

## TEACHING QUALITY IN HIGHER EDUCATION: PREREQUISITES FOR ITS IMPROVEMENT

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**Abstract:** Engagement of students in the teaching process, joint project activities with teachers, their readiness for learning and initiative are the basic prerequisites for ensuring the quality of higher education process and outcomes. Searching the possibilities of improving university teaching quality, we examined students' attitudes (N = 174) in order to determine whether students recognize the importance of joint activities with teachers, project planning and implementation, in the context of their motivational readiness for more efficient learning and higher quality acquisition of knowledge. The research was performed using a descriptive method and a scaling process. Research results confirm that students recognize the importance of joint project activities they implement with teachers during instruction, as well as of step-by-step learning (by smaller units), further motivating them to learn. These results point the researchers to the directions of action aimed at developing a system of measures to improve the quality of contemporary university education.

**Keywords:** higher education; quality assurance; project planning; motivational readiness for learning; step-by-step learning;

### 1. Theoretical approach to the problem

The starting points for theoretical consideration of our research problem are based on the pedagogical ideas of John Dewey, who was an opponent of verbalism in teaching, book knowledge and learning, and who advocated experiential learning, education through problem-solving, independent observation and student inference. Today, these ideas determine the mission of the modern education system, implying the assurance and improvement of higher education quality. Also, this mission implies the creation of conditions for ensuring the basic prerequisites of a quality life and development of each social community member, based on the knowledge and achievements of each individual. In the university education system, learning, teaching, and assessment must be directed at students. In such situations, curricula are implemented in a way that encourages students to participate in activities in which they play an important role in developing motivational readiness for learning and initiative in the learning process. This implies careful designing of study programs, their implementation and assessment of outcomes (Standardi i smjernice za osiguranje kvaliteta u Evropskom području visokog obrazovanja 2005; Strategija razvoja obrazovanja u Srbiji do 2020. godine 2012).

According to the current strategic directions of education in the Republic of Serbia, the long-term goals of its development are established from "increasing the quality of education process and outcomes to the maximum attainable level - the one that arises from scientific findings about education and reputable educational practice - to increasing the efficiency of using all educational resources" (Strategija razvoja obrazovanja u Srbiji do 2020. godine 2012, 7). With the aim of accomplishing these goals and increasing the education system quality, strategic directions of action are defined implying education quality as a primary development goal. The significance of teachers' work quality is emphasized as the key factor in education quality, and within this context, a special strategy of education, professional development and professional advancement of teachers is defined. Innovative teaching requires university teachers to use such forms and methods of organizing class activities in which students' cognitive activity, the encouragement of the development of

hypothetical, divergent and abstract thinking and the ability to apply new ideas in solving creative tasks are compulsory (Novković Cvetković 2017).

In contemporary literature on the quality of education of future teachers and educators in pre-school institutions, we recognize the established strategic directions of higher education development. These directions involve higher engagement of students, their motivational readiness for better learning and the adoption of new, applicable knowledge. The professional competences of those who educate, on the basis of the greater achievements of those who learn and teach, determine their sense of job satisfaction, personal confidence, and self-efficacy (Florian and Pantić 2013). As reflexive practitioners, teachers are ready to cyclically introduce changes and complex tasks in teaching activities, create a positive working atmosphere, provide students with help, incentives, and support, and then monitor the effects of these changes in relation to students' achievements. In such a way, acquired work experience and identification of possible problems determine the direction of further professional activity and development of teachers (Kadum, Lepičnik-Vodopivec, and Hmelak 2017; Mathew, Mathew & Peechatt 2017).

Innovative teaching models, such as ambient and programmed teaching, are a prerequisite of university education quality. They justify student expectations, learning opportunities through trials and mistakes, with the aim of better understanding and adoption of teaching contents. Their needs for greater involvement in the organization and implementation of teaching activities have been identified, where a teacher will apply the methods based on which students will be initiators in educational activities, demonstrate their creative potentials, achieve good communication with the teacher, and receive feedback on their achievements. The application of various innovative approaches, methods, forms, and models aims to intensify and modernize teaching in higher education institutions making it more interesting for and "closer" to students (Kopas-Vukašinović and Golubović-Ilić 2017; Kopas-Vukašinović, Golubović-Ilić and Cekić-Jovanović 2017; Skopljak, Zečević and Drobac 2016).

