

## **Teachers' Perception on the Benefits of Using Online Resources**

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**Abstract**—This research elaborates the perception of the teachers in relation to the benefits of using online resources in their educational activities, respectively the impact of the utilization of the platform "School Me" in the teaching and learning process. This was a longitudinal research and it included teachers of various subjects. The key research question tends to address the teachers' insight for the benefits of using online resources. Taking into account that the nature of this study is of the evaluative character, a mixed methodology has been implemented by using questionnaires and interviews in order to study and analyze the problem focus. The results show that teachers have a positive attitude towards usage of the platform in their teaching, which also influences for their lessons to become more attractive and comprehensive for the students and easier for the teachers. As far as the usage of online resources for the students' learning concerns, the findings of the performed research indicate a positive attitude of the teachers in schools for the affirmative impact that the usage of online resources has for the students' learning. This research also indicated that there are still technical problems present which in many cases hindered the utilization of the online resources.

**Keywords**—Teaching, learning, platform, online resources.

### **1 Introduction**

The integration of information and communication technology is becoming an integral and inclusive part of the education process. The development of many educational and teaching/learning software programs and electronic platforms to be used in teaching process are finding vast implementation in schools. These software programs and various electronic platforms are increasingly showing effectiveness in various teaching fields and subjects. These platforms create a more convenient environment for an effective teaching and learning, by enabling the teacher to manage the teaching and learning process easier through various phases of the lesson, as well as increasing the students' interest in learning through interaction during the learning process.

The systems for managing learning known as LMS (Learning Management Systems) are finding wide implementation. A Learning Management System (LMS) is web-based software used for managing teaching and learning by enabling teachers to

prepare various learning contents and sharing the teaching materials with colleagues and students. The characteristic of these systems is the opportunity to access the online materials and offer distance learning courses. Through these learning management systems, the interactive learning is enabled with visual learning content, application of software simulators and direct communication from the distance teachers and their students. The implementation of the LMSs by the institutions of education has assured better quality and student centred learning. LMSs have the potential to offer teaching and learning that fulfils various education needs. LMSs include a vast variety of characteristics that can be used to support distance learning and interactive education.

## **2 Literature Review**

Many institutions of education all over the world nowadays use a range of education platforms in order to support leaning. Education platforms are software-controlled infrastructures that enable the repetition of the lessons that teachers carry in the classroom. These platforms are usually placed in a computer through internet (or in Intranet) and usually they are accessible through an internet browser. Besides learning contents, such platforms also offer students' registering, teacher-student interaction, testing, evaluation, etc. In an online environment, lectures can be obtained and repeated anywhere and at any time, by ensuring wide learning flexibility. Stimulated libraries, presentations can be re-accessible, catalogued and reused over again and any time we want. These are important benefits for the students and ensure effectiveness in their learning. Virtual laboratories' simulation has replaced in the best way physical equipment and laboratories. The blending methodologies as well are currently a tool that makes teaching and learning through online resources the main teaching activity in institutions of education. Various authors in the course of their research have elaborated the importance of using the online resources respectively the implementation of the learning and teaching management systems in the education process. In most of the employed researches the findings have shown that these systems are an important and contributing factor in improvement of teaching and in enhancing the students' motivation towards learning. The use of Learning Management System (LMS) is nowadays a fundamental asset in many universities around the world. These platforms offer a powerful and flexible working tool in supporting learning process, managing resources, cooperative learning and class engagement. As a result, LMS can be seen as a tool for improving the quality of education and academic performance [1]. The use of electronic platforms or to be more exact of the learning management systems in the process of education has reached immense implementation in various places of the world. The performance of these systems is deemed as a very useful tool that contributes much positively towards the development of the education process namely, based in various forms. LMSs encounter a huge diversity of characteristics that can be used to support the distance learning as well as the traditional learning. LMSs usually function based on internet as web-based systems [2]. By using the LMSs in education process, teachers and students are important actors for suchlike teaching management

systems. Teachers can follow their students' progress by using such systems, whereas students can present their assignments, download course materials and can follow their grades by signing in into the system [3],[4]. By analysing various international authors' findings, we notice that the implementation of the learning management systems contributes in various forms on the welfare of the education process at the university level. Although, we can say that almost the same applies also to the pre-university level all over the world however, differences do exist. Diverse factors such as the infrastructure, the training and preparation of the teachers and students in using these systems, etc. have to be taken into consideration for the performance and implementation of the learning management systems.

