SEEJSD

SOUTH EAST EUROPEAN JOURNAL OF SUSTAINABLE DEVELOPMENT

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Editorial Foreword

Prof.Dr. Bekim Fetaji
Editor-in-Chief

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Welcome you to the new Issue of the SEEJSD Journal with ISSN: 2545-4471. The topics covered by this Issue are related to the current trends of research, original research that uncovers sustainable development.

SEEJSD Journal as an international journal that effectively provides a forum for academics, professionals, graduate and undergraduate students, fellows and associates to share the latest developments and advances in knowledge and practice of Economics and Business; Information Technology and Engineering, Technics and Technology; Humanities and Social Sciences. Our interest in promoting high-quality research is clearly reflected in having an established peer reviewing process and a high-profile expert group of Associate Editors and Editorial Board Members.

Hopefully you find this Issue valuable and we definitely look forward to receiving your high-quality studies for the next issue of the Journal.

Prof. Dr. Bekim Fetaji
Editor-in-Chief

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The Importance of Students Meaning in Process of Creating Teaching Materials

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ABSTRACT
Each subject needs learning materials, so that each professor prepares lectures and exercises himself. We posted our materials on Moodle platform and on e-library system. At e-library we upload our books and scripts for the subject, but on Moodle we have freedom to post videos, some simulation, open codes, images, text documents, ppt presentations. The students also have the freedom to search and find additional learning materials such as text documents, videos, and images with the aim of making it easier to master and understand the lesson. For that purpose, we had some discussions with our students to define what and how they prefer to learn. We need that discussion because we appreciate the opinion of our students to prepare better learning materials.

CCS CONCEPTS
• Education • Professional topics

KEYWORDS
Moodle, e-library, learning materials, students' opinion.

1 Introduction

Studying is a long-term process. It is a process in which professors share their knowledge with students in the subjects they teach, and the students have the task of accumulating that knowledge, processing it at home and becoming in future better than their professors. Therefore, during the teaching process, neither the students nor the professors have a simple task. This is because during studies, the most important task and obligation of professors is to teach students to understand the topics they encounter, students to know how to apply each topic practically and the students not to give up their goal. To achieve this, we often talk to students to see their opinion on how to achieve quality education made by a large selection of material for mastering new topics that are worked on in class. The conversation with the students confirms our vision to create an increasing number of materials in the Macedonian language that are more acceptable to students and give them a greater motivation for work. These include written materials, video materials as well as materials in which dominated images, to increase students' attention and desire to learn. Also, we recommend students to use educational software when learning, for which we recommend materials for learning and master it. The application of education software is important for students from the beginning of their learning. In [11] we can find reveals teachers' views for the software used in primary reading and writing. In the paper is determined that the use of educational software for students provides an advantage as concretization of teaching, minimizing individual differences between students, giving more attention to the lesson, and supporting students. The importance of information technologies in the learning process is emphasized in [5]. The need for new technologies in the learning process grows stronger and faster. The information age becomes an era of knowledge providing sound and unmatched feasibility for discovery, exchange of information, communication, and exploration to strengthen the teaching learning process. Integrating technology in subject content brings greater proficiency [6]. People today use tablets, phones, and computers rather than traditional communication methods [12]. Technological changes the way that people interact and spend their free time together. An impact on this has information, communications, and multimedia technologies [13]. In education, technology is a tool that helps teachers to embody information to create enriched and collaborative learning environments, to meet the needs of different learning styles, to support learning transfer, and to enable equal opportunities in education [14]-[15]. Increasing the quality of education, as the most important for the development of an entire society, has been researched and before [1]-[4]. The content of many books aims to encourage teachers to be imaginative in preparing material for the subject they teach [7]. In each chapter of that book the author includes different aspects of multimedia. Also, many papers aim to

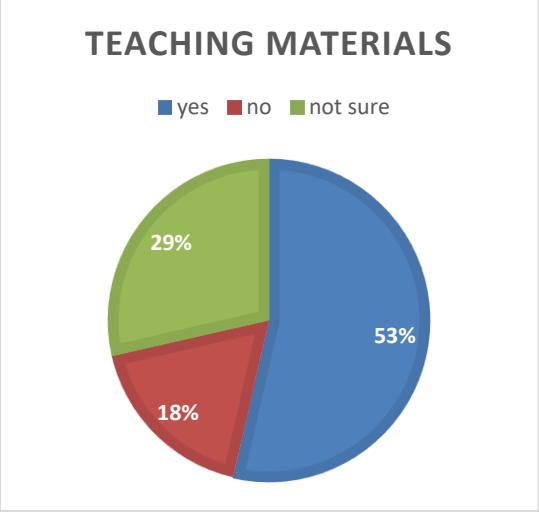
review mobile-based teaching and learning in higher education [8]. Development of information and communication technology affects all areas especially in education and learning environment. Everyday life we cannot imagine without the use of mobile phones. Mobile teaching is planning and executing learning through mobile. So, when we create learning materials it is good to take that into account, so that the materials have more applications, more views, and more users. Some authors in their research emphasized the importance of visualization [9]. The authors of that paper say that mathematical books with higher level contents which contain problems without their visual representation are hard acceptable by new generations of students. This and many other similar papers are confirmation that when creating new learning materials, one should also consider the visual representation of the problems.
Many scientific papers content exercises, proofs, practical examples, and examples solved with software which can help students to master the new teaching topics. Audio visual presentations are also very important for the material to remain in permanent memory. Teaching material in English language is also important for our students. The purpose of [10] is to develop teaching materials in English for students of informatics at the Department of Electrical Engineering Manado State Polytechnic.

