



Development and innovative
implementation of MOOCs
in higher education



STUDY ON THE ONLINE TRAINING NEEDS OF THE TEACHERS FROM UNIVERSITIES

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Study On The Online Training Needs Of The Teachers From Universities

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OBJECTIVES

Identifying teachers' attitudes towards online learning (as an alternative to face-to-face learning) and integrating this into traditional learning.

Evaluating the use of certain types of platforms / online applications in professional activity.

Identifying how online applications are integrated into current teaching and research activities.

Identifying the training needs of teachers regarding the use of applications, online platforms, and training needs related to professional activity in general.

Identifying the attitude towards the MOOC courses and evaluating the advantages they have over the traditional training methods.

Identifying arguments for which teachers would facilitate / not facilitate MOOC-type courses.

THE RESEARCH INSTRUMENT

The research tool was developed by the project team based on the review of the literature and on previous experience regarding the study of the online environment as a space for learning-teaching and research.

The questionnaire was built on three dimensions that meet the objectives:

1. previous experience of using the online environment as a learning environment
2. teacher training needs on certain applications as well as training needs in general
3. the attitude of the teachers towards the MOOC type courses and the arguments for facilitating / not facilitating this type of course

DATA COLLECTION

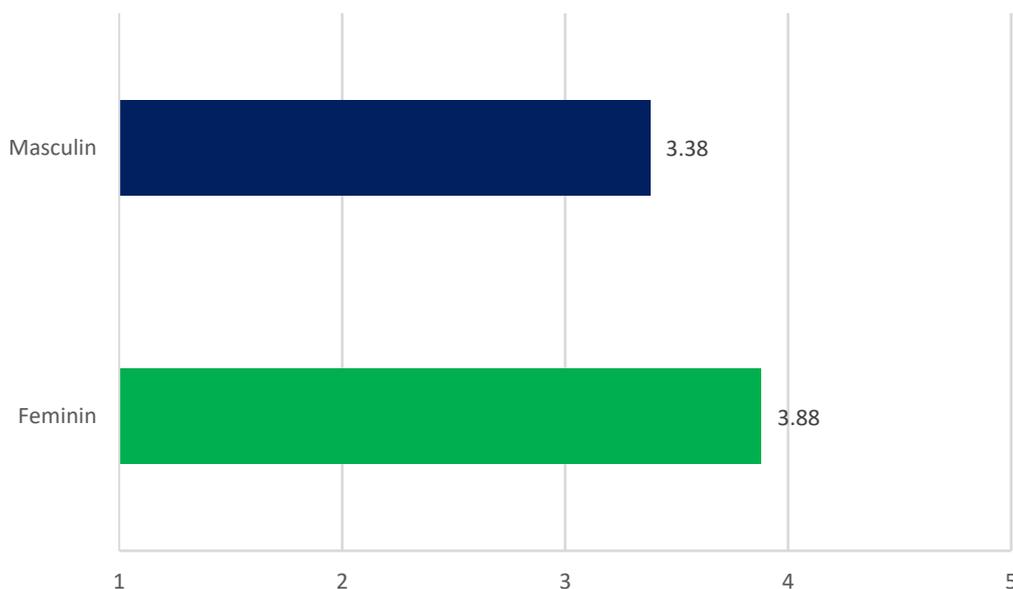
In order to get as many answers as possible from teachers, we chose to collect data using an online model (available at: <https://goo.gl/3pUXXq>).

In the first phase, e-mail addresses of teachers from educational institutions in Romania were collected and in the second phase, invitations were sent to participate in the study. The study population is hardly accessible and another data collection strategy would involve a lot more time and costs. That's why the volume of data is not very high. Being done under the described conditions, the sample of 151 teachers is a convenience sample.