A group of researchers that analyzed and evaluated teachers' activities in the learning management systems, through research gained results they show that there are relevant differences in relation to utilization and usefulness of the LMS tools depending on the teaching and the modality that the teachers are learning. However, there is a uniform criterion for all the modalities concerning the level of complexity of such tools. Moreover, they show that the scholars tend to overestimate the use frequency of the LMS tools, again with some differences, depending on the span of teachers' knowledge who utilize such tools. In any case, the utilization of monitoring software such as the Online-Data and the proposed teaching methodology can assist the coordinators in discovering the weaknesses at an early stage [5]. Therefore, the success of the LMS depends also on the effective use of these systems by the two parties in process: the teachers and students likewise [6].

Learning Management Systems (LMS) have been successfully implemented in many institutions of education of the developed countries. They have been able to enhance students' leaning performance, decrease the students' school abandonment rate and also these systems have increased the students' satisfaction for the offered courses and/or subjects [7].

Learning Management System (LMS) is user friendly and easy to comprehend if students would use the system more often. On the other hand, LMS is perceived as difficult and not user friendly, students spend much time to learn how to use the system instead of studying the learning content [8]. In this case scenario, the users might feel lost, confused or frustrated with the LMS [9].

However, handing over the course materials through a specific webpage based on the web is a method that might increase the subject or course effectiveness and sustainability. Moreover, the quality of course contents and teaching experiences can be enhanced with the assistance of internet technologies [10]. Although, specific tools such as Blog, Wiki, Podcast, WebQuest can be used for such aims, learning management systems (LMS) designed for education purposes are more preferred within scholars. The reason behind this is that LMSs enable more interaction with involved parties: student-student, student-teacher and teacher-student and are mainly based on the principles of constructivist learning [11]. These systems offer to students' interactive tools to be able to access information resources, handover the assignments related to specific lessons, online collaboration with colleagues and also assist the teachers to manage students' learning progress [12]. Evaluation of these virtual learning environments and their integrated services ensure significant values as feedback for projectors and teachers for improving their educational potential.

As in all the teaching and learning environments, students' expectations and preferences have a huge influence in developing, selecting and using of the LMSs in educational environments.

Recent researches based on the technology acceptance model, have discovered that user variable (e.g., perceptive usefulness, user friendliness, challenges) influenced the process of LMS acceptance and use [13].

It is a known fact that students have various needs, perceptions, motivation, cognitive abilities and different learning styles [14]. These distinguished characteristics should be taken into consideration while planning learning activities and determining the tools and materials. Educational environments that are projected according to students' characteristics should increase learning pace, effectiveness and sustainability [15]. Therefore, student analysis has a great importance while designing learning or planning and organizing learning contents.

Previous research studies suggest that personal and behavioural factors that tackle the technology use in education are closely related to cognition, ability, attitude, perception, confidence and engagement, while environmental variables are closely related to opportunities, hardware equipment, professional development and support [16].

In a comparative study, author Xue Shi identified the satisfaction of the learning flexibility as the strongest motive for students in using Moodle-mediated e-learning, and noticed that there is a higher level of following the courses and handing over the home assignments compared to traditional learning. The author concludes that students require an automatic grading for the home assignments, more through internet tests, learning-friendly environment, and faster response from the e-learning platform [17].

In the similar method, Krasnova and Vanushin found student satisfaction through Moodle courses were influenced by their perception for the learning flexibility, user-friendliness, design clearness and commodity [18]. By noticing the user point of view, teachers and students evaluate the community influence, satisfaction, service quality, learning and technical quality as an important determiner in accepting and using Moodle [19]. These studies emphasise the importance of continuous collection of the users' reactions in relation to their experience on using LMS in order to develop and implement LMS courses [20]. Other studies note that the web-based learning model is more effective in student achievement than the face-to-face learning [21]. Online resources in many cases have interactive materials like games that helps teachers for engaging students to learn. Bringing this kind materials into the classroom make the students pay more attention, get involved and feel fun to study [22].

## **2.1 Research objectives**

This research is carried for the purpose of recognition and comparison of the teachers' perceptions for the benefit and effects of the online resources' utilization. Respectively, the research dealt with the influence that the use of platform "School Me" had in the process of teaching and learning, after the modifications were made and the work was organized for implementing the platform based on the results and recommendations of the first research.

## 2.2 Methodology

Given that the nature of this research is of evaluative character, in order to study and analyse the key issue, the main methodology used for this matter is a combined qualitative and quantitative research. With the purpose of answering the research question:

***Which are the perceptions of teachers in pilot schools for the benefits of using the online resources?***

Consequently, as a matter of course it is required data gathering and resourceful and diverse information on the ground. For this matter, the research was carried in 10 out of 23 pilot schools. Since the nature of this research besides the evaluative character mentioned above, is also comparative, the involved schools in the second research are the same ones as in the first research. Conversely, the respondent teachers within the schools are different from the ones involved in the first research. Data gathering was executed through questionnaires (162 pcs.) distributed in hard-copy to the teachers, as well as through a half-structured interview with focus groups of teachers and headmasters.

