# E-tutor: tailor-made multiply intelligent study tool for management students

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Abstract. In this paper, we present the pilot study of three different implementations of E-tutor for online studying of management. We aim to emphasize the importance of enabling business students with the access to top tier journals and related management study materials, such as exercises, videos, e-lectures and e-books. We explain the motivation for introducing this type of online learning methodology, which was stimulated due to closed libraries during coronavirus pandemics; we describe the characteristics of e-tutor, and discuss the implementation process and lessons learned. We also provide recommendation for strong collaboration between librarians, IT experts and professors in setting and managing e-tutor as a study platform at any higher education course.

#### 1 Introduction

With the aim of modernizing study program of management education [1] and courses Foundations of management; Management (English international and domestic students course carried out in English language); and Foundations of management and organization we provided students with contemporary online materials about management. The topics were selected by the professors and organized in the form of e-tutor by librarian Mr Urban Golob in a logical structure so that the students could access from home the textbook, exercises book, e-books, e-journals, video lectures from partnering schools, and podcasts with interviews with current managers from the platform Beyond leadership. We also took care to include recreational videos in order for the students to take active breaks between study units.

E-tutor is a new teaching and training model where the professors act as facilitators of the study process by selecting the study materials that are of high quality in the studied domain. The student also is free to read or watch vast sources within the field, which gives students wider horizons and gives them a chance to study according to their multiple intelligences profile [2] [3] [4] [5] [6] [7] [8].

One goal of the implementation was a better connection between different management areas online and also their easier presentation to students, as well as quick access to study materials for students at the courses. We introduced forms of active learning as early as possible into the curriculum of the study program, already in the first year of undergraduate studies at

School of Economics and Business University of Ljubljana (SEB UL) [9]. The paper is organized as follows. After the introductory part section 2 describes the form, structure and elements of e-tutor. Section 3 contains details of the e-tutor content, in terms of which e-books, e-journals and podcasts were selected. Section 4 concludes the paper.

## 2 E-tutor implementation

Distance learning and e-learning are similar in certain aspects, however they are not the same [10]. E-learning is any kind of learning which includes technology [11] as study aid [10]. E-learning can be carried out in class or as well when the professor and the student are physically apart, which does not hold for distance learning [10]. E-learning has several different names, relating to technology used, such as virtual, network, distributed, WEB learning, however nowadays the most spread term for e-learning is online learning [10]. Despite the initial success of e-learning method it turned out later on that structured learning environment and goal-oriented [12] e-materials do not motivate students enough for them to successfully finish all the course's obligations, that is why blended learning implemented as the advancement of e-learning [10].

During pandemics the study process needed to be transformed in order to meet student needs [10]. Paper discusses distance learning model that took place during lockdown in 2020/21 study year at the management courses in the first year of the undergraduate studies at SEB UL. Processed files from professors were incorporated in PowerPoint documents and used as animation/video. The prepared learning material was also often published on YouTube. Most materials are freely available only for SEB UL students. Students' knowledge and participation assessment was most often obtained by using Mentimeter, Kahoot, 1ka or Google forms. Lectures were carried out in Zoom conference room. Modules of the course were given to students in Canvas online study room. In the first part of the semester a hybrid model was used for international students which meant that part of the students was in the classroom with the professor and other half of students was online on Zoom.

## 3 E-tutor content and lessons learned

The paper describes a digital system teaching method, based on online software tools, which enable effective remote learning in a course with limited period [13]. A teaching and student experiences with the proposed methodology, implemented in an introductory management courses are presented. At the end of the courses, we carried out a survey among students regarding their satisfaction with e-tutor, its usefulness for their management studies and how they used it. Statistics of visits to e-tutors between the start of the course and the final exam, that is during 1. 10. 2020 -10. 2. 2021 (Figure 1-3). In the period of October 1st 2020 till February 10<sup>th</sup> 2021 students at the course Temelji managementa were active as follows: 7267 views were made, 2564 viewed the page About the course, 1050 views were made to Books and articles page and 934 to Other study materials.

