



## Self-Regulation of Pedagogy Students

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### Abstract

*In process of promoting self-regulated learning, the role of teachers is crucial one. Self-regulation could be described as the ability of an individual to change his own behaviour. Because of this ability it is possible to change our behaviour towards certain requirements. At the same time, self-regulation is understood as a vast ability of man to have a control over their inner state, processes and behaviour. Teachers with well-developed self-regulation skills are better at adapting their learning approach to their own skills and become more effective in the educational process. That is the main reason, why we have decided to focus on the self-regulation process of students of pedagogy studying at universities in the Slovak Republic. As our goal in this article is to look at and investigate the self-regulation abilities of university students, we chosen to use the questionnaire developed at Center for Research on Learning at University of Kansas, which is known as the Self-Regulation Questionnaire. The Self-Regulation Questionnaire is designed to measure a student's proficiency in the four essential components of self-regulation, which are Plan (for what you want to accomplish), Monitor (progress and interference regarding your goal), Control (be able to change by implementing specific strategies when things are not going as planned), Reflect (on what worked and what you can do better next time). As teachers often work in an environment which is tightly controlled and their own self-regulation abilities are often tested, therefore they need to possess strong determination and adequate self-reflection.*

**Keywords:** control, self-regulation, The Self-Regulation Questionnaire, students, teachers;

### 1. Introduction to Theory

Self-regulation is in other words ability to control and manage your-self. It can be described as the capacity to tell your-self what to do and what not to do. Self-regulation is learned from early childhood and it is also one of the main objectives of education. This process consists of guidance, ability of self-control and setting own limits in relation to others. The capability to think and to comprehend is an important element of self-regulation. A certain level of intelligence is required for the process of self-control. It can be understood as a kind of internal struggle with your-self. It is the human psyche that performs oversight of own functions, states and internal processes. Within these stages humans try to gain control over their own ideas, feelings, impulses and performance. By means of self-regulation, person directs own living and own behaviour. That leads towards satisfying his own needs and intentions. The most important self-regulatory features of the personality include: self-awareness, self-knowledge, conscience, self-esteem and will [1].

For a person to be able to know what kind of person he is, what he knows, what he is capable of doing, how does he define himself and his options. Person must have the knowledge about:

- ⌘ own body,
- ⌘ own values and opinions,
- ⌘ memories and experiences,
- ⌘ feelings,
- ⌘ knowledge,
- ⌘ skills and competences,
- ⌘ how the others perceive him,
- ⌘ ideal ideas about him-self and who he is and what he would like to be [2].

Self-regulation as the ability to control own behaviour and emotions is one of the decisive competencies that manifests itself as specifically human [3].

Intentional self-regulation is an essential aspect of human functioning, which involves the adaptation of own thoughts, attention, emotions and behaviour as a response to environmental demands [4]. The self-regulation strategies also act as protective factors that positively influence a human life. Self-regulation could be also described as a self-care. Regulated behaviour is based on processes that



include knowledge and experience. By means of self-regulation, one can change his behaviour to be able to achieve his goal and would not allowed him-self to be controlled by automatic, reflexive and instinctive reactions to stimuli [5].

Teacher is the main organizer and implementer of education process. Teacher's personality is understood as a general model of a person's personality, characterized in particular by psychological determination [6]. The process of creating a teacher's personality is very important. The relation between the structure and the dynamics of the personality is understood as the most complicated part in the development of personality. It may also be called as the way to recognize one's personality. The following components are important for the personality of the teacher:

- ⊗ psychological resistance,
- ⊗ adaptability of adjustability,
- ⊗ ability to learn new knowledge,
- ⊗ social empathy and communicability.

The influence and formation of the teacher's personality depends primarily on the innate powers – pedagogical talent, from self-education, self-improvement, to the intensity of the teacher's interest. This process of formation of teacher's personality starts as early as he starts his preparation for the future profession, known as teaching practice. Each teacher is expected to have some degree of creativity. Creativity can be gained from experience, but it can also be the result of self-education. The success of the self-education of a teacher depends on his ability from thinking about own pedagogical work. From his ability to see its positives, its shortcomings and eliminate them. The personality of the teacher enriches the student's experience and shapes his personality [7].