## 2.3 Population and the research sample

In order to have an optimal representation, and according to the regulation on determining the sample based on the population size, we have distributed 74 questionnaires (in our case the population comprises of 290 teachers, while the sample should encounter 160 teachers) i.e., we have a genuine representation concerning sample distribution. The selection samples were based on the lists provided by the schools with the number of teachers that used the platform “School Me” and from these lists the selection of teachers was made randomly.

The table below presents the distribution of the samples per respective schools:

**Table 1.** Distribution of the samples per pilot schools

No.	Municipality/place	School	The number of teachers that use the platform	The number of respondent teachers
1	Prishtina	Model	25	9
2	Prishtina	Mileniumi i Tretë	23	5
3	Podujeva	“Naim Frashëri”	28	8
4	F.Kosova	“Mihail Grameno”	44	8
5	Drenas	“Ali Gashi”	22	7
6	Istog/Gurrakoc	“Martin Camaj”	22	2
7	Gjakova	“Zekeria Rexha”	43	19
8	Han i Elezit	“Ilaz Thaqi”	39	4
9	Lipjan	“Ismail Luma”	31	8
10	Gjilan	Mulla Idriz Gjilani	13	4
Total			290	74

As far as the focus-groups concerns, they were carried in the two same schools as in the first research, except with other teachers, one in the village and one in the city, respectively in “Martin Camaj” school in Istog and “Model” school in Prishtina,

whereas 6 teachers were selected intentionally per each school. The selection of the teachers was made by the school headmasters, selecting the teachers that used the whole time the named platform in their teaching process. Moreover, the interviews were carried with the mentioned two schools' headmasters where the focus-group teachers are from.

The information gathered from the questionnaires and interviews are analyzed and presented as the research results in this paper. It should be noted that in this research are also presented the results of the comparison of the findings in both carried researches. The presented results are only the ones that are statistically valid.

## **2.4 Demographic data**

The first part of the questionnaire that was distributed to the respondent teachers comprised of demographic nature questions, including also the questions that enabled to subtract information related to digital competency of the respondent teachers, respectively related to the competency on using the platform "School Me".

From **Table 2** it can be seen that 68.9% of the respondent teachers have followed training on developing competency for ITC, respectively using ITC, whereas 80.4% were trained for ECDL, 5.9% for MOODLE, 5.9% SITOS, 5.9% E-Learning and ECDL, and 1.9% E-Learning. This means that 31.01% of the respondent teachers have not followed any training on the use of ITC. Whereas in the question were they trained in using the platform "School Me", 56.76% of the respondent teachers declared that they were trained in using this platform, while 43.24% declared that they did not have any training on using the platform "School Me".

33.78% of the respondent teachers confirmed that they are very familiarized with the procedures of using the platform "School Me", 54.05% are moderately familiar, 9.46% are little familiar and 2.7% of the respondent teachers declared that they were not at all familiarized with the procedures of using the platform "School Me".

**Table 2** below present the data related to the respondent teachers' level of education, work experience, grades that they teach, their age and gender. Therefore, 89.2% of the respondents declared that their level of education is Bachelor degree, 8.1% declared that they have finished Master degree and 2.7% finished Pedagogical High School (PHS).

**Table 2.** Demographic characteristics of the respondent teachers

Demographic characteristics of the respondent teachers							
Gender		N	%	Followed training(s) on using ITC		N	%
	M	8	10.9		YES	51	68.9
	F	66	89.1				
Age	Years	N	%	NO		23	31.01
	22-30	12	16.2				
	31-40	30	40.54		N	%	
	41-50	22	29.7	Type of training for ITC	ECDL	41	80.4
	51-60	7	9.5		MOODLE	3	5.9
	Over 60	3	4.06		SITOS	3	5.9
			ECDL, E-learning		1	1.9	
Level of Education		N	%	E-learning	3	5.9	
	PHS	2	2.7	ECDL, MATLAB	0	0%	
	Bachelor	66	89.2	MATLAB	0	0%	
	Master	6	8.1	Not declared	0	0%	
	Years	N	%				
Work experience	0-10	25	33.8	Followed training for using the platform “School Me”		N	%
	11-20	31	41.8		YES	42	56.76
	21-30	14	18.9		NO	32	43.24
	Over 30	4	5.5	Familiar with procedures on using the platform “School Me”		N	%
	Undeclared				Very	25	33.78
					Moderately	40	54.05
					Little	7	9.46
			None	2	2.7		

**2.5 To date experiences on the use of the platform “School Me”**

In order to observe the up-to-date teacher experiences on the use of the platform, being from the technical aspect as well as from the aspect of the impact that the use of the platform has on the student learning and teaching, the questionnaire questions were categorized in three categories:

1. Technical aspect of the utilization of the platform
2. The impact of the platform in student learning and
3. The impact of the platform in teaching.

