MOTIVATION & SELF-REGULATED LEARNING – FROM THEORY TO PRACTISE

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TASK

• It is evening.
• You are preparing yourself for a test which takes place tomorrow.
• There are lots of pages to be read and you also have other more interesting things to do at home.
• What methods or strategies do you use to learn in the most effective way?
• How do you force yourself to study?
A student-orientated model of self-regulated learning

**STUDENT**
Task value – goal setting
Self-motivation beliefs
(self-efficacy, intrinsic/extrinsic motivation, goal orientation)

**PLANNING**
- LEARNING STRATEGY CHOICE
- TIME MANAGEMENT
- ENVIRONMENT MANAGEMENT
- SOCIAL CONTROL
- PEER LEARNING
- SOCIAL CONTACT

**MONITORING**
- ENCODING CONTROL
- ATTENTION CONTROL
- MOTIVATION REGULATION
- BEHAVIORAL REGULATION
- AFFECT / EMOTION REGULATION
- EFFORT REGULATION
- HELP SEEKING
- REGULATION
Self-Regulated learning

• All students regulate their academic learning and performance in one way or another

• Self-regulated learning can be defined as an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate and control their cognition, motivation and behaviour, guided and constrained by their goals and the contextual features in their environments.

• Self-regulation is a cyclical process, because the feedback from prior performance is used to make adjustments during repeated attempts. These adjustments are needed, because personal, behavioural and environmental factors are constantly changing during the course of learning and performance and must be observed and monitored
Self-regulated learning – key aspects

• Self-regulated learning involves the three general aspects of academic learning:

• 1. *active control of the various resources* students have available (time, study environment and their use of others (such as peers and faculty members) to help them

• 2. self-regulation of motivation and affect, which involves *controlling and changing motivational beliefs* (efficacy) and goal orientation; students can also learn how to control their emotions and affect (such as anxiety) in ways that improve their learning;

• 3. self-regulation of cognition which involves the *control of various cognitive strategies for learning*, such as the use of deep processing strategies that result in better learning and performance than students showed previously
Self-regulation is like getting someone to watch over your learning.

That person is? Yourself!
The first phase creates the necessary conditions for learning.

The second self-regulatory phase involves processes that occur during learning efforts and which guide and regulate the learning process.

The third phase, self-reflection, involves processes which occur after the learning experience and which influence reactions to that experience. Self-reflection refers to looking back on the learning experience; that is, giving meaning to the learning experience.
Forethought & Planning
(Zimmerman 2000, 2002)

Task analysis
- Goal setting
- Strategic planning
- **Motivational beliefs**
  - Self-efficacy
  - Outcome expectation
  - Intrinsic interest
  - Goal orientation

![Diagram showing the relationship between Forethought Planning, Self-reflection, Performance practice, Monitoring, and Control.](Diagram)
PHASE I: Motivation, task analyses & motivational beliefs

• Everyone has needs, values, motives, goals, expectations

• The basic need theory of motivation views needs as dispositions toward action. Needs can be biological, affective, emotional, cognitive, aesthetic, volitional, behavioural, spiritual etc., and they can explain the actions of the individuals.

• Motivation requires physical or mental activity
  – Physical activity entails effort, persistence, and other overt actions
  – Mental activity includes such cognitive actions as planning, rehearsing, organizing, monitoring, making decisions, solving problems, and assessing progress.

• These activities are engaged to attain the fixed goals.
Motivational components – student approach

• 1) Students’ beliefs about the importance and value of the task (value components)

• 2) students’ beliefs about their ability or skill to perform the task (expectancy components)

• 3) students’ feelings about themselves or their emotional reactions to the task (affective components)
Value components – Task value

“I think the course material in this class is useful for me to learn”

• Task value is conceived as a value an individual attached to success or failure on a task
• Importance / Interest / Utility
• High motivational task value leads to more involvement in learning
• It has been found in many studies that the students’ task value correlates with the grades received
Value components –
Student Goal Orientation

— Why am I doing this task?

- **Intrinsic motivation** is an individual's willingness to work purely for personal satisfaction
  - Intrinsically motivated students work on a task because they find it enjoyable — task participation does not depend on rewards or any other external constraints.