The essence of teacher's educational activity forms student's personality. It is actually a certain sum of teaching knowledge and skills, ways of behaviour and personal qualities. The teacher educates students mainly by his own behaviour. He is a role model for them, an example that students imitate, and they might even try to be like him. Teacher does influence his students in both, in positive as well as negative way. The relation to oneself is specific, as it includes high standards of self-demands, process of own improvement and higher niveau of self-regulation.

Teacher's professionalization is extensively effected by his readiness for his profession. There are six main features that high quality teacher should have [8]:



Graphic 1. Six main features of high quality teacher



And because of above features we are inclined to think that teachers with well-developed self-regulation skills are more suitable for adapting their learning approach to their own skills and are much more capable of becoming more effective in the educational process.

## 2. Methods and Participants

The survey sample was composed of N= 143 students (freshmen at university) studying pedagogy of natural sciences, social sciences, languages, arts and educational subjects at university in the Slovak Republic, Constantine the Philosopher University in Nitra, Faculty of Education.

We have chosen to use the questionnaire developed at Center for Research on Learning at University of Kansas, which is known as the Self-Regulation Questionnaire [9]. The Self-Regulation Questionnaire is designed to measure a student's proficiency in the four essential components of self-regulation, which are:

- ⌚ **plan** - for what you want to accomplish,
- ⌚ **monitor** - progress and interference regarding your goal,
- ⌚ **control** - be able to change by implementing specific strategies when things are not going as planned,
- ⌚ **reflect** - on what worked and what you can do better next time

Students have completed the questionnaire by self-rating items on a 5-point, Likerttype scale. This scale ranges from 1 (Not very like me) to 5 (Very like me). The Self-Regulation Formative Questionnaire was developed in 2015 by Research Collaboration. An extensive review of related research resulted in the identification of four components essential for self-regulation. Self-regulation requires students to plan what they want to accomplish, monitor progress, take control and make changes when things don't go as planned, and then reflect on what worked. The questionnaire was tested for reliability using Cronbach's coefficient alpha<sup>2</sup> with 5,543 high school and middle school students during the 2016-2017. The overall self-regulation questionnaire was found to be highly reliable (22 items;  $\alpha = .896$ ). The plan subscale consisted of 5 items ( $\alpha = .632$ ), the monitor subscale consisted of 6 items ( $\alpha = .704$ ), the control subscale consisted of 6 items ( $\alpha = .744$ ), and the reflect subscale consisted of 5 items ( $\alpha = .682$ ).

## 3. Results

As we have already mentioned, the research sample was made by 143 students of academic subjects. The questionnaire consists of 4 self-regulation areas; each area contains 5-6 questions. We share opinion of researchers [9], that these 4 areas in the questionnaire reflect self-regulation not only during the study, but also during professional training and throughout life. As can be seen in Table 1, the average was always greater than 3 which is the middle value for the 5-point Likerttype scale. The highest score was in the area of control. We can argue that the areal of control is the most common among students, that means that they control their roles and goals. Kurtosis was found -0.57 of Plan, therefore, the values are not distributed close to normal in the file. Skewness is the highest in the field of control, that means that students were close to the average and as it is a negative value, they marked more options that are on the right side of the average. Standard Deviation is an average of 1.03 if we evaluate all areas together.

Table 1. Descriptive statistics for every area of the questionnaire

Area	N	Mean	SD	Kurtosis	Skewness	Sum
Plan	143	3,36	1,09	-0,57	-0,34	480
Monitor	143	3,61	1,07	-0,37	-0,46	516
Control	143	3,72	1,00	-0,23	-0,53	528,5
Reflect	143	3,48	0,97	0,13	-0,37	497

*\*Note: N = number of participants. SD = Standard Deviation.*

Regarding frequency, the most responses, among all the answers were Option 4 - Mostly like me. In Figure 1, we can see all answers frequencies, only in the Plan is the order of the third and fourth answers is different. Otherwise the ranking in the other areas are same, 4-3-5-2-1. Because of that we can assume that all the areas represented in the questionnaire are about the same level. The questionnaire was helpful both for our research and for the students them-selves. When a student has



calculated his points, the sum of points is equal to his level of self-regulation. Higher number of points means better Self-regulation.

