STUDENT TEACHERS' BELIEFS ABOUT SELF-ASSESSMENT

Ida Szucs Zagyvane
Department of Educational innovation, Eszterhazy Karoly Catholic University, Eger (Hungary)

Abstract

The aim of the presentation is to show the results of a longitudinal study conducted during the student teachers' long-term individual practice in a partner school. The rational of the research is to explore student teachers' beliefs related to self- assessment, which is the engine of self-regulated learning and the key of continuous professional development. Only a few empirical studies focus on student teachers' self-assessment examining mainly the accuracy of self-assessment. Some of them concluded that applying formative assessment including self-assessment in teaching practice is rather problematic, although there is much potential in applying it. The number of studies reflecting on student teachers' beliefs on self-assessment is limited. Our research tries to fill up this gap by forming the following research questions: a) How do student teachers conceptualize self-assessment? b) Which metacognitive strategies can be identified in their beliefs? c) Which factors influence extended use of self-assessment as a method in their everyday teaching practice? To answer the questions, a longitudinal action research strategy was used in the qualitative paradigm. The research took four years. The sample consisted of nine student teachers altogether, five in the experimental and four in the control group; eight of them were from Eszterhazy Karoly Catholic University, one was from Debrecen University. All the student teachers completed their one-year long teaching practice at Dobo Istvan Secondary School, Eger. The results are based on the analysis of data gained from input and exit interviews with student teachers divided into an experimental and a control group. All student teachers in the experimental group were supervised by the same mentor teacher. She supported them by carrying out self-assessment regularly. The members of the control group had different mentors and they did not do self-assessment regularly. The other sources of data were semi-structured interviews made with the members of the experimental group after each self-assessment, student teachers' written reflections and the mentor teacher's reflections after class observations. The validity of the results was provided by theoretical, data and methodological triangulation Cohen's Kappa coefficients proved high reliability of coding. According to the results, student teachers' self-assessment concept is much more complex than that one revealed by former international researches. The student teachers believe that self-assessment is crucial in in the learning process and professional development, however, they do not apply it consciously, furthermore, only a few of them uses it in their teaching practice. The student teachers' self-assessment profiles justified that each student teacher takes a different learning path during teaching practice, thus they need more personalized support implying further aspects of mentors' professional development. Self-assessment backs student teachers in identifying their strengths and weaknesses but not all of them are able to develop professional learning goals. Therefore, the mentor needs to pay more attention to help student teachers to link their needs to learning goals. The research results have also shown that effective ways of managing of emotions is pivotal in realizing self-regulation; therefore, more activities supporting self-knowledge, self-understanding would be beneficial in teacher training.

Keywords: Student teachers, self-assessment, long-term individual practice.

1. Introduction

Describing teacher education as a system opens new perspectives in the field of the researches (Falus & Szűcs, 2023). In this study, we are focusing on the student teachers' beliefs on self-assessment and their real-life self-assessment in the process of practice teaching. The wider context of this study is our researcher teacher program in the frame of which we explore the role of self-assessment in self-regulated learning. The theoretical background of the study is based on notions like self-regulated-learning, self-assessment, metacognition and their interrelations. Exploring the scientific literature, we can state this research is filling in a gap. Although the student teachers do self-assessment after completing certain courses and teaching activities, the number of studies focusing on their beliefs related to the role of self-assessment in their learning processes and applying self-assessment in teaching is limited.

2. Theoretical background

2.1. Self-regulated learning and metacognition

Describing teacher education as a system defining its macro, meso, and micro levels with their components helps the researchers and decision makers identify the points of possible interventions in order to develop teacher education further (Falus & Szűcs, 2023). From the point of view of the student teacher, initial education completed at the training institution and all the possibilities providing teaching practice (individual, group and individual long-turn practice) add to developing his/her beliefs on school, pupils, teachers, and teaching. This period gives opportunities to develop skills and competences supporting student teachers' life-long learning skills (European Council, 2002). Self-regulated learning is a key factor contributing to life-long learning. It is a complex system of cognitive, metacognitive and motivational processes (D. Molnár, 2014).

