



## TOWARDS IMPROVEMENTS IN TEACHERS' PROFESSIONAL DEVELOPMENT THROUGH THE REFLECTIVE LEARNING PARADIGM – THE CASE OF SLOVENIA

### YANSITICI ÖĞRENME PARADIGMASI ARACILIĞI İLE ÖĞRETMENLERİN MESLEKİ GELİŞİMLERİ - SLOVENYA ÖRNEĞİ

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**ABSTRACT:** Developing reflective teachers who will be committed to their professional mission and whose own development will represent a value is an important objective of the professional training of future teachers. This article deals with an evaluation of the module of instruction in teacher training that was directed at raising students' awareness of the importance of reflecting on their pedagogical work and their overall professional activity. The module focused on the acquisition of skills for thoughtful activity in pedagogical practice and the development of a positive attitude to lifelong teacher education. The main aim of the study was to assess students' conceptions of instruction, in particular from the perspective of students' perceptions of the importance and influence of learner-centred methods targeting didactical competencies.

**Keywords:** teacher development, teacher education, reflection learning, didactic competencies of teachers

**ÖZET:** Mesleki misyonlarına bağlı yansıtıcı öğretmenlerin yetiştirilmesi ve bu öğretmenlerin yarattığı değerler gelecekteki öğretmenlerin mesleki eğitimindeki amaçlardan biridir. Bu çalışmada öğretmenlik eğitimi alan öğrencilerin, ileride verecekleri pedagojik eğitimi ve dolayısıyla mesleki yaşamları etkilemesi beklenen “yansıtıcı öğretmenlikle” ilgili eğitim modülünün değerlendirilmesi amaçlanmıştır

**Anahtar sözcükler:** öğretmen gelişimi, öğretmen eğitimi, yansıtıcı öğrenme, öğretmenlerin didaktik yeterlikleri,

## 1. INTRODUCTION

One of the key policy questions concerning higher education developments over the last few years has involved improvements in graduates' employability. In particular, the relative impact of teaching and learning modes on better job performance has attracted significant attention (DECOWE, 2011–). This issue is very scholarly in the case of school teachers' education because they learn how to teach and are hence exposed to a double-loop learning-teaching experience: methods they perceive and internalise as successful teaching practices during their studies are gradually transferred to the workplace. In other words, university students who want to become teachers begin their studies with 12 years of school practice as students, and their working career with more than 17 years of experiences. In this context, the paper explores how students of education develop their own learning conceptions, and what their attitudes are to the *participative* or *learner-centred teaching modes* they experience during their professional training.

This question dates back to the late 1970s and early 1980s. At that time, Saljö (1979) and colleagues of the so-called Goteborg School started with conceptions of the learning approach labelled as the *back to cognition* principle (Marton et al. 1993; Boulton Lewis 1994). This led to two major questions: *first*, how the teacher's conceptions affect the learner's approaches to

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learning and learning outcomes and, *second*, what is the relationship between a teacher's conceptions and their approaches to teaching. Within the research process, this represented a shift in attention from teacher behaviour to teacher thinking.

With the adoption of the cognitive paradigm in teacher education, the view prevailed that in order to understand teachers' activity it is necessary to understand the underlying cognitive processes (Clark and Petersen, 1986). These theories played an important role in the identification and creation of an explicit cognitive referential framework which helps the teacher perceive and process information and further influences their decision-making process and activity. Fox (1983) stressed that teachers who adopt more "learner-centred" teaching approaches can find themselves in a paradoxical situation where students appreciate their interesting, well-structured and well-presented explanation which serves as the basis for the reproduction of the learned matter. At the same time, they can have a relatively negative attitude to the problem-solving teaching method, which demands their increased mental involvement and independence. Hence, the roles of teacher and students should complement each other in the teaching process (similarly to the process of teaching and learning) and only the transformation of both enables a teacher »to redirect the attention from his role of a teacher to the student's role« (Kagan 1992). This not only implies redirecting at the level of conceptions, but also at the level of actions so that a student teacher is capable of implementing their (higher) conceptions of instruction in practice. For a teacher to be prepared for and capable of carrying out cognitive-constructivist-oriented teaching, they first have to clarify and reconstruct the conception<sup>1</sup> of their role: me as a teacher. This issue has been labelled with the policy-driven slogan "problem-based learning", that should eventually lead to a higher level of acquired competencies. These questions lie at the centre of this paper. In broad terms, we study how conceptions of instruction which are typical of the »teacher-centred instruction model« prevail among students of education. This is done in several steps. First, we present the theoretical and methodological framework. Second, we give an overview of the case study on education studies in Slovenia with their main relevant characteristics as a key observation point. This is based on our own analysis of data from an international graduates' employability survey looking at how general study characteristics of students of education differ from other students. Third, using a qualitative case study we explore education students' conceptions of instruction (the case is conducted in their didactic module) and explore how their argumentation is in line with the relevant theoretical framework. On the basis of these steps we provide recommendations for the future development of education students' training in Slovenia and Europe.