The concept of contemporary university education implies the establishment of teaching quality which is one of the key responsibilities of higher education institutions (McKimm 2009). Students should be given the opportunity to work together with teachers to plan, create, comment and distribute teaching content, and to adopt material piece by piece ('step by step') according to their interests, abilities and pre-knowledge. In the university education system, students are expected to acquire functional (practically applicable) knowledge, develop key competencies, thus securing their place in the labor market by personal qualities and professional competencies. If we add to this the fact that today's constantly changing society requires an individual who is ready to quickly learn, react, adapt to new situations, make decisions, critically think and use modern technology, university teachers face a major professional challenge. They must be able to devise and implement teaching activities that will enable, on the one hand, the development and popularization of subject contents studied by students, and, on the other hand, joint activities of teachers and students aimed at better accomplishment of teaching outcomes in terms of quality of acquired knowledge.

Research has confirmed the positive impact of the project work model on the level of knowledge and engagement of students, their interest in learning and developing strategies for solving problems (Holm 2011). The advantage of the project work model compared to the traditional model has also been determined in terms of 'academic performances', motivation, cooperation in work and engagement in the learning process. (Kaldi et al. 2011). Also, studies that researched programmed teaching have confirmed that this work model has some advantages and that its application to certain subjects positively influences the acquired

knowledge quality. (Cekić-Jovanović et al. 2014; Cekić-Jovanović 2015; Terzić and Miljanović 2009; Županec et al. 2013, etc.)

## **2. Research methodology**

Research goal: Determine whether and in what way students recognize the opportunities of organizing teaching activities that would encourage greater engagement, higher quality learning, and adoption of new, applicable knowledge.

Research tasks:

(1) To determine whether students recognize the importance of joint activities with teachers, project planning and implementation, within the context of their motivational readiness for more effective learning and better acquisition of new (applicable) knowledge.

(2) To examine students' attitudes about the opportunities of learning 'step by step' (by smaller units), whether this work contributes to the better acquisition of teaching contents.

Research methods, procedures, and instruments: The research used a descriptive method and a scaling process. For the purpose of this research, a scale of students' attitudes (Likert-type) was made.

Research sample: For the purpose of this research, a suitable sample was selected - students of the second and third year of undergraduate studies at Faculty of Pedagogical Sciences, University of Kragujevac, from the departments of grade teacher and preschool teacher (N=174).

## **3. Research results with discussion**

The first research task was to determine whether students recognize the importance of joint activities with teachers, project planning and implementation, in the context of their motivational readiness for more efficient learning and better acquisition of new (applicable) knowledge.

Students' attitudes were examined in relation to the claim By joint activities with teachers, project planning and implementation, students are further motivated to learn and acquire new knowledge. Descriptive indicators point to the fact that the majority of students surveyed, 158 of them (90.80%), agree completely (46.0%) or agree (44.8) with the above claim. They believe that students should be provided with joint activities with teachers, project planning and implementation, with the aim of additional motivation for learning and acquiring new knowledge. Only 2 students (1.1%) have a negative attitude regarding the above-mentioned claim. The value of median (as a measure of average), which in this case is 2.00, supports these results. This value confirms that more than a half of the students covered by the research have a positive attitude in relation to this claim.

The second research task was to examine students' attitudes about the opportunities of learning 'step by step' (by smaller units) and whether this work contributes to the higher quality adoption of teaching contents. Students expressed their views in relation to the claim It is important for students to be given the opportunity to learn 'step by step' (by smaller units) as in this way they can better acquire teaching contents. The results of the research show that 107 students (61.49%) agree completely, and 62 (35.63%) agree with the above claim. The value of the median, in this case, is 2.00, which determines the relevance of the data that 97.1% of the students surveyed have a positive attitude in relation to the claim that within university teaching it is important that a teacher applies methods and procedures that will enable 'step by step' learning. Only 2.9% of students surveyed have a neutral attitude.