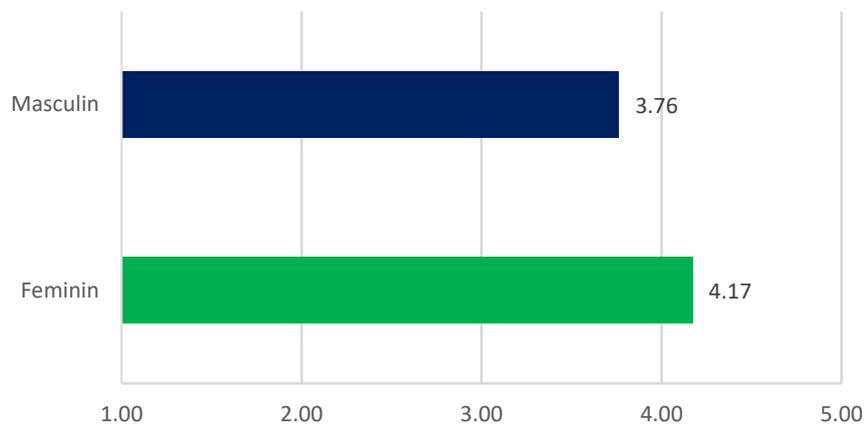
RESULTS

To what extent do you consider online learning as an alternative to traditional learning?

On a scale of 1 to 5 (where 1 = to a very small extent and 5 = to a very large extent) the average of responses was 3.64. If we look at this question from the perspective of gender differences, we see greater openness to online learning as an alternative to women. The average obtained by them is 3.88 and the average of the males is 3.38. The obtained difference is significant $t(137) = 2.73$ $p < 0.05$

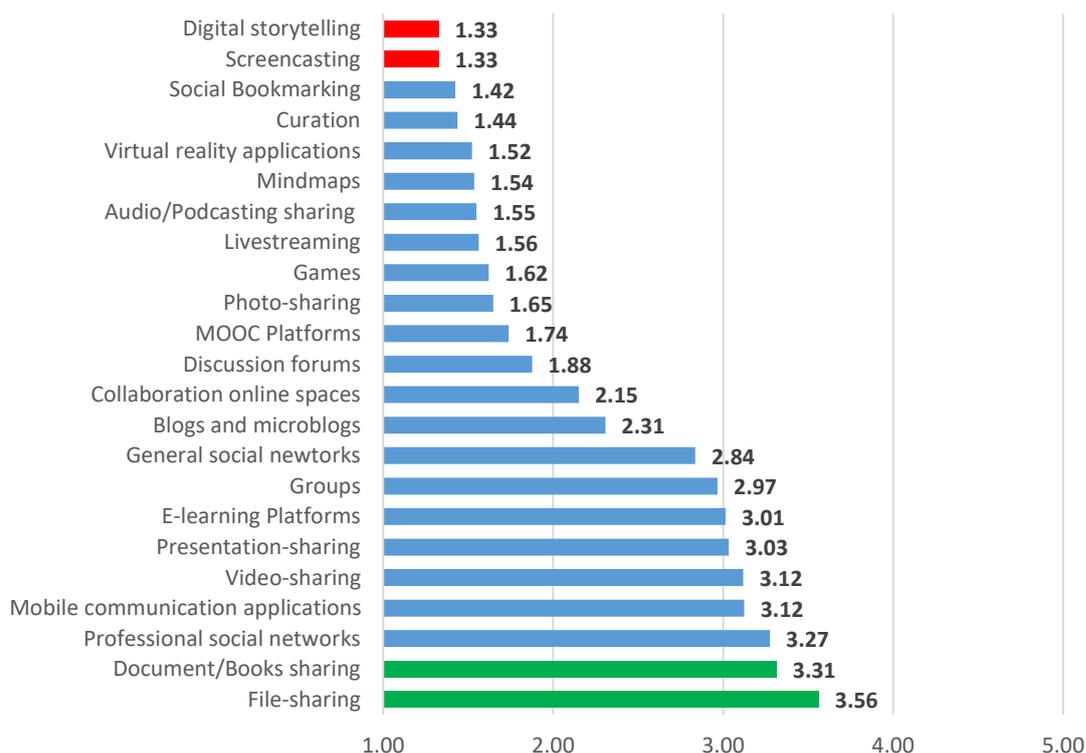


Do you consider necessary (useful) the integration of online learning into traditional learning?