### 1.1. "Reflection" in the Context of Teachers' Own Professional Development

In this section we discuss how the concept of *reflection* plays a central role in teachers' training, teaching work and in the interrelation between both spheres. In this way it complements teachers' own conception and student-centred learning. First, we define a teacher's professional development as a process of experience-based learning that starts with professional training related to university education. It is in this stage that student teachers develop their conceptions, make them meaningful and establish their own teaching practices. These teaching practices are created in the teacher's personal, professional and social dimensions and signify the teacher's progress towards critical, independent, responsible decision-making and acting. During their studies the teacher's professional development takes place on two levels, namely the level of conceptions and the level of acting: both are closely interrelated in the reflection process (Clark and Peterson 1986). Conceptions of learning and instruction significantly influence the individual's understanding, vision or interpreting of the context of acting and decision-making (learning, teaching) (Ramsden 1992; Trigwell and Prosser 1996). The results of pedagogical action in turn have an influence on conceptions – they represent a starting point for the analysis of conceptions (for their affirmation or alteration) and for changing pedagogical action. If the teacher is to be optimally prepared for the challenges of

<sup>1</sup> The term conception can be defined as a personal, implicit construct formed in an individual's personal history as a kind of sediment of his / her experiences and lessons learned from them, functioning like compasses in an individual's life, which is demonstrated in qualitatively different ways of understanding, interpreting and acting in different individuals.

professional practice, it is important to connect the level of conceptions with skills of acting as soon as students enter the educational process. It is important for higher education to also be carried out according to the cognitive-constructivist approach, which in didactics means, for example, confronting and connecting scientific models of instruction and students' subjective conceptions. In this way reflection explains critical differences in teachers' good performances related to teaching.

The fundamental task of researching teachers' concepts is an in-depth self-discovery of teachers or, as stated by Clark and Petersen (1986), teachers need to be assisted on their way from an implicitly guided system of personal beliefs to an explicit description of their cognitive referential framework. This provides a basis for a teacher's reflective approach and a guarantee that the teacher also stimulates students' reflection and self-discovery through their pedagogical work. It is therefore very important for the teacher's professional development that they learn about themselves as much as possible (methods of learning, thinking, evaluation...) as well as about the diversity of students (considering their perceptions of learning, approaches to learning, cognitive styles, motivations, background knowledge, positions in class etc.). All of this requires the teacher to be capable of *reflection* – the core of the modern perception of teacher professional development (Schon 1983; Zeichner 1983; Marentič Požarnik 1987; Grimmitt and Erickson 1988; Korthagen and Kessels 1999; Korthagen and Vasalos 2005; Freese 2006; Hoban and Hastings 2006; Harfold and Mac Ruairc 2008).

The term reflection originates from the Latin word »*reflectere*« which means to reflect, to think about, to judge. The term has been increasingly discussed from the 1980s onwards. Schon (1983), for example, differentiates between thinking during action and thinking about action. In accordance with this model, a thinking practitioner is an individual who is also capable of thinking during action and can respond accordingly to the insecurity and conflict of the relevant practice. Such "thinking during action" and "thinking about action" are forms of activity whereby the teacher develops their own views about problem perspectives by identifying and solving a problem (Grimmett 1988: 10). Since, as pointed out by Schon, "the problems in a specific situation are not clearly evident, a practitioner can 'build' them on problematic situations which cause surprise, difficulty and insecurity". Hence, in the context of teachers' education, reflection can be defined as "a way of thinking about pedagogical issues, involving the ability of rational decision making, selecting and taking responsibility for the selected option". For Zeichner (1983) and Zeichner and Liston (1987), reflection means a clarification of the teacher's daily routine from the perspective of pedagogical and also wider dimensions. In the opinion of Zeichner, when evaluating reflection it is essential to include the question of whether an individual sees their activity in the wider context involving ethical, moral and political principles. According to Bell (1993: 29), reflection can be observed as a process of cognitive learning originating from an in-depth analysis of (own) practice and cognition that guides individual thinking and activity (meta-cognitive process). The process can evolve individually, with the teacher making short or long breaks to shed light on class activity (Richet *cf.* Bell 1993: 29), or as an interactive process (Knights in Bell 1993: 29), where the teacher, assisted by another person (a critical friend), clarifies dilemmas, asks questions and acquires a deeper insight into their work and cognition leading their activity. Adler (1991) compared various reflection models and found that they share some common features such as the notion of: a) instruction as a complex and highly unpredictable activity; b) the notion of the teacher as a practitioner confronted with several requirements of thoughtful decision-making, and the development of a teacher's perception abilities and relevant responses in situations where thoughtful judgment, evaluation and various teaching skills are required.