**Technical aspect of the utilization of the platform:** Concerning the difficulties that teachers have in opening of the platform “School Me”, 12.5% of the teachers have declared that they very often have difficulties in opening the platform, 16.7% declared that often have problems in opening the platform, 41.7% have declared that they sometimes have problems, 13.9% of the teachers declared that they rarely have problems, while 15.3% of the teachers declared that that they never have problems in opening the platform.

In the question if there are cases when teachers were not able to open a particular lesson unit within the platform, more than half of the teachers 61.1% declared that there are cases when they could not open a specific lesson unit within the platform,

while 39.9% of the teachers declared that rarely or almost never, they could not open a lesson unit within the platform.

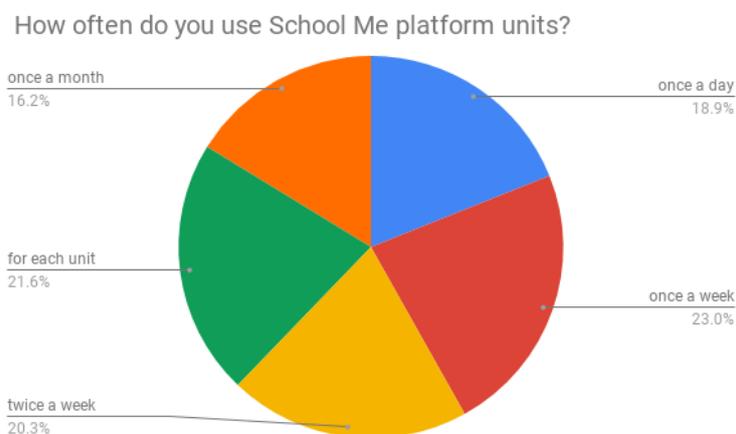
**Table 3.** Results of teacher perceptions for opening the lesson units within the platform

Give your opinions for the below declaration	Very often	Often	Sometimes	Rarely	Never
Are there cases where you cannot open a particular lesson unit within the platform?	4.2%	20.8%	36.1%	27.8%	11.1%

Regarding the disconnection during the work on the platform, 86.1% of the teachers declared that they were disconnected during the work on the platform, while 13.9% of the teachers declared that they were never disconnected during their work on the platform.

**Table 4.** Results of the perceptions of teachers for disconnection during the work on the platform

Give your opinions for the below declaration	Very often	Often	Sometimes	Rarely	Never
Were there cases that you were disconnected during the work on the platform?	6.9%	26.4%	36.1%	16.7%	13.9%



**Fig. 1.** How often do you use School Me platform units?

**The impact of the platform in student learning:** In order to observe the perceptions of the respondent teachers related to the impact that the platform “School Me” has in student learning, they were asked to give their opinion related to the questions in Table 5. For the affirmation that teaching with the platform “School Me” facilitates the learning, 97.2% of the respondent teachers fully or partially agreed. Concerning the learning of students in various forms (individual, pair, group, etc.) through the platform, there was 94.4% partial or full agreement from the respondent teachers. Whereas, concerning the opportunities that the platform offers for each student to

learn in their own pace, 83.3% of the respondent teachers agree fully or partially. 93.1% of the respondent teachers fully or partially agree that the platform supports various learning styles (visual, auditory, etc.).

In the context of the impact that the platform might have in enabling students to search necessary information for their learning benefits, most of the respondent teachers (97.2%) fully or partially agree that the platform influences the students in searching for information concerning their learning needs. 91.5% of the respondent teachers fully or partially agree that the platform assists students for their independent learning. 88.9% of the respondent teachers agree fully or partially that the platform assists students' self-evaluation through tests/assignments associated with the lesson units. Moreover, 97.2% of the respondent teachers agree fully or partially that the platform motivates students' learning. 79.1% of the respondent teachers agree fully or partially that the platform assists students in doing their home assignments. Most of the respondent teachers (86.1%) have fully or partially agreed that students that use the platform have a more sustainable knowledge. On the affirmation that when there is a lack of laboratories and educational tools the platform offers options for concretization of lesson units, 93% of the respondent teachers agree fully or partially. If the platform assists the students in their preparation for various tests and evaluations, 84.8% of the respondent teachers agreed fully or partially. 97.3% of the respondent teachers agree partially or fully that the use of multimedia materials of the platform "School Me" in the educational process boosts students' critical thinking.