Considering that the data from the survey were collected by the Likert's five-point scale of attitudes and that they originated from the ordinal measurement scale, we believed that the Mann-Whitney test was the most appropriate for testing the zero hypothesis and computing the statistical significance of the differences in respondents' attitudes, in relation to

the independent variables defined in this research (the year of studies and the study program the respondents attended at Faculty of Pedagogical Sciences of University of Kragujevac, Jagodina).

When it comes to the respondents' year of studies, the significance value for all claims is greater than 0.05 ( $p > 0.05$ ), confirming that a statistically significant difference in student attitudes regarding the claim It is important for all students, regardless of the year of studies, to be given the opportunity to learn 'step by step' (by smaller units) as in this way they can better acquire teaching contents was not established in relation to this variable.

However, in relation to the variable study program the respondents attended, the Mann-Whitney test determined the statistical significance of the differences in relation to student attitudes regarding the above claim. The significance level, in this case, is less than 0.05 ( $p < 0.05$ ), therefore it can be concluded that the difference in the values obtained is statistically significant, that in 95% of cases there is a systemic factor or some kind of regularity that leads to this difference. The determined differences in the attitudes of the students surveyed, determined by the study programs they attended (grade teacher, preschool teacher), can be the starting point for further research on the problem of improving university education quality in the context of, for example, contents of study programs and didactic-methodical instructions for their realization.

Based on the presented research results, in relation to the established tasks, we conclude that the research hypothesis assuming that students recognize the importance of joint project activities implemented in teaching with teachers, as well as step-by-step learning (by smaller units), in the context of their motivational readiness for more effective learning and better acquisition of new (applicable) knowledge is confirmed. These determinants are recognized in various innovative teaching models, such as programmed, problem, exemplary, project teaching. As motivational factors in learning, aimed at acquiring quality knowledge, they represent key elements, that is, the essential parts of project and programmed teaching.

Bearing in mind the fact that students see the possibility for additional motivation in learning 'step by step' and joint project activities with teachers, it should be noted that the proposed models of teaching allow for constant feedback on their achievements. Students, after each 'step', know at all times what they have or have not learned, where they have wronged and how to correct the mistake. Continuous feedback, which follows each step of student activity, is motivational because objective knowledge of own results stimulates further activity in mastering the envisaged curriculum. Students are more willing to learn and to acquire new knowledge more effectively, which encourages the development of their critical thinking and learning process management.

#### **4. Conclusion**

Contemporary university teaching requires learning, teaching and assessment to be directed at students. They, as subjects in the teaching process and equal partners of teachers, should establish good communication with teachers, actively participate in project planning and implementation, organization and realization of various teaching activities, and receive feedback on their achievements in a timely manner. Increased activity and engagement of students during classes have positive effects on their motivation, initiative, creativity, but also on the quality, durability and practical applicability of the acquired knowledge.

By examining students' attitudes, we wanted to determine whether and how students recognize the opportunities of organizing teaching activities that would encourage greater engagement, better learning and the adoption of new, applicable knowledge. The research results confirm that the students ( $N = 174$ ) of the second and third year of undergraduate studies at Faculty of Pedagogical Sciences, University of Kragujevac, from the department of grade teacher and pre-school teacher, recognize the importance of joint activities with

teachers, project planning and implementation in the context of their motivational readiness for more efficient learning and higher quality acquisition of new (applicable) knowledge (90.80%). Also, they consider (94.02%) that it is important to give them the opportunity to learn 'step by step' (by smaller units) and that such work contributes to better adoption of teaching contents.

Based on the research results presented in this paper, conclusions implying certain measures for improving university education quality are imposed: 1) university education quality implies that teachers, according to their professional competences, develop a learning environment encouraging student development, where the quality of teachers work is recognized as the key factor in student education quality; 2) it is important that teachers, through modern teaching systems such as programmed and project teaching, encourage the initiative and cooperation of students in the teaching process; 3) joint project planning and implementation of activities with teachers is a prerequisite for university education quality, as this kind of work encourages students to expand their knowledge, enrich their experiences and develop abilities; 4) teaching models that offer students the opportunity to learn 'step by step' (by smaller units) can contribute to the development of their potential and interest in research work, thus requiring the need to identify the possibilities of their application in teaching practice.

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