The reflection ability that is considered a means of developing the modern reflective teacher should be developed systematically in students who are to become future teachers. The issue of how to design and didactically carry out the curricula for teacher education or how to develop the concept and connect theory and practice in teacher education programmes is therefore essential (Bell and Gilbert 1994; Brookfield 1995; Grimmitt and Erickson 1988; Korthagen and Kessels 1999; Zeichner 1983).

The next section presents those teaching modes that are based on reflection approaches and are student-centred.

## **1.2. Student-Centred Teaching Approaches**

In the context of teachers' professional development, the concept of reflection as discussed in the previous section largely relates to teachers' work and certain teaching approaches. As shown, the actual implementation of teaching modes depends on one's own perception. Depending on a teacher's own conception, teaching activity can be either more teacher-centred or more learner-centred, meaning that the subject of teaching is brought closer to students' cognitive schemes. In this section we present those approaches that in our view are the most relevant for implementing reflective learning modes and are developed during tertiary education.

### **1.2.1. Lectures, seminar and micro lessons based on reflective approaches**

Students' learning methods are still largely based on classical teaching modes such as lectures or seminar assignments. These classical modes represent the basis of all other student-centred methods and can be particularly effective when supported by reflective approaches: analysed in written form and presented to colleagues during seminars, practice work in lesson planning and micro lessons by teaching their colleagues. These reflective approaches may be considered as mini empirical research work whereby students acquire research skills such as the development of research questions, preparation of data collection instruments, and critical interpretation. An important professional characteristic and virtue of a teacher is the teacher's empathy and deep understanding of other actors in the pedagogical process. In reflective approaches, participants swap various roles ranging from teachers, learners and observers to transmitters of feedback information. Taking up various roles should give future teachers greater empathy and flexibility, as well as greater competence in their role as teachers.

### **1.2.2. Video techniques and approaches**

Video is an important tool for modelling and stimulating cognitive conflict in teacher education (Marentič Požarnik 1987; Wong et al. 2006; Sherin and Han 2002; Borko et al. 2007) and therefore the assessed lessons were recorded on video. We agree with the concerns of various researchers that »sharing video in PD settings is likely to seem more threatening to teachers than sharing other artifacts such as student work and lesson plans« (Borko et al. 2007) or, in the words of Marentič Požarnik (1987: 47), »In order not to create 'a divine comedy' or even 'human tragedy' from the use of this 'godly machine', teacher trainers need to have a profound knowledge of its operation and influence.« The video lessons can be initially viewed by each student in a safe environment – together with a colleague, a »critical friend« of their choice.

### **1.2.3. Mutual observations**

Teachers need to be trained in critical instruction observation (for example, peer mentoring among colleagues) (Gilbert 2005). In order for students to acquire the skill of systematic instruction observation, each student observed some lessons of their colleagues according to various protocols. The teacher's professional development requires skills in preparing an individual written report as a group discussion and exchange of opinions with colleagues (Park et al. 2007; Orland-Barak and Yinon 2007). Every observed lesson was followed by an in-depth group analysis of the instruction, with a particular emphasis on various didactic aspects that were indicated as necessary for quality instruction (notably beginner teachers) (Reynolds 1992; Veenman 1984; Kagan 1992; Freiberg 2002; Valenčič Zuljan et al. 2007).

### **1.2.4. Feedback evaluation**

In order to ensure quality pedagogical activity and teacher professional development, it is also important for the teacher to receive feedback on their instruction from the learners and to thus juxtapose his/her own goals and expectations with the feelings of the receivers of his/her activity (Hoban and Hastings 2006). With this method, »learners« typically fill out an anonymous written questionnaire after every lesson that includes cognitive (understand ability, level of requirement, relevance and work organisation) and emotional aspects of instruction (level of interest, class climate and well-being). Another of the modern teacher's important competencies should be their research

qualifications (Marentič Požarnik 1987; Henson 2001; Ponte et al. 2004; Bergendahl 2003), including skills for drawing up a reflective written report and publishing the findings of their own research work (Ebbutt 1985).

In the next section we apply these considerations to our empirical case. It comprehends a case study of Slovenian students of education. In line with the general goals of the paper we gradually present the broader context of teacher education in Slovenia as this will provide an interpretative framework for our micro case that is presented later. Before that, in section 3 we discuss student-centred teaching approaches and the techniques used as some of them will be analysed later on in the paper.

## 2. METHODOLOGY

In this section we present three main methodological steps that correspond to the presentation of results. This sequence follows the principles of triangulation (Denzin, 1978/1989), which explains how a combination of different research methods leads to the best results concerning the studied phenomenon. In our case, the level of analysis and method complement each another.

