EDMODO PLATFORM INTEGRATION CHALLENGES ON SECONDARY EDUCATION IN KOSOVO: EMPIRICAL ANALYSIS

Erleta ALIHAJDARAJ, Florinda IMERI, Agon MEMETI

Faculty of Math and Natural Sciences, University of Tetova, Macedonia

agon.memeti@unite.edu.mk

Abstract: The idea behind this paper starts from the strategic plan for education in Kosovo, where a key priority for the Ministry of Education and Science is the integration of ICT and other education tools in teaching and learning process in secondary education. Contemporary education systems are using different learning platforms to accomplish their tasks effectively and provide easy access to different learning resources. It has been more than a decade since the Learning Management Systems are introduced, and it seems to become one of the most important platforms for increasing the value of learning and teaching process in Kosovo. The paper shares the experience on the use of Edmodo LMS as a tool for enhancing the quality of learning and teaching. It addresses the perceived usefulness and challenges regarding Edmodo as a tool for enhancing students' learning. Edmodo is a free and secure educational learning platform, which provides a simple way for teachers to create and manage an online classroom community. It allows teachers to connect and work with their students anywhere and anytime. Seeing the importance of using a learning platform, we have conducted a survey, which relies upon collection of empirical data with an aim to explore the impact and importance and the challenges of using it in secondary education in Kosovo. In addition, the importance of this study was to study the factors affecting the effective adoption of LMS by the schools staff and to propose solutions to help improve future adoption.

Keywords: Edmodo Platform, Secondary Education, Kosovo

Introduction

School infrastructure is a key factor for effective teaching and learning in schools, in order to increase school attendance of students and improve their achievements but also to increase staff motivation as well. School infrastructure includes classrooms, laboratories, etc. and the day-to-day-formal teaching and learning traditionally takes place in the classrooms.

Information and communication technologies (ICTs) have changed the nature of global interactions and educational practices and it has been adopted almost everywhere. Intensively is being used in educational institutions as well (Drent, M & Meelissen, M), and affects all educational stakeholders: educators, parents, and students. The current generation of ICT development, known as a learning management system (LMS), is designed to organize and regulate the administrative tasks of schools and other organizations (Esther, S). LMS referred as Virtual Learning Environments, Course Management Systems, etc., is web based application, running on a server and accessible with a web browser from any location with an Internet connection. LMS originated in the late nineties of the previous century. Its adoption rate is higher in higher education. LMSs' are being used in secondary education as well, but little is known about the technology acceptance of LMS; how it influences on learning; how the use of LMS is related with teachers' and students' perceptions about teaching and learning; learning outcomes resulting from the use of an LMS, and about teachers' motivation and training for using the LMS. There are two groups of LMSs, commercial and free and online LMSs. Commercial LMSs like Blackboard, often has practical constraints, for example, it tend to be expensive and not every school can afford to purchase and maintain them over the long run. Trainee teachers cannot access certain features such as creating a course, enrolling students and setting up student groups as these functions are usually open to instructors or administrators only. Edmodo as free online LMS is promoted as a 'secure social networking environment' whose interface resembles Facebook, which makes it instantly popular with students! A single teacher to help maintain daily activities of the class, with no technical expertise required to get started, can implement Edmodo. A teacher can create Groups, which might be based on class structure, curriculum groups, etc. Unlimited number of documents can be stored in Edmodo Library and these documents can be shared within Groups using folders. Edmodo integrates with Google Docs –in the Google Drive folder directly from your Edmodo Library and make files in your Google Drive folder available in your shared folders. Edmodo can be personalized with a unique subdomain for your school, and a unique personal profile address.

This study aimed to identify the use of Edomodo, its impact in quality of learning and the challenges the staff is facing while trying to use it. The literature suggests that teacher commitment and infrastructure are driving forces behind LMS use, if the technology is available, but it does not identify how teachers are motivated to use LMSs. Usually governments do not provide any incentives to schools for implementing LMSs. In order to gain a deeper understanding of what factors influence the teachers' use of Edmodo, the mixed-method research is addressed. The questionnaire, that incorporates closed and open-ended questions, was the main data gathering technique and the semi-structured interviews with the teaching staff, which has offered more in depth data comparing to the questionnaire, which tend to be superficial. The paper is composed as following. The first part chapter is an introduction to the subject, the second elaborates the research approach, the third and the forth chapters presents the research questions and empirical results respectively, while the last one is the conclusion section.