Based on previous data 87.5% of the respondent teachers agree fully or partially that the use of platform "School Me" has a positive impact for the students that fall behind in lessons. If the platform "School Me" offers better opportunities to test the students' achievements, most of the respondent teachers (86.1%) agree fully or partially. 75% of the respondent teachers agree fully or partially with the affirmation that the platform offers possibilities for the parents to follow the students' learning, whereas, 13.9% stated that they do not agree with this and 11.1% stated that they do not know if the platform offers the opportunities for the parents to follow students' learning achievements.

**Table 5.** The results of teachers’ perceptions for the impact of the platform in students’ learning

Which is your attitude related to the following affirmations?					
	<i>Fully agree</i>	<i>Partially agree</i>	<i>Do not agree</i>	<i>Fully dis-agree</i>	<i>Do not know</i>
15.1 Teaching with the platform “School Me” facilitates the learning	56.9%	40.3%	1.4%	0%	1.4%
15.2 The platform offers possibilities for the students to learn in various forms (individual, pair, group, etc.)	33.3%	61.1%	5.6%	0%	0%
15.3 The platform offers for each student to learn in their own pace	31.9%	51.4%	8.3%	4.2%	4.2%
15.4 The platform supports various learning styles (visual, auditory, etc.)	54.2%	38.9%	4.2%	1.4%	1.4%
15.5 The platform enables students to search the necessary information for their learning benefits	52.8%	44.4%	2.8%	0%	0%
15.6 The platform assists students for their independent learning	38%	53.5%	8.5%	0%	0%
15.7 The platform assists students’ self-evaluation through tests/assignments associated with the lesson units	45.8%	43.1%	8.3%	2.8%	0%
15.8 The platform motivates students’ learning	56.9%	40.3%	1.4%	0%	1.4%
15.9 The platform assists students in doing their home assignments	31.9%	47.2%	13.9%	1.4%	5.6%
15.10 The students that use the platform have a more sustainable knowledge	47.2%	38.9%	8.3%	0%	5.6%
15.11 When there is a lack of laboratories and educational tools the platform offers options for concretization of lesson units	59.7%	33.3%	4.2%	0%	2.8%
15.12 The platform assists students in their preparation for various tests and evaluations	43.1%	41.7%	8.3%	1.4%	5.6%
15.13 The use of multimedia materials of the platform “School Me” in the educational process boosts students’ critical thinking	43.1%	54.2%	2.8%	0%	0%
15.14 The use of platform “School Me” has a positive impact for the students that fall behind in lessons	50%	37.5%	12.5%	0%	0%
15.15 The platform “School Me” offers better opportunities to test the students’ achievements	31.9%	54.2%	12.5%	0%	1.4%
15.16 The platform offers possibilities for the parents to follow the students’ learning progress	34.7%	40.3%	13.9%	0%	11.1%

**The impact of the platform in teaching:** After reviewing the data collected from the teachers through the questions from the questionnaire concerning the impact that the platform “School Me” has in teaching, we have these findings:

*The impact of the platform “School Me” materials in implementing the lesson plan* - 87.5% of the respondent teachers agree fully or partially that the use of materials presented in the platform “School Me” enables the qualitative implementation of the lesson. 12.5% of the respondent teachers are neutral, although not a low percentage, still it doesn’t wither much the result of 87.5%.

Concerning the assistance that the platform “School Me” can offer to the teachers in accessing various materials and make the proper selection, 73.6% of the respondent teachers have fully or partially agreed that the platform “School Me” has helped them in accessing various materials and make the proper selection, whereas 2.8% of them have not agreed to this statement. To the question how much is the teaching through the platform “School Me” inclusive for the students in learning, 95% of the respondent teachers fully or partially agreed that this platform enabled the full inclusion of the students in the learning process. As far as the offering of the opportunity of the platform “School Me” for the teachers to compare their teaching methodologies to other teachers concerns, 75% of the respondent teachers agreed fully or partially that the platform “School Me” enabled the comparison of the teaching methodologies between teachers.

It is important to identify the impact of the platform on the teachers in increasing the students' learning per subject. Therefore, in this context 77.7% of the teachers agree fully or partially by asserting that the use of the platform increases the students' learning per specific subject, whereas 4.2% do not agree with this statement.

Also, 79.1% of the respondent teachers agreed that they managed to enhance their teaching by using the platform “School Me” in the question of the impact of the platform in improving the teaching. 16.7% declared neutral and 4.2% do not agree with the statement that the platform “School Me” has managed to improve their teaching.