### 2.1. Desk research and semi-structured interviews – describing the general characteristics of teachers' education in Slovenia

The research framework of general characteristics of the education system in Slovenia has been prepared as part of the international research project DEHEMS (2011–) that is studying disciplinary similarities and differences on international bases. The focus of the desk research and semi-structured interviews was to present the particularities of Slovenian higher education studies of education from the perspective of employability. While the scope of this research was much broader, here we only present the results that are relevant to this paper.

### 2.2. Large-scale survey analysis – the characteristics of students of education

The second methodological step relates to our own analysis of the REFLEX (2011–) and HEGESCO (2011–) surveys. Both surveys studied the transfer of higher education graduates from higher education to the labour market and thereby explored the characteristics of students, study programmes, jobs and the intersections of these areas in 19 European countries and Japan. For the purpose of this paper, we only sampled students of education in Slovenia<sup>2</sup> (366 graduates) and performed a simple education – job matching check. Due to the scope of the paper we stayed at the level of a descriptive analysis and compared education graduates with the total sample of the Slovenian average<sup>3</sup>.

### 2.3. Qualitative survey – An evaluation of students' own conceptions and learner-centred teaching modes

The final purpose of this paper was to study: a) student perceptions of their own conception; and b) student perceptions of learner-centred teaching modes. The study included 24 students (5 males and 19 females) who took part in pedagogical training as part of obtaining their teacher's professional certificate.

## 3. FINDINGS

### 3.1. An overview of teachers' education and training in Slovenia<sup>4</sup>

<sup>2</sup> The data set for Slovenian graduates five years after their graduation is acquired from the HEGESCO international survey conducted in 2008. In the case of graduates from the teaching and education domain, 366 were employed and 15 were unemployed. Out of the 366 graduates, 309 (85.4 percent) were working as teachers.

<sup>3</sup> The results of the desk research, semi-structured interviews and the analysis of the large-scale survey are presented in one segmented chapter.

<sup>4</sup> Part of this chapter was prepared on the basis of the international DEHEMS (2011-) project. If not indicated differently, it summaries programme characteristics of the University of Ljubljana which with 56,000 students is the biggest academic institution in Slovenia. The survey was conducted at its Faculty of Education.

Like in many other EU countries, in Slovenia the state is also the main stakeholder in the professional education domain and plays a dual role: as the main employer of graduates and as a governor regulating this profession. The process relating higher education to job positions is defined by national legislation. Candidates for job positions in the educational field must satisfy three requirements: knowledge of the Slovenian language, an appropriate level and direction of education (defined by the Ministry of Education) and a professional exam. Future teachers can also acquire qualifications by enrolling in a study programme/training course providing pedagogic/andragogic education for professionals in primary and secondary schools<sup>5</sup>. After completing the appropriate field of study and passing the professional exam students can obtain a fixed-term or unlimited term contract in educational institutions. Teacher education in Slovenia can take various forms. On one hand, it generally includes the contents of a particular subject area or several areas students are trained to teach while, on the other, it includes the general pedagogic part including the theoretical knowledge and practical skills needed to perform the teaching profession. Two education models can be defined in terms of the way these two components are integrated into the study programme. When students acquire teaching knowledge at the same time as subject-related knowledge, we can speak of the parallel model of educating education experts (for example, this model is applied in the Netherlands, Poland and Romania, and is often seen in Sweden). Alternatively, when the study programme is conceived so that students first acquire knowledge of the subject and later also teaching knowledge, we can speak of the successive model of professional education (for example, this model is used in France). In most countries, educational training can be carried out according to both the parallel and successive models (Valenčič Zuljan and Vogrinc, 2011). The two models of teacher education are also used in Slovenia. It is therefore possible to obtain a teaching qualification:

- a) by successfully concluding a higher education study programme dedicated to teaching one or two subjects and by obtaining the professional title of teacher of one or two subjects (parallel model of teacher education); or
- b) by successfully concluding a higher education study programme in which students acquire the necessary knowledge related to a particular subject area, but do not acquire the necessary pedagogic knowledge. Having concluded their studies, such graduates are obliged to complete a one-year course on pedagogy and andragogy that is evaluated with 60 credit points (the successive model).<sup>6</sup> One such programme module will be presented in detail in the empirical study.

The Bologna reform has brought many novelties and changes to this professional field. The main change is that it is necessary to complete the 2<sup>nd</sup> level of study programmes so as to work in a classroom. That is why we can expect that most students will also continue their studies on the 2<sup>nd</sup> level. There is also more practical training in the curricula.

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<sup>5</sup> After a 6-month training period in an educational institution, trainees need to pass a professional exam from the field of education which is regulated by the Ministry of Education.