The Research Approach

Learning benefits of ICTs are widely recognized by academics and practitioners alike, but the context in which teachers operate often affects the extent to which ICTs are used in order to achieve beneficial teaching & learning outcomes. While ICT is heavily used in school administration, its use in teaching & learning varies significantly. Investigating the use of ICT for teaching & learning can be difficult, as ICT is not a single variable: rather, the effect depends on many other factors, such as what technology is being used, its purpose, and the context in which it is used.

The current generation of ICT development, known as a learning management system (LMS), is designed to organize and regulate the administrative tasks of schools and other organizations (Esther, S). The purpose of the study reported in this paper was to explore what factors affected teachers' use and perception of ICTs, and the use of a new learning management system.

Teaching and administrative staff of five secondary schools responded to a survey. The questionnaire used in this study examines the factors such as teachers-perceived barriers, their knowledge and skills and the ICT infrastructure available. The questionnaire was sent electronically. To add more data on to the case study and complement a survey, we decided to conduct interviews as a second data collection technique. This study included a semi-structured interview, with guiding questions developed ahead. The initial analysis of the survey results influenced interview questions, in particular the questions about faculty-level ICT use.

Outcomes from the study are in the form of recommendations, which we hope to assist the ongoing implementation of a learning management system and the integration of technology in learning environments.

Quantitative data will be analyzed using Statistical Package for the Social Sciences (SPSS) whereas qualitative data will be analyzed with the inductive method. As regarding the sampling frame and size of our survey, the data presented in this paper are answers taken from 200 teacher and school administrators.

Research Questions and Results

Below are presented research questions of our survey.

- ✓ RQ1. What kind of training do teachers have on applying the learning management platforms?

Answers to questions Q1 (Do you think that the education degree should be taken into the consideration?), Q2 (Do you feel that you are ready to apply this platform?) and Q3 (Does the use of this platform incite curiosity in the educational process) gave us information about our first research question. From the answers, we can conclude that most of the teachers agree that professional training must exist in order to adequately use the online platform. A worrying fact is that 60% of them said they do not feel ready to apply this platform, and 70% of teachers stated that the use of Edmodo platform stimulates curiosity in the teaching process. In addition nonprofessional preparation and the reluctance of teachers are factors that the platform is not being used widely in the school, even though the fact that 70% of teachers stated that the use of Edmodo platform stimulates curiosity in the teaching process. Tables (1,2 and 3) relevant to these questions are presented below.

Table 1: RQ1:Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Higher education, bachelor	80	42.9	40.0	100.0
	Other	120	57.1	60.0	
	Total	200	100.0	100.0	

Table 2: RQ1:Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	120	61.9	40.0	100.0
	No	80	38.1	60.0	
	Total	200	100.0	100.0	

Table 3: RQ1:Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	140	66.7	70.0	100.0
	No	60	28.6	30.0	
	Total	200	100.0	100.0	

✓ RQ2. Dos the current technological infrastructure has any impact and/or supports to effectively use Edmodo?

School infrastructure is a key base for effective use of a learning platform. The answers to Q1: Does school has the IT equipment that support the platform being used? Shows that 85% of teachers fully or partially agree that schools currently are not equipped to support the use the platform.   Q2 (Do you think that applying this platform will improve your teaching?) and Q3 (Do you feel that a learning platform is an important factor towards increasing the quality of learning?) gave us information about the importance and the impact that the use of an LMS has in the teaching process, from their viewpoint. Reports that come from different surveys shows that the use of any learning platform in secondary education process have shown very positive impact. 70 % of teachers are positive whereas 30% of teachers think that the use of a platform has no significant relevance that affects the improvement of teaching and learning, Answers to question Q3 suggest that most of the teachers, 90% feel positive towards LMS use. Tables (4, 5 and 6) relevant to these questions are presented below.

Table 4: RQ2:Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completely agree	120	61.1	60.0	100.0
	Partially agree	30	14.3	15.0	
	Agree	20	9.5	10.0	
	Disagree	30	14.3	15.0	
	Total	200	100.0	100.0	

Table 5: RQ2:Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completely agree	40	19.0	20.0	100.0
	Partially agree	50	23.8	25.0	
	Agree	50	23.8	25.0	
	Disagree	60	28.6	30.0	
	Total	200	100.0	100.0	

Table 6: RQ2:Q3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completely agree	70	33.3	35.0	100.0
	Partially agree	80	42.1	40.0	
	Agree	30	14.3	15.0	
	Disagree	20	9.5	10.0	
	Total	200	100.0	100.0	

✓ RQ3. Does the age of teachers has any impact on their ability to effectively use a learning platform?