2 Research Methods

The purpose of the study is to see students' opinions to create better teaching materials. For that reason, we had some discussions with the students and came to some conclusions. Discussion was made in the classroom with 56 students that listened to the subject Fundamentals of Electrical Engineering. The discussion consisted of four questions. The question was aimed for learning materials, exercise materials, do they use additional material and how often they used Moodle and e-library for studying. The study considered all aspects of trustworthiness in qualitative research.

3 Findings and Results

We had some discussions with the first-year students for the subject Fundamentals of Electrical Engineering. We prepared some question lists to see students meaning in process of creating teaching materials. There were four questions and each student spent less than 5 minutes reading and thinking about the question list. From the students' answers we can define what more to add in the learning and teaching process.
The first question that we considered was "Are the teaching materials sufficient to master the learning material?". Most of the students said that the material is sufficient for the subject i.e., 53% or more than half of the students.



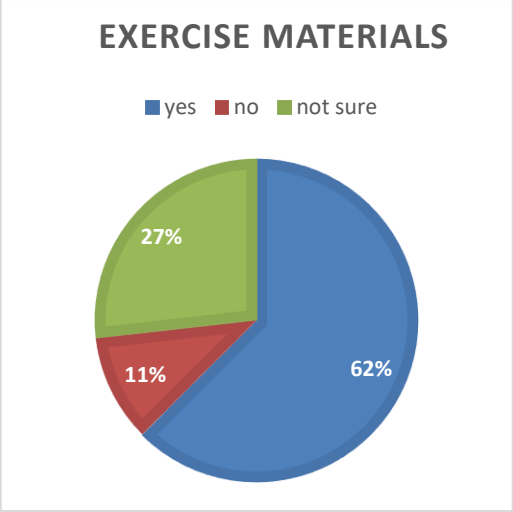


Figure 1 The first question from the discussion **Figure 2 The second question from the discussion**

29% are not sure about that idea, and only 18% said that they need more materials to better master the subject (Figure 1). For teaching materials, we have prepared script, presentations, some videos, and simulation about teaching lectures. All the teaching materials are posted on Moodle platform and on e-library system.
The second question for discussion was "Are the exercise materials sufficient to master the learning material?". The answers are given in Figure 2. From Figure 2 we can see that 62% said that exercise materials are enough for mastering the subject. Only 6 students said that the material is not enough. The rest 15 students or 27% of the students were not sure about the question.
At each class, after each lesson, we solve 10 or more different tasks. We solve the tasks together with the students. In this way, we keep their attention, and they more easily master the assigned tasks. We also assign 5 to 6 tasks as homework.

Those tasks are solved by the students at home as independent work, so at the beginning of the next class we also solve those tasks that are not clear to the students on the board.
Next, the third question was about how often students use Moodle and e-library in the learning process. As we can see from Table 1 and Figure 3, 75% of the students are using Moodle every day or once a week. The rest 25% use the platform 2-3 times a week or once a month. Unlike Moodle, the e-library is much less used i.e., 35.7% are using e-library every day or once a week and more than half or 64.3% use the platform 2-3 times a week or once a month. From this we conclude that Moodle is a platform that is more accepted and used by students, in contrast to it, the e-library is used much less often because you just download a book, a script, a practicum or a collection from it just once.

Table 5 How often do you use Moodle and e-library?

	Every day	Once a week	2-3 times a week	Once a month
Moodle	26	16	14	0
e-library	5	15	26	10