<sup>6</sup> The syllabus of the course on pedagogy and andragogy, carried out by the Faculty of Education of the University of Ljubljana for future teachers who during their studies have not acquired the necessary pedagogic, andragogic and special didactic education, is as follows: pedagogy (4 CP), pedagogical methodology (3 CP), didactics (5 CPT), developmental and pedagogical psychology (7 CPT), andragogy (3 CPT), sociology of education (4 CP), philosophy of education (4 CP), inclusive education (4 CP), subject-specific didactics with ICT and practical pedagogic training (14 CT), pedagogical practice (4 CT), elective subject from the set of subjects offered by the faculty or University (8 CT). The course on pedagogy and andragogy is also carried out at the other two pedagogical faculties (the Pedagogical Faculty of the University of Maribor and the Pedagogical Faculty of the University of Primorska) as well as the Faculty of Arts of the University of Ljubljana. Although the syllabuses differ somewhat, they all provide candidates with basic pedagogic, andragogic and special-didactics education, and are all evaluated with 60 CT.

### 3.2. Selected Programme Characteristics

#### 3.2.1. General characteristics of the study programme

The proportion of Slovenian graduates of education who consider their study programme to be demanding is significantly lower compared to students of other studies [HGS=50.5%; HGE=38.9%]<sup>7</sup>. For example, in comparison, in medicine studies almost three out of every four graduates regard their studies as demanding. Every second graduate of education believed that employers are very familiar with the programme, which is the biggest share among all graduates in Slovenia, although due to the vocational scope of the teachers' studies this is still relatively low [HGS=34.3%; HGE=49.3%]. Quite surprisingly, and contrary to the traditional view held by the Slovenian general public, graduates of education are among those who consider their academic status to be the lowest among all fields of study [HGS=26.6%; HGE=15.2%]. In addition, the average weekly study hours almost perfectly match the Slovenian average (approximately 23 hours).

#### 3.2.2. Modes of teaching and learning

The highest proportion of graduates who assessed that lectures are a very emphasised characteristic of their study programme was found among graduates of education [HGS=74.9%; HGE=79.2%], although the difference was not very big in comparison to graduates from other study fields. Another notable characteristic in education studies is the stress on oral presentations [HGS=34.9%; HGE=47.8%]. Teaching modes that were quite comparable between graduates of education and graduates of other domains were group assignments, lectures, the implementation of research programmes, problem-based learning, written assignments and multiple choice exams. Interestingly, the proportion of graduates who had carried out a traineeship with an employer was the highest in the education domain [HGS=55.2%; HGE=78.4%], although the average duration was among the shortest [average months, HGS=4.3; HGE=2.3].

#### 3.2.3. Employability aspects

The proportion of graduates of education who thought that their work requires from them more knowledge than they can actually provide was approximately the same as the Slovenian average [HGS=23.8%; HGE=23.0%]. The proportion of graduates who consider they were well-prepared for work was, in comparison with other graduates, above the average [HGS=32.9%; HGE=40.5%]. Graduates of education also consider their programme provided a relatively good basis for starting work [HGS=53.7%; HGE=42.7%], but less good for developing entrepreneurship capabilities [HGS=18.5%; HGE=6.7%]. Few of them believe their professional development offers good career prospects [HGS=31.3%; HGE=22%], however they were the most satisfied among all study domains [HGS=64.0%; HGE=77.9%].

#### 3.2.4. Employment aspects

According to the HEGESCO survey, the share of the unemployed in higher education five years after graduation in the education domain has been the same as the Slovenian average [HGS=3.4%; HGE=3.4%]. The share of those with a fixed-time contract was above the Slovenian average [HGS=19.4%; HGE=25.0%]: graduates of education typically commence employment for a limited time period and this trend is only increasing. The average number of contractual working hours was the lowest among all study domains [working hours, HGS=43.8; HGE=40.3], and gross monthly earnings were also among the lowest [monthly earnings in EUR, HGS=1,736; HGE=1,471].

### 3.3. Typology of Conceptions of Teachers Professionals

In this section we consider the extent to which students internalised higher conceptions of instruction, which served as a basis for implementation of the modern student-centred instruction

<sup>7</sup> HGS is an abbreviation for higher education graduates in Slovenia (all fields of study following methodological premises, while HGE stands for higher education graduates of education. Percentages stand for the proportion of graduates who attributed a certain study programme, job or transition characteristics with the highest values – 4 and 5 on a 5-level Likert scale, and 6 and 7 on a 7-level Likert scale. This approach is in line with the REFLEX and HEGESCO projects.

model. The results were obtained following the methodology described in section 2 of this paper.

