

NEW METHODS OF EDUCATION AND THEIR IMPACT ON STUDENTS AND TEACHERS

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1. Summary

Development of information technology and communication (ICT) affects us in all areas of our lives. One of these areas is education specifically for example the way of education, learning methods, platforms and technologies used in education process. This article displays survey research results which are focused on using information and communication technologies in the education process at selected university in Slovakia. We obtain the data by questioning through an electronic questionnaire. The target respondents are students as well as teachers of University of Zilina in Slovakia. At the beginning of the research, we determine the assumptions that are evaluated after collecting the data. Assumptions are based on interviews with external experts and consultants for education at that university. The main objective of this article is to find out how teachers and students respond to the implementation of information and communication technologies in the learning process, identify the user problems that may arise on both sides and the strengths and weaknesses of this implementation. This approach has proved to be a powerful tool and one of the most effective ways to get feedback from teachers and students who are directly affected by this technological development. The research results highlight the untapped potential of ICT and the need for teacher training in ICT at a given university. The results also show positive feedback from students regarding to the use of ICT in education process. Students would like to use electronic lectures as an alternative way of learning in their absence. Teachers are a bit skeptical about it.

2. Introduction

Currently many secondary schools as well as universities are dealing with implementation of information and communication technologies in the school environment. [1, 2, 3] The problem of many universities and secondary schools is the inefficient use of technologies that are currently available. One reason is also insufficient teacher training, which subsequently leads to incorrect adaptation of technology to existing teaching. Performing primary research by questioning respondents is a very useful way to find out how both pedagogies and students perceive the implementation of ICT in the learning process. Very recent topic in the field of education also concerns electronic lectures. Many universities have already made such lectures accessible to their students as well as to external people. Many surveys have also done in connection with electronic lectures. We have therefore decided to conduct such a survey also at the University of Zilina in Slovakia, which does not yet use this teaching method. The University of Zilina cooperates with e-learning, which can be used both by a teacher and a student. e-learning is used to record lectures and case studies of teachers and to submit assignments made by students. It also serves as a tool for electronic dissemination of information and student grades. [4, 5, 6]

After calculating the sample size we set goals and assumptions of research, linked to the questionnaire questions:

Goal 1: Find out how many teachers are not self-confident in the use of ICT currently available at the university.

Goal 2: Find out how many students are not self-confident in the use of ICT currently available at the university.

Goal 4: Find out what students think about electronic lectures.

Goal 5: Find out how many teachers are very satisfied with the currently used e-learning.

Goal 6: Find out how many students are very satisfied with the currently used e-learning.
 Assumption 1: More than 50% of teachers are not self-confident in the use of ICT currently available at the university.
 Assumption 2: At least 40% of students are not self-confident in the use of ICT currently available at the university.
 Assumption 3: Less than 35% of teachers consider electronic lectures are good learning tool.
 Assumption 4: More than 60% of students think that electronic lectures are very good learning tool.
 Assumption 5: Less than 60% of teachers are very satisfied with the currently used e-learning.
 Assumption 6: Less than 40% of students are very satisfied with the currently used e-learning.
 These assumptions are based on interviews with experts.

3. Introduction

Goal 1: Find out how many teachers are not self-confident in the use of ICT currently available at the university.
 Assumption 1: More than 50% of teachers are not self-confident in the use of ICT currently available at the university.
 Out of 80 teachers, 51% are not self-confident in the use of ICT currently available at the university.

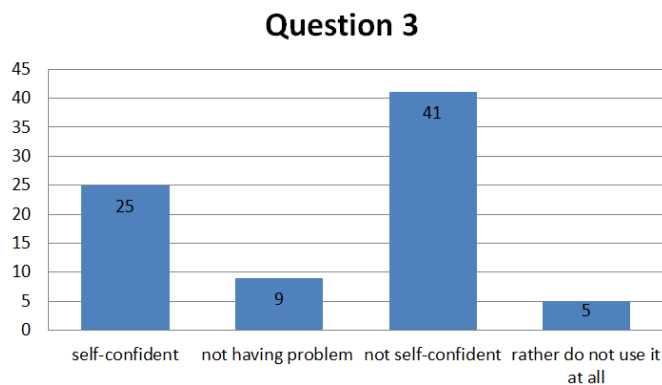


Figure 1 Question 3

Goal 2: Find out how many students are not self-confident in the use of ICT currently available at the university.
 Assumption 2: At least 40% of students are not self-confident in the use of ICT currently available at the university.
 The survey research shows lack of confidence in more than half of teachers. Students have done better on this issue. Research has also shown that only 35% of teachers perceive positive electronic lectures and 70% of students perceive it very positive. Other results of questions not covered by this article have shown that students see great advantages in electronic lectures due to time flexibility and deeper focus in home environment. Teachers, on the other hand, perceive electronic lectures a little more skeptical. They believe that students are not able to keep their discipline as at lectures at school. The university is currently using e-learning. In both cases (students and teachers) more than half is very satisfied with this e-learning.

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