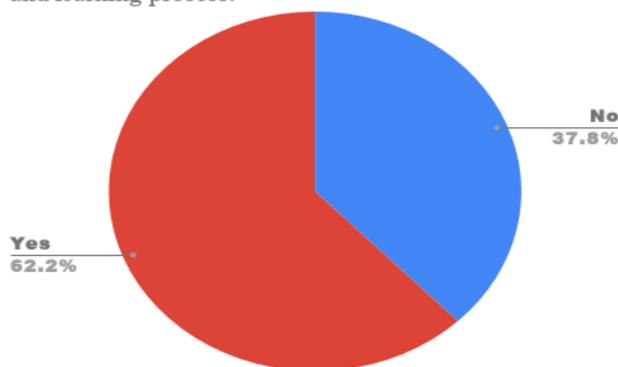
For the positive impact that the use of platform has in achieving educational results, 80.6% of the respondent teachers fully agreed, whereas concerning the possibility on teacher-student interaction through utilization of the platform “School Me”, 80.6% of the respondent teachers have agreed fully or partially that the use of the platform has enabled interaction with their students. As far as interaction with their study field and other colleagues through the platform “School Me” concerns, 63.9% the respondent teachers agree fully or partially that the platform enables such prospect, while 33.3% declared neutral and 2.8% do not agree with the above assertion.

**Table 6.** Results of the teacher perceptions for the impact of the platform in teaching

Which is your attitude related to the following affirmations?					
	<i>Fully agree</i>	<i>Partially agree</i>	<i>Do not agree</i>	<i>Fully disagree</i>	<i>Do not know</i>
16.1 By using the materials presented in the platform "School Me" the qualitative implementation of the lesson is enabled	30.6%	56.9%	12.5%	0%	0%
16.2 The platform "School Me" has helped me in accessing various materials and make the proper selection	52.8%	20.8%	23.6%	2.8%	0%
16.3 The teaching through the platform "School Me" is inclusive for the students in learning process	60%	35%	5%	0%	0%
16.4 The teaching through the platform "School Me" gives me the opportunity to compare my teaching methodologies to my other teacher colleagues	50%	25%	18.1%	6.9%	0.6%
16.5 The use of the platform "School Me" increases the students' learning in my subject	45.8%	31.9%	18.1%	4.2%	0%
16.6 By using the platform "School Me", I have enhanced my teaching skills	31.9%	47.2%	16.7%	4.2%	0%
16.7 The use of the platform "School Me" has positive impacts in achieving educational results	26.4%	54.2%	13.9%	5.6%	0%
16.8 The platform "School Me" has enabled me to interact with my students	29.2%	51.4%	18.1%	1.4%	0%
16.9 The platform "School Me" enables me the interaction between my study field and other colleagues	18.1%	45.8%	33.3%	2.8%	0%

In the question: Do you think that there should be added other tools (options) to the platform in order to be more efficient for the teaching and learning process? 62.2% of the teachers think that there should be added other tools to the platform.

Do you think that other tools (options) should be added to this platform to be even more efficient for the teaching and learning process?



**Fig. 2.** Teachers' perceptions of the need to add new tools (options) to the School Me platform

The teachers' suggestions for the tools (options) that should be added to the platform were: additional materials, animations, exercises, tests, printout activities, online games, learning results.

## 2.6 The findings from the interviews with teacher focus groups

The center of this interview was the so far experience in utilization of the platform in their work as teachers, the impacts in using the platform in their students' achievements, fulfilling their expectations with the platform "School Me", difficulties encountered during the use of the platform and future expectations from the platform.

In order to work carefully starting from the concrete issues that teachers' opinion was required, we defined the following problems as such: is it necessary to use electronic platforms, specifically the platform "School Me" in the process of teaching the relevant subjects, does the use of the platform make the teaching easier for the teacher and more attractive for the student, do the platforms' learning materials meet the requirements of use for the three phases of the lesson, are the teaching materials rich with activities and multimedia components that would affect the engagement of the students and the development of their critical thinking, what are the difficulties encountered during the use of the platform, and which are the future expectations from the platform in the context of its improvement.

With the aim on respecting the ethical principles of the interview, we have presented through an identification code the name of the school where the interviewee comes from. Given that there are 6 teachers from the same school, we have added a number to the school to identify each interviewee and the name of the subject.

Several analytical approaches were used to process the interview data, such as: thematic, grounded and dynamic.

The interviewees' opinions for each question are presented in the following tables, accompanied by the relevant interpretations.

**Table 7.** Teachers' answers regarding the need to use electronic platforms, in this case the "School Me" platform in the teaching process in the subject they teach

Interview Code	Answer
MC Teacher Class 1	Yes, it is necessary, because it helps students' learning process. Moreover, they can repeat the video as many times as it's needed
MC Teacher Class 2	Yes, it is necessary
MC Teacher Class 3	Yes, of course!
M Teacher Class 1	The platform "School Me" is very necessary
M Teacher Class 2	Yes, it is necessary
M Teacher Class 3	Yes

As can be seen from the table above, all the teachers see the use of the platform "School Me" in their teaching as necessary because it helps students learning, meets the requirements of the new curriculum, etc.