According to the four-level conceptual framework of instruction (see Figure 1), which was formed on the basis of a survey of various conceptions of classified and subjective theories<sup>8</sup>, as well as scientific instruction models, students' answers were placed in four categories and students' comments were added to the description of each category – which may also be considered basic dimensions of quality teaching. We are aware of the fact that, in order to provide a proper justification of this assumption, it is necessary to find a balance between the sense of security and acceptance of the individual within a group on one hand, and the insecurity and risk involved in the social cognitive challenge on the other. We agree with Orlan Barak and Yinon (2007) about the importance of »the right gap to enable student teachers to transform discomfort into a learning opportunity«. Yet this is difficult to predict and seems to depend on a variety of personal, interpersonal and contextual factors (also see Kagan 1992)<sup>9</sup>.

**Figure 1: Framework of Education Students' Conceptions of Their Own Work in Relation to Reflective Teaching**

Models of instruction	Teacher-centred instruction model		Student-centred instruction model	
Conceptions of instruction	Transmission (a)	Encouraging understanding (b)	Providing direction for the learner's development (c)	Encouraging personal growth (d)

Own model, adapted following Fox (1983) and Scardamalia & Bereiter (1989).

### 3.4. The Distribution of Answers

#### 3.4.1 Transmission (to know more) [f2; f% 8]

This category has been elaborated as a process of transmitting knowledge and controlling the memorised matter. Examples include: (statement by participant A) ... the teacher's explanation needs to be good, interesting and of good quality so as to encourage all those present to participate; (statement by participant B) ... during the whole lesson the teacher maintained focus on the subject and kept the students' attention at a high level.

#### 3.4.2 Encouraging understanding (to understand and know more) [f18; f% 72]

This category is considered a process of encouraging students' understanding. The mode is related to students' previous knowledge and experiences which are considered »quantitative dimensions«. Although the teacher wants to know what and how much the student knows, he does not explore the quality of the student's previous knowledge and is not interested in the student's incomplete conceptions and viewpoints. The teacher (simultaneously) assesses the student's understanding through simple use or concretisation with examples. Example include: (statement by participant C) ... the teacher should have paid attention to how the students understood his explanation and assessed their understanding with simple questions.

#### 3.4.3 Providing direction for the learner's development (to understand better – to gain a different kind of knowledge) [f2; f% 8]

This mode is related to the process of encouraging »contextual understanding« – changing students' conceptions and understandings of the world. A student's previous knowledge and experiences are qualitative conceptions and represent the basic components of teaching. The transformation of the student's knowledge is essential; the student builds their own, processed system

<sup>8</sup>The main purpose of analysing the participants' conceptions according to the predefined four-level taxonomy according to Fox (1983) and Scardamalia and Bereiter (1989) was to encourage a cognitive conflict in students between the objectives of modern education, which demand a shift towards a student-centred instruction model, and between their own conceptions where a teacher-centred instruction model still prevails. The results are logically clustered in the main categories as elaborated in the model presented above.

<sup>9</sup>Promoting an adequately adjusted cognitive conflict is therefore an exceptionally complex task for teacher trainers as it requires thorough knowledge of the individual and careful planning of the zone of proximal development (Vigotsky 1975).



of knowledge. Examples include: (statement by participant D) ... a stress needs to be put on the student's activity – research, discovering and problem-solving, (statement by participant E) ... the teacher needs to be clearly enthusiastic about his subject and the subject matter he was teaching, therefore he succeeded in encouraging the students to express their suggestions and ideas together with creative anticipation.

#### 3.4.4. Encouraging personal growth (to live differently) [f2; f% 8]

In this mode teaching is considered a means of encouraging personal growth (personal goals). Examples include the following statement (D). In class, students solved various problem situations and critically evaluated methods of solving life problems, which will surely contribute to their knowledge and be valuable guidance in their everyday life and judgment.

Our analysis of conceptions of instruction confirms that typical conceptions of the transmission model of instruction prevail over the teacher-centred instruction model among the participants. The largest share is represented by the second category of conceptions of instruction, namely "Encouraging understanding". Three out of four participants pointed out the importance of quality knowledge transmission, with a specific stress given to the students' understanding. This teacher-centred instruction can, when implemented in a quality way, significantly contribute to students' knowledge. It should nevertheless be noted that, in order to achieve the durability of students' knowledge and especially for students to gradually become independent and achieve other important objectives of modern teaching, such teaching should always be supplemented with teaching methods that originate in the student. This represents the so-called student-centred instruction model, which is only modestly present among the teachers in our research. In the analysis of teaching, only four students stressed criteria typical of such a model of instruction (categories 3 and 4). They particularly highlighted the role of such teaching in getting students into the habit of searching for additional literature, individual learning planning, acquiring critical judgment and evaluation criteria etc. However, such teaching methods are not viewed as a basis but only as a periodical addition to traditional teaching. It is in this context that one should understand the results of student-centred teaching approaches.