Different models of self-regulated learning have been described in which the researchers identified phases, strategies of the complex regulatory processes (Winne & Hadwin, 1998. 278.; Zimmerman, 2000. 15.; Pintrich, 2000, 454.; Boekaerts, 2011. 410–411.; Efklides, 2011. 8.; Järvelä & Hadwin, 2013). These models are different from one another depending on the components' role in the regulation and the number of levels of regulatory strategies but the models have some common features. The following phases and strategies appear in them: Planning (setting goals, activation), Monitoring, Controlling and Reflecting.

The phases/ strategies are interrelated with one another functioning sequentially or parallel to one another, therefore self-regulated learning is an open ciclical process within which it is not sensible to separate the phases (Panadero, 2017). The phases activate cognition, motivation, behaviour and its environmental context.

Metacognition plays a crucial role in self-regulation. It is the complex system of cognitive abilities with the help of which the learner reflects on different situations in order to develop his/her existing knowledge (Peverbly, Probst & Morris, 2002; Stavrianopoulos, 2007). Practicing planning, monitoring and assessment contribute to development of metacognition (Meloth & Deering, 1992; Schraw, 1998; Stavrianloulos 2007; Slavin, Chamberlin & Daniels 2007; Dignath & Büttner, 2008; Csíkos, 2007; Perry et al., 2019). The connection among metacognition, cognition and motivation is provided by assessment especially self-assessment. Self-assessment is closely related to monitoring. The learner compares his own learning goals to the qualitative or quantitative criteria of his learning activities (Zagyváné, 2019. 22.), and forms positive or negative judgements. Then, he performs adaptive behaviour: continues his successful learning strategies expecting further successes in learning or tries to avoid the feeling of dissatisfaction and escapes from learning (Zimmerman & Moyran, 2009. 304. Self-assessment and monitoring maintain the continuity of self-regulation, forming new learning goals and elaborating strategies to achieve them.

2.2. Examining student teachers' self-assessment

Revising the latest researches we can see, that they mainly focus on student teachers' self- assessment, how they assess themselves at the end of the courses (Kilic & Saglam, 2023; Martín-del-Pozo & Martín-Sanches, 2022) or teaching activities (Sigmon & Fogelsong, 2021; Riberio-Silva & Amorin, 2023). The number of studies dealing with self-assessment is limited and there are far fewer researches exploring student teachers' beliefs on self-assessment and its role in the learning-teaching process.

3. Research

In the research, we formed the following research questions:
- How do student teachers conceptualize self-assessment?
- Which metacognitive strategies can be identified in their beliefs?
- Which factors influence extended use of self-assessment as a method in their everyday teaching practice?

To answer the questions, we applied a longitudinal action research strategy in the qualitative paradigm. The research took four years in a secondary school in Eger, Hungary. The secondary school is one of the partner schools of Eszterhazy Karoly Catholic University with a teacher education program consisting of five years of university-based education and one year of individual long practice in the school selected by the student teachers.

The results are based on the analysis of data gained from input and exit interviews with student teachers divided into an experimental and a control group.

The sample consists of nine student teachers, five in the experimental group and four in the control group.

Figure 1. Experimental group.

Student teachers – Experimental group	University	School year	Specialization
1. Student	EKKE	2021/22	English language-Hungarian literature and grammar
2. Student	EKKE	2021/22	Biology- PE
3. Student	EKKE	2022/23	English language- Music, singing
4. Student	EKKE	2022/23	Hungarian literature and grammar- Library studies
5. Student	EKKE	2023/24	English language - History

Figure 2. Control group.

Student – Control group	University	School year	Specialization
1. Student	DE	2021/22	Hungarian literature and grammar - History
2. Student	EKKE	2022/23	Library studies- History
3. Student	EKKE	2022/23	History - Geography
4. Student	EKKE	2023/24	English language - Ethics

The same mentor teacher supervised all student teachers in the experimental group. She supported them by carrying out self-assessment regularly. The members of the control group had different mentors and they did not do self-assessment regularly.

The other sources of data were semi-structured interviews made with the members of the experimental group after each self-assessment, student teachers' written reflections and the mentor teacher's reflections after class observations.

The validity of the results was provided by theoretical, data and methodological triangulation Cohen's Kappa coefficients proved high reliability of coding (input and exit interviews: between 0.97 and 1; interviews after the observed lessons: between 0.88 and 1).