- **Extrinsic motivation** arises from an individual's desire to get better results than others (comparative motivation) or to achieve an external reward or avoid a negative consequence (non comparative motivation).
Expectancy components –
Self-Efficacy Beliefs & Outcome expectations

• “I'm certain I can master the skills being taught in this class.”

Self-efficacy refers to personal beliefs about having the means to learn or perform effectively (Zimmerman, 2000)

• School students preparing themselves for examinations have efficacy judgements of their capabilities, skills and knowledge. At the same time they have outcome expectations about the grades they might receive in the exams.

• Students who are low in self-efficacy tend to be more anxious about their learning

• In many studies is has been proven that high self-efficacy is highly predictive for success in the task. High efficacy beliefs and outcome expectations correlate positively with high grades.
Affective components
Self worth - Fear of failure - Test anxiety

“When I take a test I think about items on other parts of the test I can't answer.”

• Self-worth refers to an individual’s self-respect and sense of personal value. It is a basic human need to feel accepted and appreciated and to protect one’s sense of worth

• Avoidance orientation describes an individual's inclination to protect him/herself from failure - Fear of failure

• Test anxiety leads to underperformance in the exams – High anxiety students are not able to use appropriate learning strategies although they study and try as much as other students
Practice, Monitoring & Control
(Zimmerman 2000, 2002)

Self-Control
Self-instruction
Time management
Task strategies

Process creation
Help-seeking
Environmental structuring

Self-Observation
Cognitive monitoring

Performance
Practice
Monitoring
Control

Forethought
Planning

Self-reflection
PHASE II: Practice, monitoring & control
Self-instruction & Help-seeking

“If I start to feel nervous about getting my course work done, I say to myself ‘I know I can do this”

• Self-instruction strategies combine a variety of self-talk strategies, which are used for self-reinforcement, incentive escalation and encoding control. Students might use these strategies to remind themselves during the test about their chosen strategies (e.g. to check the answers several times) and possible consequences of a failure to motivate themselves for better results.

• Help-seeking strategies refer to the strategies used to get help or assistance from others (students, instructor), to control their own emotional states and to provide self-reinforcement and reassurance.

• Self-instruction strategies were more often used by the less successful group of students.
PHASE II: Practice, monitoring & control
Use of various learning strategies

• Learning strategies can be grouped into cognitive, metacognitive and resource management strategies.

1. Cognitive strategies help the learner to code new material and facilitate the analysis and formulation of knowledge.

2. Metacognitive strategies help the learner to plan, regulate, monitor and formulate his/her own cognitive processes.

3. Resource management strategies help the learner to control time, effort and outside help in order to perform the task.
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+ Self-handicapping strategies
The use of cognitive learning strategies

• Rehearsal strategies
  “In the morning on the bus I read through the notes in my exercise book and swear a lot”
  “I read the subject material a couple of times, first in detail and after that more generally”

• Elaboration Strategies
  – “I often make notes, to make the work easier for myself”
  – “I try to outline tasks by sketching them and using logic”

• Organisation Strategies
  – “In order to learn efficiently I read for example, the piece, followed by the notes I made in the lesson, and then I deliberate it to myself and set myself questions”

• Critical Thinking
  – “If I do not understand the course material, I try to understand — if I do not understand, I take my maths book which explains the course”
Resource management strategies

Time Management Strategies
— “I have to reserve the whole evening for this”
— « Le matin du test, je me lève tôt (+/- une heure) pour revoir mes notes »
— “I also set my alarm clock, so after about half an hour I can have a break. Not that it always works...”