#### 3.5. The centrality of learner-centred teaching approaches

In this section we present the students' assessments of student-centred teaching approaches. We identified eight indicators based on the theoretical overview focusing on five broad items (lectures and seminar assignments based on reflective approaches, video approaches, mutual observations, stimulated recall techniques and feedback evaluation and own expert opinions). The evaluation was conducted by the same group of students involved in the identification of teachers' conceptions (see section 5.3). Students were offered eight possible methods that they had experienced during their studies but in particular in the didactic module. Each work method was assessed in terms of its importance for teachers' professional development (ranging from 1 – not important to 5 – very important). Following the REFLEX (2011–) and HEGESCO (2011–) experiences, the distribution in this particular case encountered frequencies that indicated the highest values: a very important and significant influence.

**Table 1: Evaluation of Learner-centred Teaching Approaches, by importance**

	Importance (in percent)	Own analysis
Realising one's own lesson	83.3	
Preparing for the lesson in writing	66.7	
Watching video clips of one's own lesson	62.5	
Experts' feedback concerning the lesson	54.20	
Informal socialising and exchanging opinions with colleagues	50.00	<i>N=24</i>
Learners' feedback concerning the lesson	45.80	
Feedback session with colleagues concerning the lessons	16.70	
Drawing up the final report	4,20	

The results shown in Table 1 indicate that all methods have a broad correlation: those assessed to have high importance were viewed as also having a large influence<sup>10</sup>. In terms of importance, the results clearly indicate that the practical realisation of one's own lesson and preparation for a lesson was attributed the highest importance. Clearly, one's own teaching experience cannot be replaced by any other indirect learning method. Similarly, also watching a video clip of one's own action, which may be perceived as a direct reflection method, was regarded as very important by most students (taking third place).

Second to the group of own participation and reflection teaching modes, various forms of feedback were identified. Among them, the most important was experts' feedback and colleagues' feedback. It seems that a combination of expert opinion and informal feedback from colleagues yields the best results. Colleagues might provide insights that might not be of interest to an expert, or are perceived as a "fair" second opinion on ethically sensitive issues or environmental conditions. This kind of feedback clearly needs to be conducted in informal settings since "a feedback session concerning the lessons with colleagues" was given a significantly lower evaluation. This was even clearer in the event of drawing the final report, which should be studied in deeper detail.

## 6. CONCLUSION

How can we promote teachers' openness and responsibility for their own professional development that implies lifelong active learning of the individual? The answer to this question is complex and undoubtedly dates back to the very beginning of teacher education. It is important that all participants support this objective and that the appropriate intertwining of theoretical and practical training is achieved. Only through this can students become aware of the importance of reflection and simultaneous evaluation of their own work, and thereby integrate such an approach. The basic aim of the study was to assess students' conceptions of instruction and to evaluate the work methods in teacher training, in particular from the perspective of students' perceptions of the importance and influence of learner-centred methods targeting didactical competencies. On the basis of the four-level taxonomy of conceptions of instruction which we formed according to our analysis of numerous taxonomies of conceptions of instruction offered by various authors and features of scientific teaching models, we came to the assumption – that still needs to be tested on a large-scale basis – that the majority of students in education in Slovenia hold conceptions typical of the »teacher-centred instruction model«. This is out of step with modern teaching objectives which point out the importance of supporting learners in order for them to develop independent, creative and critical thinking, to equip them to confidently handle various problems in their future lives and thus also enhancing the role of the school as a platform for social integration. However, we found that students are more greatly aware of the significance of supplementing and intertwining both models of instruction. In the analysis they pointed out that in order to increase student independence and self-regulation it is important to supplement traditional teaching with project work, a problem-solving approach and other work methods which build on the student's experience, analyse the quality of the student's previous knowledge along with their deficient notions, opinions and beliefs. The internal aspects of teachers' professionalism are strong. The results show that they identify themselves firmly with their job and are committed to their jobs. The external aspects of professionalism give an impression of being in decline: the status of the teaching profession is evaluated as being below-average, they have limited progression possibilities within their careers and low earnings. It is particularly problematic that they experience low job security in their transition from education to the labour market, a trend that has in recent times been growing. In such circumstances, the paradigmatic shift from learner-centred methodstowards student-centred methods, which requires changes in one's own personality is not easy. Yes, there is room for improvement. The large-scale survey results indicate that, in comparison to others in Slovenia, students do not find their studies to be very demanding. The results also indicate that, among other things, the weak link in teachers' professional training is the lack of practical

<sup>10</sup> However, due to the paper's limitations and scope and sample size, the correlation analysis is not provided.

experiences, group assignments, the implementation of research programmes and problem-based learning. These are all areas that provide a context for mastering reflective learning approaches.