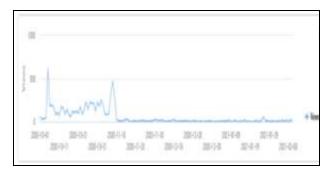


Figure 1. Statistics of students' visits of e-tutor Temelji managementa (source Urban Golob).

In the period of October 1<sup>st</sup> 2020 till February 10<sup>th</sup> 2021 students at the course Temelji managementa in organizacije were active as follows: 3209 views were made, 1158 views to page About the course, 561 views to page Study materials and 423 views to page Books and articles.

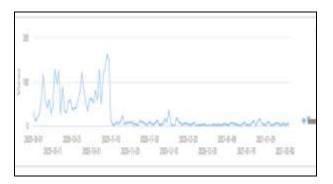


Figure 2. Statistics of sudents' visits of e-tutor Temelji managementa in organizacije (source Urban Golob).

In the period of October 1<sup>st</sup> 2020 till February 10<sup>th</sup> 2021 students at the course Management were active as follows: 2611 views were made, 826 to the page About the course, 485 to page Books and articles and 280 views to page Study materials.

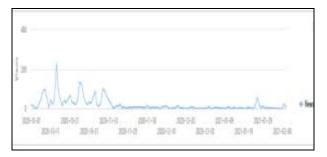


Figure 3. Statistics of students' visits of e-tutor Management (source Urban Golob).

The composition of e-tutor is the following: First all the professors at the courses are presented. Then, also all the colleagues from the teaching assistant staff and library are presented with contacts for assistance to students.

Study materials are provided with access to textbooks in Slovene and English language. Available books in the faculty's library are classified according to key concepts discussed at the courses. E-sources on management [12], environmental management [1], sustainable management [14], sustainable leadership [8], social innovation [11], were selected, as well as e-books, e-journals and e-magazines and databases.

Among other, students can access the following management journals: Academy of Management Annals; Journal of Management; Academy of Management Review; Administrative Science of Management Quarterly; Academy Journal; Leadership Quarterly; International Journal of Project Management; Strategic Entrepreneurship Journal; Journal of Innovation & Knowledge; Harvard Business Review; Business Strategy and the Environment; Strategic Management Journal; MIS Quarterly; Journal of Strategic Information Systems; Information & Management; of Journal Product Innovation Management; Human Resource Management Review; Journal of Management Studies; Journal of Knowledge Management; Journal of Operations Management.

Students can also access magazines such as Economist, Financial Times, The Wall Street Journal and Der Spiegel. In the databases section students can access Taylor & Francis Online, Business Source Complete, Business Source Premier, ProQuest Ebook Central, Springer Link and Bisnode Gvin.com. In the video section of e-tutor students have video instructions for how to find e-sources, how to prepare their seminar papers according to APA citation standard, exercises for active breaks and lectures from partner universities. Students can also watch video theoretical abstracts or podcasts Beyond leadership where mostly Slovenian managers are interviewed.

Key feedback points from the sample of 81 students show that: (1) students intend to use the E-tutor also in the future at other courses and study years (79,9% of respondents); (2) 45,7% of respondents used e-tutor once a month, while 27,2% of respondents used it once

a week; (3) 51,9% of respondents read 2-4 e-papers during the winter semester, while 22,2% of respondents read no e-paper and 21% of students read 5-7 e-papers; (4) students appreciated the most the online study materials, which were available together with the textbook through the library's webpage.

According to the digital content manager Urban Golob from the library of the SEB UL [15] e-tutors are available worldwide and also locally in Slovenia, however in 2020 from all the university libraries the library of SEB UL was most visited with over 40 000 visits to library online sources.

45,7% of students used e-tutor once a month, 27,2% used e-tutor once a week (Figure 4). 51,9% of students read 2-4 articles on e-tutor, 22,2% of respondents read none, and 21% of respondents read 5-7 articles (Figure 5). Regarding the e-tutor design the majority of the students found e-tutor easy to navigate, useful in shortening their search time for study materials and also found it visually appealing (Figure 6).