Answers to questions Q1 (Do you apply any platform in your school?), Q2 (Do you think you are ready to apply this platform?) shows that there is a positive correlation between them thus the success of an LMS implementation in a school depends on commitment from the teachers. If the teachers do not take the time to actively participate in the LMS, the students will most likely avoid using it as well.

Table 7: RQ3: Q1 & Q2

		Do you apply any platform in your school?	Do you think you are ready to apply this platform?
		Statistics	
N	Valid NO	200	60%
	Valid YES	0	40%
	Total	100%	100.0

Conclusions

First, although learners from 5 schools were involved, this sample cannot fully satisfy the study on using the LMSs. Second, we did not check for additional background variables, such as previous educational history, prior knowledge, motivation, aspirations, social-economic status, etc.

In this study after consulting 200 teachers from secondary schools, it is observed that despite the fact that schools are using a Learning Management System (LMS), only 10% of the participating teachers actively use it. We can conclude that despite the high adoption level of LMS within schools, the low adoption rate of it suggests that teachers are unfamiliar with how LMSs are designed and works.

Other research suggests the most cited barrier to successful ICT use and integration is a lack of teachers' professional development. Our survey shows that most of the teachers do not feel confident toward use of ICT and consider themselves as having limited knowledge to make fully use or integrate ICTs into teaching and rely on the ICT coordinator's support.

While the future for the LMS may sound promising, research shows that the use of LMS depends on teachers' motivation and training for using the system. The findings show that teachers did not attend any LMS training courses. Most of the participant were unaware of the LMS provided by their schools, which indicates that schools do not enforce staff toward using them.

In order to enhance the teachers' awareness towards LMS usage, we suggest that schools should provide their staff with the technology and training courses. Online training for example could have several benefits such as teachers will access it without leaving their classrooms, they can improve their computer literacy and be able to interact with their trainers and colleagues.

We believe that the use of Edmodo platform will positively affect students learning by positively stimulating them with different tasks and activities. In addition, teachers' mechanical work will be reduced, their collaboration with students will be tightened and it will increase the value of learning and teaching.

References

Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature. Eurasia Journal of Mathematics, Science & Technology Education, 5(3), 235-245.

Botturi L., Cantoni L. & Tardini S. Introducing a Moodle LMS in Higher education: the e-Courses Experience in Ticino (Switzerland).

Brummelhuis, A. C. (1995). Models of educational change: The introduction of computers in Dutch secondary education (Doctoral dissertation). University of Twente, Enschede.

Dagada R. & Mungai P. (2013). Learning Management System Implementation Framework for Higher Education-Case of University of the Witwatersrand. International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 3, No. 2, April 2013.

Drent, M., & Meelissen M. (2008). Which factors obstruct or stimulate teacher educators to use ICT innovatively? Computers & Education, 51, 187–199.

Esther, S. (2008). One-stop shopping with learning management systems. T H E Journal, 35(6), 18–20.

Kember, D., McNaught, C., Chong, F.C.Y, Lam, P. & Cheng, K.F. (2010). Understanding the ways in which design features of educational websites impact upon student learning outcomes in blended learning environments. Computers & Education, 55, 1183–1192.

Masizana-Katongo A., Mpoeleng D., Nkgau T.Z. (An open source LMS deployment and integration strategy for the University of Botswana.

Schiler, J. (2003) Working with ICT: Perceptions of Australian principals, Journal of Educational Administration, 41 (3) pp. 171-185.

Steven F. Tello. & Motiwalla L. (2010). Using a Learning Management System to Facilitate Learning Outcomes Assessment. Learning Management Systems Technologies and Software Solutions for Online Teaching: Tools and Applications (138-156), Hershey, PA: Information Science Publishing.

Tserendorj N., Tudevdagva U. & Heller A. (2013). Integration of Learning Management System into University-level teaching and Learning.   Chemnitzer Informatic – Berichte.

Whelan R., & Bhartu Dh. (2007). Factors in the deployment of a learning management system at the University of the South Pacific. Proceedings   Ascilite Sngapore.