
	Self-Reaction	Self-Satisfaction/Affect	Student's perceptions of satisfaction or dissatisfaction (and associated affect) regarding his/her performance; may be related to sense of personal achievement.	Zimmerman (2013)
		Adaptive/Defensive	Student's conclusions about whether he/she needs to alter his/her approach during subsequent efforts to learn.	Zimmerman (2013)

Reference

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