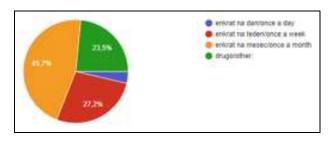


Figure 4: Students' usage of e -tutor

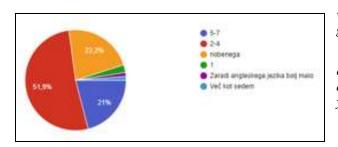


Figure 5: Students' reading of e-papers

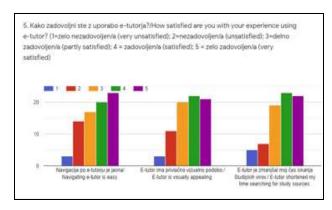


Figure 6. Design of e-tutor viewed by students.

Students are first time faced with fully online studies therefore they worry:

"the amount of study required to pass the courses in first year is big"

"that I haven't dedicated enough time for studying"

"I am not sure I will get a good grade"

"I lack the will and motivation for studying during the pandemics"

"Passing the final exams. Even though professors are understanding, studying effectively in these times is very overwhelming".

"I am afraid that I don't have enough knowledge to pass the exams"

"That I forgot to do anything important"

"full study plan"

"Passing the exam. It's gonna a lot of "learn-by-heart"-theory which I am not very good at"

Students shared with co-students the following tips for managing stress during online studying:

"Take a walk! Yoga! Music!"

"Physical exercise"

"Start preparing for the final exam sooner so you don't run out of time. Make a schedule, so you know exactly when you have time for study and free time."

"walks every day and exercises indoor, study every day, walks in the nature, talking with family and friends, good sleep"

"Dropping things that you can't currently do. Focusing on the most important part (studying) that you have to do. Fill the rest of the time with light hearted things that you enjoy."

"Have enough sleep. It is essential for your health."

"At least one hour per day don't work on computer, listen to your body."

"Read a good book"

"Take your time - for studying and relaxation!"

"always focus on what yoy are doing and take a deep breathes"

"you should get enough sleep every single night"

"reading non-school related books"

"Don't feel guilty for laying down and watching an episode of your favourite series."

"Create a work schedule. That will help you to focus on what you need to spent your time on. Putting in "leisure" might seem strange, but then you know that you are "allowed" to relax." "Find a thing that relaxes you, that brings you joy, in that way you will be able to do all that you wish. All is possible with a lot of effort and work!"

Based on the analysis implications for future work are in the form of making a timeline for the students when and how we recommend to them that they use e-tutor. Students expressed in their reflections the need to balance their studies with sports, relaxation and free time activities, as well as good study management skills, therefore we recommend to professors to advice their students on how to make the best out of their study time, where to find resources and how to use them. It would be interesting to compare how students performed at the final exam in terms of study time invested in studying the different e-sources on e-tutor.

#### 4 Conclusion

The e-tutor implementation has many benefits as well as certain challenges that we noticed during the pilot implementation and need to be considered: (1) the need for excellent collaboration and mutual understanding between librarians and professors; (2) the subscription to top tier journals and databases that are costly that is why support from the university is needed; (3) large time investment for selecting appropriate materials for the course, adjusting them, adapting them, advancing them, adding new ones and maintaining e-tutor; (4) some students lack online study skills and need additional assistance in order to make use of e-tutor resources; (5) increased need for consultation hours encourages permanent assistance; (6) introductory workshop of e-tutor at the beginning of the course is essential in order to guide students step-by-step through the functionalities of the e-tutor and demonstrate to students on a practical example how e-tutor is intended to help them (eg. finding theoretical sources for the seminar paper; finding datasets regarding analysed company; clarifying concepts discussed at the lectures, etc.). Students' motivation is an important factor for achieving as many benefits of this study approach as possible.

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