Environment Management Strategies
“I lock myself in my room, put music on and then take my books and other things out”
“I fetch food and drinks from the kitchen, shut myself away in a room and put music on loud enough so that I won’t hear other sounds in the house (such as the TV)”
“If there is a lot to study, I leave the home environment, and go for example, to a café, where it is peaceful, and there is nothing else to do but study”
The use of metacognitive control and regulation strategies

Encoding Control Strategies
   “If I don’t understand what I have read I revise it, for example, from my notes”
   – “I revise the main points in my mind and if everything is clear, I can do what I want”

Attention Control Strategies
   “I’ll try to concentrate on the task!
   “I remove everything interesting from my mind and simply force myself to study for the exam.”
   “I find it hard to control what enters my mind sometimes so I put some classical music on, which helps me to concentrate and generally puts me at ease, and then I try to focus until I am sure that my mind will not wander again”
   “I know that my ‘study skill’ and ability to concentrate are quite poor, so I try my best and read my exercise book and notes”
   “I force myself to read even if I can’t concentrate, but if there is an ice hockey game on TV, then I have to watch it even if I study at the same time for the exam”
The use of metacognitive control and regulation strategies II

Effort Regulation
   “I never study after midnight or else I will be extremely tired in the morning, and won’t be able to concentrate on the exam”
   “Study for 30 minute periods with 10 minute breaks for relaxation”

Peer Learning
   “If problems arise, I phone my friends”

Social Control
   “I will ask my friend not to call me tonight!”
   “I think about what kind of things the teacher might ask me and memorise what are, in my opinion, the exam subject’s most important areas”

Help seeking strategies
   – “I will ask my teacher to explain it again”
   – “If problems arise, I will ask a family member”
Motivation Regulation Strategies

Self-reward

– “I promise myself rewards (for example, breaks or food)”
– “I reward myself with a Cadbury’s Dairy Milk chocolate bar”

Positive outcome thinking

“I think: ’If/when I study hard now, I can get a good mark on the exam’”

“The results in the exam are directly proportional to the effort given in studying.”

Thinking of negative outcomes

“I motivate myself by thinking that if I don't pass the exam; I will have to re-sit the whole course again.”

Task value/learning goal/interest

“I think that it is worth studying, because I want to get into a good university”
Affect/Emotion Regulation Strategies
Studying can be fun

- “I have to entertain myself a bit when revising, or else I will loose my concentration.”

• Students use a wide range of affect regulation strategies. Studying involves all kind of emotions such as anticipation, hopelessness, anxiety, enjoyment, boredom, pride and disappointment.
• These strategies include, for example, telling yourself to calm down, focusing on your breathing to calm down, relaxation exercises, reminding yourself of things that make you feel good, or simply strategies to change the boring work to fun.
  - “I make sure that I feel the urgency of the situation. I find that I can work better if there is a set deadline and I’m under pressure”
Behavioural Regulation Strategies

• Students can control the state of their body and regulate themselves or their conditions in at least three different areas:

1. Nutrition “I drink coffee in order to remain alert”

2. Need for sleep “The night before the exam I go to sleep earlier than normal and try to think about something else and relax a while before bedtime”

3. Physical conditions “I take a 5 minute break, during which I open the window and stretch my legs”

• Most of the students seem to know when is the best time to go to sleep or to wake up to be at their best in the test situation.
Self-instruction strategies: Self-talk – learned rules - reminding

– “I tell myself that there are only a few weeks of exams left, and then this will all be over”

• Self-instruction refers to telling oneself how to proceed during a learning task. There is some evidence that self-instruction can improve students’ learning.

• Self-verbalisation is used as a teaching method with children with special educational needs

• Self-talk could be a way for a student to decrease her/his emotional arousal and escalate motivation.
  – “I live by the motto ‘first work, then pleasure’”
Non-constructive strategies

— “If I am tired – I go to sleep. If there is something good on TV – I will watch it, school has been put on the back burner in my life”

• Most of the self-control and self-regulation strategies are aimed at improving individuals’ performances in an academic situation. However some of the students have a different goal: they are not actively looking for improvement — on the contrary, they have given up.