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### Genişletilmiş Özet

Mesleki misyonlarına bağlı yansıtıcı öğretmenlerin yetiştirilmesi ve bu öğretmenlerin yarattığı değer gelecekteki öğretmenlerin mesleki eğitiminde önemli bir amaç teşkil etmektedir. Bu çalışmada öğretmenlik eğitimi alan öğrencilerin, ileride verecekleri pedagojik eğitimi ve dolayısıyla mesleki yaşamları etkilemesi beklenen “yansıtıcı öğretmenlikle” ilgili eğitim modülünün değerlendirilmesi amaçlanmıştır. Öğretmenlerin, bireylerin yaşam boyu öğrenme süreçlerine dahil olmasını gerektiren kendi mesleki gelişimleri için daha açık fikirli ve sorumlu davranmaları nasıl teşvik edilebilir? sorusunun yanıtı oldukça karmaşıktır ve öğretmen eğitimin başlangıç aşamalarına kadar uzanmaktadır. Bu bağlamda, tüm katılımcıların bu amacı desteklemesi, kuramsal ve uygulamalı eğitimin uygun bileşimin sağlanması önemlidir. Ancak bu yöntem ile öğrenciler yansıtmanın önemini algılayabilir, kendi çalışmalarını değerlendirebilir ve bu yöntemi benimseyebilirler.

Bu çalışmanın temel amacı öğrencilerin, eğitim anlayışlarını değerlendirmek ve öğretmen yetiştirilmesindeki çalışma yöntemlerini özellikle öğrencilerin didaktik becerilerinin gelişmesini hedefleyen öğrenci-merkezli yöntemlerin önemi ve etkisi konusundaki algıları bakış açısından değerlendirmektir. Değişik yazarlar ve öğretim kuramları tarafından önerilen öğretim kavramları sınıflamasına dayanarak oluşturduğumuz 4'lü sınıflamaya göre ve henüz büyük ölçekte sınıflanmamasına rağmen, Slovenya'daki eğitim fakültesi öğrencilerinin büyük bir çoğunluğu öğretim yöntemi olarak öğretmen merkezli yöntemi benimsemektedir. Bu sonuç, öğrencilerin bağımsız, yaratıcı ve eleştirel düşüncenin geliştirilmesi, gelecekteki yaşamlarında karşılaşılabilecekleri sorunlarla başedebilmelerini sağlayacak araçlarla donatılmaları, okulların sosyal entegrasyon için bir platform oluşturmasının önemine işaret eden modern öğretim yöntemlerinin amaçlarına uymamaktadır.

Ancak, öğrencilerin her iki öğretim modelini sağlama ve birleştirmenin önemine önemli ölçüde sahip sonucuna ulaşılmıştır. Öğretmen adayları, yapılan analizde, öğrencilerin bağımsızlıklarının ve özdenetimlerinin artırılması için geleneksel öğretim yöntemlerinin proje çalışmaları, problem çözme yaklaşımı, öğrencinin deneyimine dayanan diğer çalışma yöntemleri ve öğrencinin geçmiş bilgilerinin, eksikliklerinin, fikirlerinin ve inançlarının incelenmesi ile desteklenmesi gerektiğini vurgulamışlardır.

Öğretmenlik mesleğinin içsel özellikleri çok kuvvetlidir. Bu çalışmanın sonuçları, öğrencilerin kendilerini işleri ile özdeşleştirdiklerini ve mesleklerine bağlı olduklarını göstermektedir. Mesleğin dışsal özellikleri ise mesleğin düşüşe geçtiği izlenimini vermektedir: öğretmenlik mesleğinin prestiji ortalamanın altında görülmekte, mesleki yükselme olanaklarının ve ücretlerin düşük olduğu düşünülmektedir. Özellikle sıkıntılı görülen bir diğer nokta ise son yıllarda artan bir eğilim olarak eğitimlerinden işgücü piyasasına geçişteki düşük iş garantisidir.

Bu koşullar altında öğretici merkezli yöntemlerden kişilik özelliklerinin değişmesini gerektiren öğrenci merkezli yöntemlere geçiş biçimindeki bir paradigma değişimi çok kolay görünmemektedir. Elbetteki ilerleme sağlanması olasıdır. Büyük ölçekli araştırma sonuçları öğretmen adaylarının Slovenya'daki diğer öğrencilerle kıyaslandığında eğitimlerini çok zor bulmadıklarını göstermektedir. Çalışmanın sonucu, ayrıca, öğretmenlerin mesleki eğitimlerindeki zayıf halkaların uygulamalı eğitimin, grup çalışmalarının, problem çözme odaklı eğitimin olmaması ve araştırma programlarının uygulanmaması olduğunu göstermektedir. Tüm bu alanlar yansıtıcı öğrenme yaklaşımının oluşturulması için temel sağlamaktadır.