**Table 8.** Teachers' responses regarding the effects of using the materials of the platform “School Me” on the engagement of students in their learning and achievements

Interview Code	Answer
MC Teacher Class 1	The learning effects are very positive
MC Teacher Class 2	Positive effect for the students, since the platform can encourage them to work harder
MC Teacher Class 3	The learning effects are very positive
M Teacher Class 1	The effects are immense, as students focus on learning through listening and watching
M Teacher Class 2	The platform "School Me" is attractive to students as they have the opportunity to learn differently, which affects positively them
M Teacher Class 3	The visual appearance and the questionnaire have aroused curiosity and interest

Regarding the effect of using materials of the platform “School Me” on students' engagement in learning and their achievements, all the teachers are of the opinion that the use of platform materials has increased students' interest in learning and has positively impacted their learning outcomes.

**Table 9.** Teachers' responses to the impact that the use of the platform “School Me” has on the enhancing the teaching so that it is more attractive and more interactive with students

Interview Code	Answer
MC Teacher Class 1	It has a very positive impact in enhancing the learning
MC Teacher Class 2	It has a positive impact so far, because it is a great assistance particularly with using videos which can be attractive for the students and reduce monotony
MC Teacher Class 3	It has an immense positive impact in enhancing the teaching
M Teacher Class 1	It is easier for the teacher to maintain the lesson interest as it helps a lot for a more attractive teaching
M Teacher Class 2	The visual appearance has helped me in make the lesson more attractive and raise the students' concentration
M Teacher Class 3	Using the platform "School Me" helps me make teaching more attractive and interactive with students. I have described it as a virtual assistance

From the table above we see that all the teachers are of the opinion that the use of the platform "School Me" has a positive impact on improving their teaching by making it easier and more attractive for the students. The platform is seen as a virtual assistance or as a genuine help that assists them in the teaching process.

**Table 10.** Teachers' responses to what they expect from the platform in the future in the context of improving teaching materials

Interview Code	Answer
MC Teacher Class 1	I expect to expand the teaching units for all the subjects
MC Teacher Class 2	To include other subjects as well and have more adapted teaching units, the specific teacher that lectures in the video should be louder
MC Teacher Class 3	I expect to expand the teaching units for all the subjects
M Teacher Class 1	The compatibility of the teaching units with the curriculum up to 100 percent
M Teacher Class 2	I expect in the future that the platform should be 100% in compliance with our curriculum
M Teacher Class 3	To be more in line with the teaching curriculum. To have more ‘memorization’ exercises because students are constantly asking for them

Regarding the teachers' expectations for the improvement of the platform in the future, from the table we see that all the teachers expect the addition and enrichment of relevant materials with particular elements per specific subject.

As for the difficulties in use concerns, all the teachers pointed out that in the beginning the main problem was the access to the platform due to the weak network, a problem that according to the teachers' answers seems to have been avoided to a considerable extent for the teachers of two schools. However, as an ongoing problem is the access of more teachers to the platform at the same time.

## 2.7 Findings from the interviews with the headmasters

It was also interesting to know the opinion of school leaders regarding the platform "School Me" and its effects. Hence, in this context, we conducted interviews with the headmasters of the two schools where the focus group teachers came from. Therefore, the interview was conducted with the headmaster of SHMU (Elementary School "Martin Camaj" in Gurrakoc and the headmaster of the School "Model" in Prishtina. In accordance with the ethical principles of the interview, we presented the name of the school where the interviewee comes from with an identification code.

Below are presented the opinions of the interviewees on each question accompanied by the relevant interpretations.

- ***The headmasters' opinions on the platform "School Me" and its role in the teaching process:*** Both headmasters (Headmaster 1 and Headmaster 2) think that the platform plays an important role in the teaching process in order to increase quality. It is considered as an assistant to the teacher which ensures the successful implementation of the curriculum and enables shifting of the focus towards students and learning. The Headmaster 1 emphasizes that: "The platform "School Me", besides meeting the need for successful implementation of the New Curriculum, it also provides wider information, support for teaching and learning and inspires the stakeholders." Headmaster 2 has this opinion: "The platform has the role on assisting and turning the attention towards the pupils, etc..."
- ***The headmasters' opinions on the platform implementation process in their school, technical difficulties during the implementation:*** Both headmasters have stated that the flow of the platform implementation process in their schools is very good. They stated that thanks to the support of the collaborators within the school and KEC (Kosovo Education Center), the implementation no longer has the difficulties it had at the beginning, such as: regarding the installation of the internet which required 30 Mbps, the impossibility of access at the same time for more than three teachers, etc. Although, the difficulties were reduced compared to the beginning of the use of platform, nevertheless the headmasters point out that still there is a lack of TV screens in each classroom and the existing ones are of the small dimensions. Nonetheless, the schools no longer face the difficulties they had during the first implementation phase.
- ***The headmasters' opinions on the digital competence of their school teachers, the need for staff training on using the platform "School Me":*** Concerning the digital competence of their school teachers, the opinions of the headmasters in this

context same as in the first research are different. Headmaster 1 emphasizes that his staff is not bad in terms of digital competence but that he needs a small part of his staff to be provided with training, especially for teachers who have started using the platform after the training was provided by KEC. The Headmaster 2 stresses that his staff doesn't need additional training.