4. Results

Regarding the conceptualization of self-assessment by the examined student teachers, it is a complex process, which is present in people's life generally, but it occurs as a professional activity in teachers' everyday practice. They consider self-assessment as the engine of their own learning, personal and professional development. The concept of learning means two things for them: it refers to their development as university students and as beginner teachers. Self-assessment means development, growing and activity for them in order to succeed in their life. Student teachers also emphasize the role of self-assessment in building self-knowledge and knowing others. They conduct self-assessment considering criteria set either by others or by themselves. Some student teachers use self-assessment in their teaching practice as well. The most frequently used method is reflection as feedback from pupils in oral or written forms, which takes place during the learning process, or in its final stage. The sources of self-assessment are feedbacks from pupils, mentors, leading teachers. The members of the experimental and control groups named their strengths and weaknesses; in the input interviews, these were mostly related to their student identity and in the exit interviews mainly to their teacher identity. The members of the experimental group mentioned more job-related strengths in the exit interviews than those of the control group. Regarding the identified weaknesses, there were no differences between the two groups.

There were no differences between the two groups as for the quantity and quality of their learning goals mentioned. Dissimilarities were detected in the relation of the input an exit interviews. There was no difference between the groups considering linking their weaknesses to their learning goals referring to the existence of metacognition, self-regulation. There were students in both groups who have strong self-regulation. In the second group, the weaknesses and learning goals were not linked to each other in the input interviews but it did appear in the exit interviews. In the third group, the student teachers did not connect their weaknesses to their learning goals either at the beginning or at the end of the action research. The support used for achieving their learning goals also was identified in the interviews but this category was detected at the same student teachers in their input and the exit interviews having no difference between

the experimental and the control group in this matter.

We also examined the student teachers' self-assessment regarding the predetermined criteria describing the learning-teaching process in the classroom and the learning outcomes at the end of teacher education. In case of the earlier, the members of the experimental group gave higher evaluation to themselves than those of the control group while at the end of the teaching practice the members of the experimental group gave lower evaluation to themselves than those of the control group. These results show the role of regular self-assessment, as student teachers gained a broader view of the factors influencing the learning-teaching process, they were more critical with themselves. The mentor teacher benefitted from the results as identifying professional fields in which the student teachers required more effective support (the use of work forms, differentiation, assessment, self–assessment, time management). We could gain the same results in the case of self-assessment according to the learning outcomes; it is higher in the control group than in the experimental group at the end of the research.

All student teachers believe that self-assessment plays a very important role in teaching, but only the members of the experimental group claimed that they apply it on a regular base.

In the second phase of the action research, we described the self-evaluation profile of the student teachers of the experimental group based on the interviews and written reflections after each observed lesson and the mentor's reflections.

The profiles supported our conclusion that the student teachers were at different levels of self-regulation ranging from ones having strong self-regulation to ones having weak one. The profiles also revealed that those whose self-regulation is weaker, it is waving depending on their emotional state of mind justifying the role of emotions in self-regulation. If the student teacher is able to control his/her emotions, self-regulation is smooth (two students). Another student had difficulties with thinking over the possible solutions and it was the obstacle of setting new learning goals. One of the student teachers with strong problem-focused way of thinking and effective reactions in unexpected situations could compensate imperfect self-regulation.

5. Conclusions

All these results revealed that the examined student teachers conceptualize self-assessment as a complex system contributing to their professional development, their self-regulation supporting their pupils learning. A school-year long teaching practice effectively develops their self-regulation in which self-assessment is pivotal. The results also confirmed previous research conclusions that self-assessment supports building self-knowledge, identifying strengths and weaknesses (Kilic & Saglam, 2023; Martín-del-Pozo and at al., 2022). A new result is that the examined student teachers are at different levels of self-regulation. Although they are expected to be adults, self-regulated and responsible learners, using a wide range of metacognitive abilities, they are different from one another in this aspect, and it requires further research in the future to explore the factors influencing their self-regulation. Understanding the role of self-assessment in self-regulation requires special methodology in teacher education that includes the knowledge of wide varieties of self-assessment methods. Our research provides a support in this aspect.

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