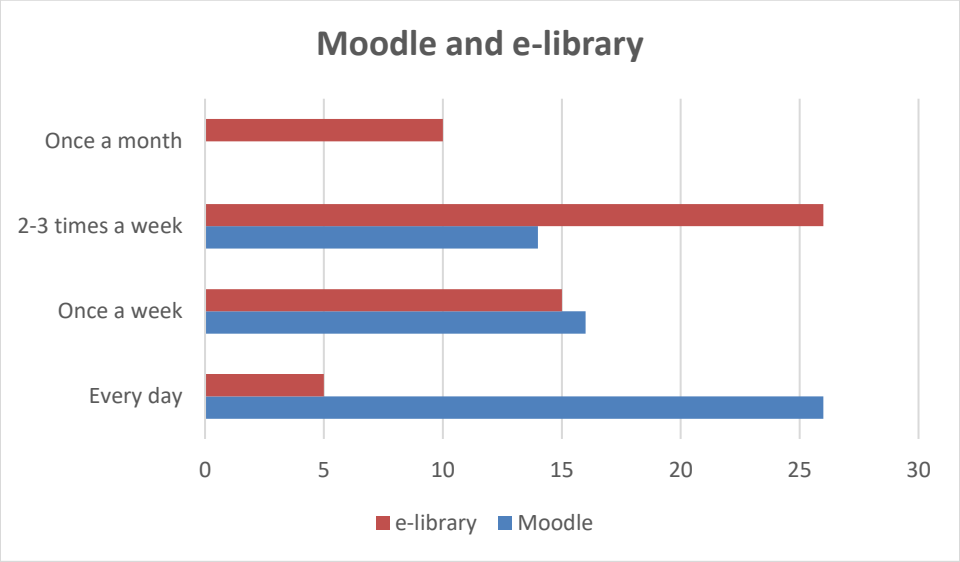


Figure 3 The third question from the discussion
The fourth and the last question was "What additional materials do you use and how much?". Most of the students i.e., 71.43% used YouTube videos, every day or once a week, but the biggest percentage 85.71% listened to free courses every day or once a week. Free courses contain video and written lessons, tasks, homework, and projects from everyday real life. Students prefer this kind of learning because can learn each time they want to do that, at every place in the world (at school, at home, at bus station, train station...).

Table 6 What additional materials do you use and how much?

	Everyday	Once a week	Overall percent for the first tw	2-3 times a we	Once a month	Overall percent for the least tw

			o col u m ns	e k		o col u m ns
Image s	1 0	5	26 .7 9	1 1	3 0	73 .2 1
YouT ube videos	3 0	1 0	71 .4 3	1 0	6	28 .5 7
E- materi als in Mace donia n	2 0	1 3	58 .9 3	2 3	0	41 .0 7
E- materi als in Englis h	2 3	1 0	58 .9 3	1 6	7	41 .0 7
Simul ation	1 0	1 8	50 .0 0	2 0	8	50 .0 0
Presen tations	1 5	1 2	48 .2 1	1 4	1 5	51 .7 9
Scient ific papers	5	3	14 .2 9	2 3	2 5	85 .7 1
Free course s	2 9	1 9	85 .7 1	6	2	14 .2 9

E-materials in Macedonian and e-materials in English were used by more than half of students every day or once a week. Simulation and presentation were used with almost the same frequency (often and rarely). This kind of additional material is not so attractive for all the students. They have divided opinions.

The least used additional materials for learning were images with 73.21% and scientific papers with 85.71%. The students used these materials 2-3 times a week or once a month. Images are not acceptable for all students for understanding, not all want to learn by visualization. Also, scientific papers are not familiar for students, and they are written at a higher level, so they are not comprehensible to students (Table 2 and Figure 4).

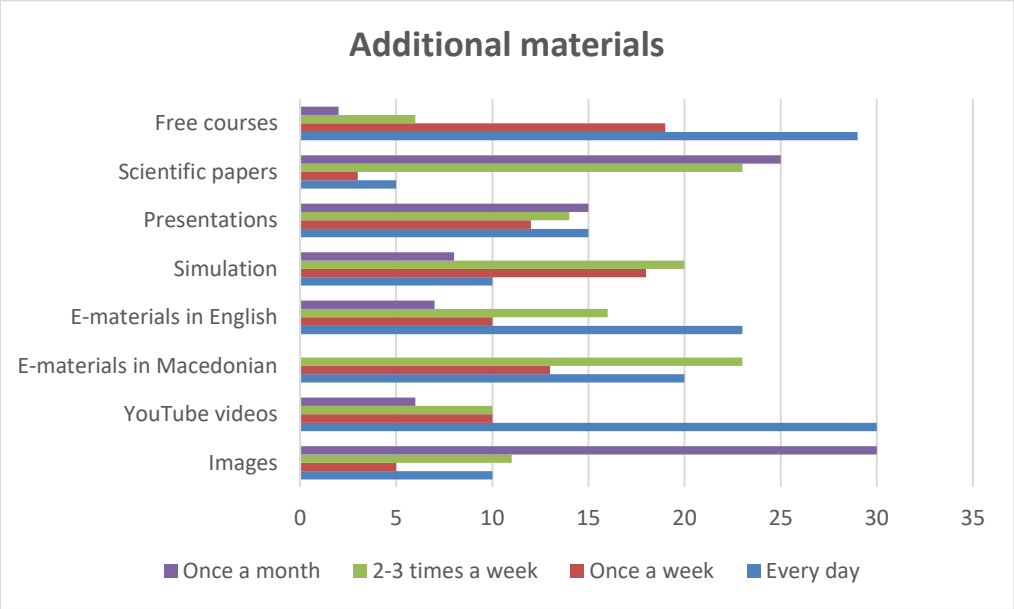


Figure 4 The fourth question from the discussion

4 Conclusions and Recommendations

All the students said that they used YouTube videos for the subject and some free courses on the internet in everyday learning. So, in the next subject preparation we are going to add more videos and links to some free courses. We will do everything to make our students more satisfied and to gain more knowledge.
We work with our motto: better teachers, better schools. So, we think that in addition to the students' opinion the most important thing in the creation of learning materials is the experience of the professors and considering their opinion.

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