- ***The headmasters' opinions regarding teachers' interest in using the platform, differences in interest depending on the age:*** In this context also as stated above, headmasters have different opinions. From the response of the Headmaster 1 it appears that the interest of teachers in using the platform is satisfactory, but there are differences in interest depending on the age. Older ages (e.g. over 52 years) are a bit more reluctant to use the platform. Whereas, the Headmaster 2 states: "The interest is brilliant. There was always a need for our teachers to have an assistant within the classroom, and this cyber assistance provides 50% of the needed assistance, hence the interest is vast".
- ***The headmasters' opinions on whether the use of the platform "School Me" has provided opportunities for the application of the new curriculum:*** Both headmasters state that the platform has offered the opportunities to apply the new curriculum. Headmaster 1: "Yes, it has provided us with opportunities for better implementation of the new curriculum, initially by altering the concept that the book is the main source of learning. It is useful for cultural and linguistic development, especially in terms of students' building and exercising the key competencies. This platform fosters the desire to learn independently".
- ***The headmasters' opinions regarding the effects that the utilization of the platform has in teaching and learning process:*** The headmasters state that after the carried mentoring and observation, they have noticed that the use of the platform has had a positive effect on the teaching and learning process. Headmaster 1: "During the internal evaluation of the school, the evaluation team used a questionnaire for students and teachers regarding the effectiveness of this platform where as a result it turned out that most consider it a genuine platform since it can be used in addition to the classroom at home as well, as a tool for interactive learning or for assessing student achievement. The platform also facilitates interaction in teaching and learning through quizzes, exercises and various problem-solving situations by motivating and developing critical thinking more compared to classical forms (of teaching and learning). The Headmaster 2 also says that he has mentored lessons with and without the use of the platform - and "we have noticed that there is progress with the platform, however since it is the first year of implementation without facing technical problems, we consider that measurements should be made next year also in order to obtain concrete results".
- ***The headmasters' opinions on how should the platform "School Me" be supplemented or improved:*** Both headmasters think that the platform should be supplemented. The Headmaster 1 thinks that "it would be good to include other subjects (which are not included in the platform)". Whereas, the Headmaster 2 is of the opinion that: "Lesson units should be added. Quizzes should be added. Tests for students should be added. To be in accordance with the new curriculum. To add the communication rubric between teachers and parents".

### **3 Conclusion**

Based on the findings of this longitudinal research and referring to the bibliography, it can be concluded that: teachers' perceptions for using the online resources during the teaching process are positive. Teachers think that it is very important to use these resources, since the teaching process becomes more attractive, it increases the learning engagement, and it is compatible with various learning styles. According to the teachers the utilization of the online resources increases the students' learning results. With the intention on improving the work on using the online resources in the teaching/learning process, the following recommendations are presented. The recommendations also relate to the need on further enhancing the platform through improving the learning contents and increasing the number of functions, in order to upgrade the learning quality through effective utilization of the platform.

#### **3.1 Recommendations for the developers of the platform "School Me"**

- Enriching the learning contents with other additional materials, better compatibility with subject lesson plans, particularly for the primary education. Adding other subjects to the platform, so that the utilization should be for all the subjects.
- Enhancing the experimental aspects of the learning contents, to enable laboratory work through various simulations, offering practical examples from the real-life experiences.
- Adding more materials in the subject learning contents that facilitate interactivity among teachers and students.
- Adding the application that enables students' online testing, adding the application that supports collaboration between teachers (teacher forum), as well as adding the application that allows parent-teacher communication.
- Offering the possibility for the teachers in publishing the learning content materials.
- Checking the technical aspect of the multimedia materials such as the sound system, intonation clarity.

#### **3.2 Recommendations for the schools**

- Responsible school structures (but also all other stakeholders involved in this project) to see the possibility on providing the necessary infrastructure so that all the school teachers and students could be able to use the platform (TV screens for all the classrooms).
- School leaders should be aware on appointing the technical staff, which should assist teachers and students in eliminating faults, as well as continuously maintaining the IT equipments in schools.

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