• All secondary school teachers can recognise this type of student in their classrooms – they are our most challenging students.
Reflection
(Zimmerman 2000, 2002)

- Performance
- Practice
- Monitoring
- Control

- Forethought
- Planning

Self-reflection

Self-judgement
Self-evaluation
Attributions
Self-reaction
Self-satisfaction
Adaptive – defensive
PHASE III: Self-reflection, self-judgements, self-evaluation and causal attributions

- **Self-judgment** involves self-evaluating your own performance and attributing causal significance to the results. Self-evaluation refers to comparing self-monitored information with a standard or goal.
- Students are more likely to search for causes of their failures than for causes of their successes.
- Goal setting and **self-evaluation** of goal progress constitute an important motivational mechanism. Students work toward goals and they evaluate their progress, which helps them to sustain certain behaviour. There is a clear conjunction between goal setting and outcome expectations. Students act in the ways they believe will help them attain their tasks and goals.
- Self-evaluation refers to comparing self-monitored information with a standard or goal.
FROM THEORY TO PRACTISE
How to foster intrinsic motivation among students?

• Challenge students’ skills with activities of intermediate difficulty – avoid boredom
• Curiosity: Present ideas which are slightly at odds with learners’ existing knowledge and beliefs – surprise elements
• Control: Allow students choices in activities and procedures. Foster attributions to causes over which they have some control.
• Fantasy: Engage students in games and simulations
• Develop in students an incentive to satisfy their interests and curiosity rather than to please the teacher and obtain good grades
How to deal with lack of motivation

– “I don’t lack motivation, but I don’t usually have time for studying”

• It is necessary to find together with the student reasons for lack of motivation (weak self-esteem, weak self-beliefs, lack of interest/value/utility, negative idea of her/himself as a learner, deliberately chosen self-handicapping strategies etc.)

• It takes some time to build self-confidence and find together with the student concrete reasons to study
  • “Unfortunately I often succumb to the temptations of TV, music, and food. As a result, I often give up trying”

• It might be useful to analyse what kind of strategies the student is using when studying and which are the weak areas (see table).
How to improve motivation and performance?

• Set clear and specific goals
  – It is much more efficient to ask students to read three books in a given time than encouraging them to read more
• Goals should be challenging and difficult – but not outside the range of students’ capabilities
• Set students both proximal and distal goals
  – Projects can be divided into a series of subgoals
• Provide feedback which increases students’ self-efficacy for obtaining the goal
Self-regulated learners & the role of the teacher

Where is the teacher?

Classical teaching style

SRL teaching style

From I-class project – M. Delmas
“As we start a new school year, Mr. Smith, I just want you to know that I'm an Abstract-Sequential learner and trust that you'll conduct yourself accordingly!”
Why promote self-regulation?

• Skilful self-regulators achieve better results and grades
• Self-regulative skills can and should be taught to students at the secondary school level. Learners can be trained to monitor and control their internal and external conditions: time management, study environment, distractions, concentration, emotions and motivation.
• Especially, children with special educational needs (SEN) seem to profit from the teaching of self-regulatory skills
How to promote self-regulation?

• Self-regulatory skills are of little value if a person cannot motivate himself to use them. Start with task value and motivation!

• A study skills “Learning to learn” program should be obligatory at the beginning of secondary school – and repeated before the 6th secondary:
  – Information processing, note taking, test preparation, goal setting, time management, critical thinking, self-evaluation etc.

• Students should be set tasks in which they can practise their self-regulation skills

• Learners should be allowed to practise adapting the different learning strategies in a safe learning environment
How to deal with parents?

• If a student is under-achieving or in danger of having to repeat the class — it is easy to blame a teacher, or the school or the laziness of the student for the negative results.

• The discussion should be focused on the key areas of the student’s learning process:
  – motivation/weak motivation level (possible reasons)
  – goal setting/ quality of goal setting, (intrinsic, extrinsic)
  – interest, values (why the student is not working?)
  – self-efficacy beliefs (low self-efficacy – low outcome expectation)
  – self-regulatory skills and self-regulation practice.

• Instead of allocating guilt, the discussion should concentrate on ways to understand and help the student with her/his motivation or learning problems.
European Schools challenge

• In the European School system it is a real challenge to create learning experiences that will allow the integrity of every student.

• According to Wlodkowski and Ginsberg (1995),
• ‘an approach to teaching that meets the challenge of cultural pluralism and can contribute to the fulfilment of the purpose of higher education has to respect diversity; engage the motivation of all learners; create a safe, inclusive and respectful learning environment; derive teaching practices from principles that cross disciplines and cultures; and promote justice and equity in society.’
References