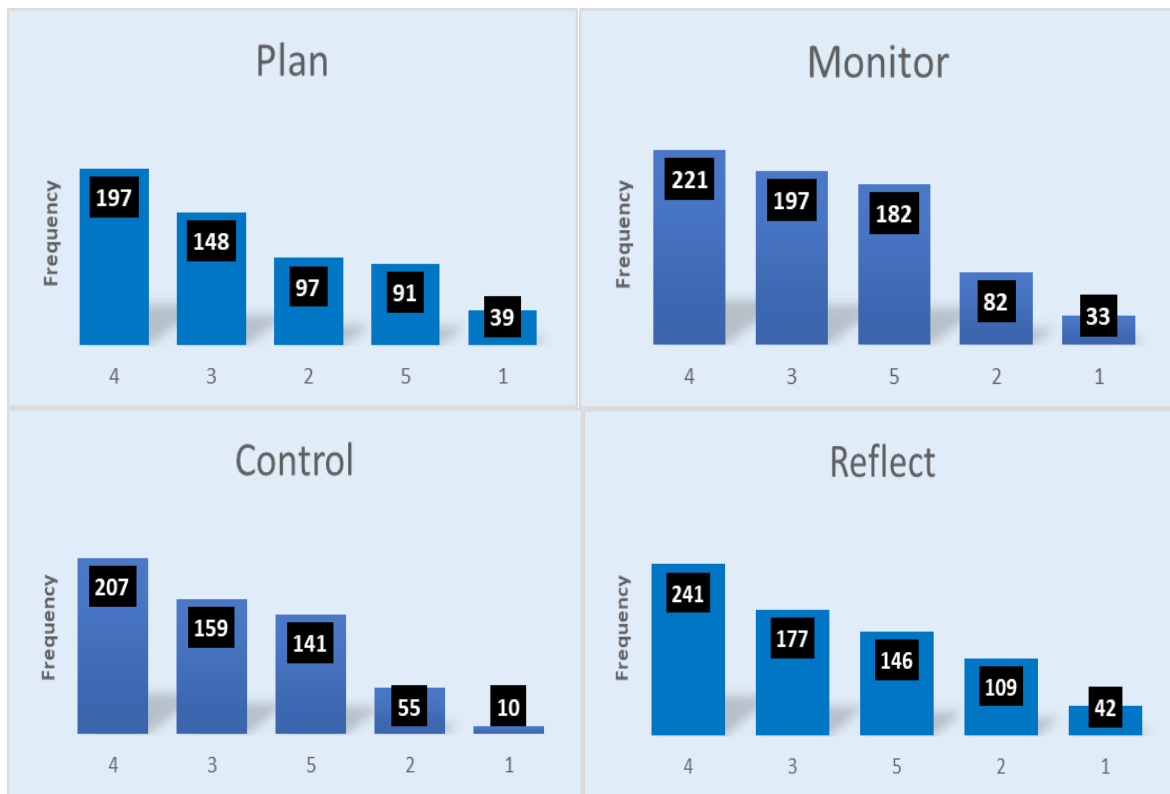


Figure 1. Frequency of areas

Despite the fact, that results do not show the situation as alarming, we are still convinced that the self-regulation score should be higher for group that is made of future teachers. The average number of points obtained in the questionnaire was 74. The self-regulation leads to self-awareness and people with higher self-regulation are capable of controlling their own reactions and manage their own emotions [10]. A higher degree of self-regulation is necessary for the work of the teacher. Self-regulation is essentially based on the theoretical assumption that individuals are important actors in their own development.

#### 4. Conclusions

We came to the conclusion that the self-regulation refers to the proactive application of self-regulatory processes, cognitive behaviours, emotions to obtain goals, learn skills and guide own emotions. [11,12]. Self-regulated students are metacognitive, behaviourally and motivationally active actors in their own learning process [13]. The self-regulation process could be interpreted as making a plan, monitoring that plan, making changes to be able to stay on track, and reflecting on what has worked and what could be improved the next time [14]. The self-control, confidence, and knowledge gained from self-regulation provide students the perseverance and skill to fruitfully navigate their studies and careers. Implementing self-regulation improvements students' organizational ability and builds healthy work habits. The self-awareness and self-critiques used in self-regulation assist students to stay on track and continue their toward goals, to work well with others and to adapt to new situations.

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