From the above graph it can be seen that women respondents are more in agreement with the integration of online learning into traditional learning. Women teachers has got an average of 4.17 (SD = 0.91) and male teachers has got an average of 3.76 (SD = 1.08). The difference between the two groups is significant, $t(151) = 2.52$, $p < 0.05$. It can be said that women are more open for using online education methods and integrating them with traditional methods.

To what extent do you use the following types of platforms / online applications in your professional activity?



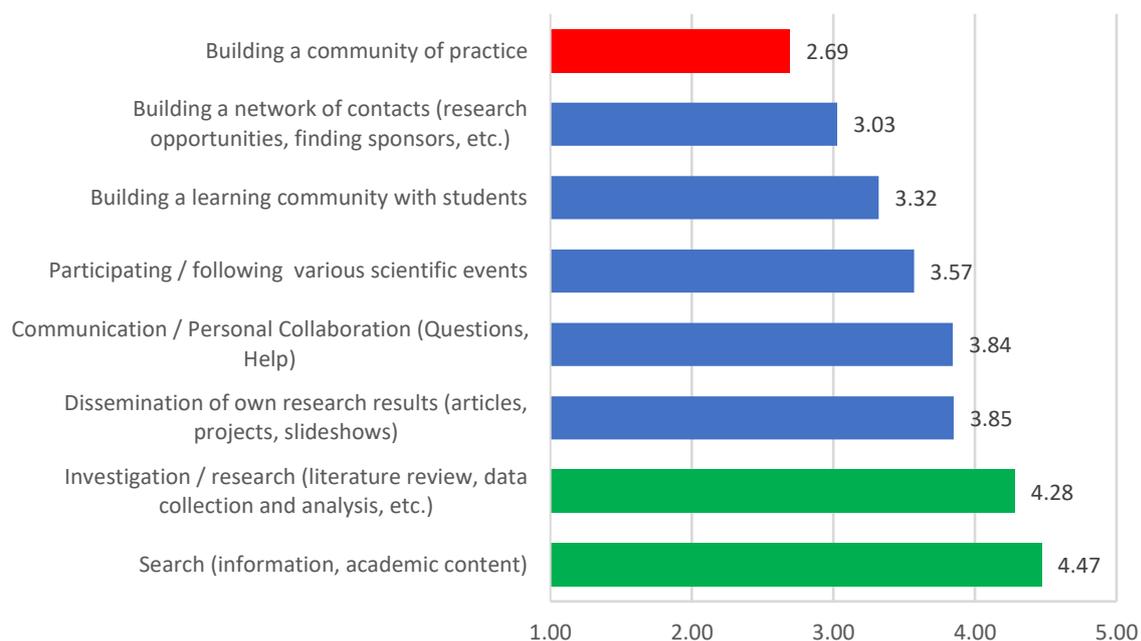
A list of platforms and online applications was presented to respondents asking for the evaluation of their use in current teaching or research work. It can be noticed that the most used types of applications are document/books sharing (M = 3.31) and file sharing (M = 3.65). The least used applications are Digital storytelling (M = 1.33) and screen casting applications (M = 1.33).

We wanted to find out if there are differences between male and women teachers for top applications. In the case of the first application, File-Sharing, women teachers obtained an average of M = 3.78 SD = 1.31 and the male teachers obtained M = 3.32, SD = 1.29. The comparison of the obtained means reveals that the file sharing applications are better integrated into the professional activity for women, $t(151) = 2.16, p < 0.05$.

For book or document sharing applications, there are no significant differences in their use in professional contexts by women or male teachers.

Also, for the use of social networks (Facebook) in work, differences were observed among teachers. Thus, the women use to a greater extent (M = 3,19, SD = 1,52) than the male (M = 2,44, SD = 1,42) social networks in the professional activity, $t(151) = 3.09, p < 0.01$.

What are the current activities for which you use online tools, applications and platforms?

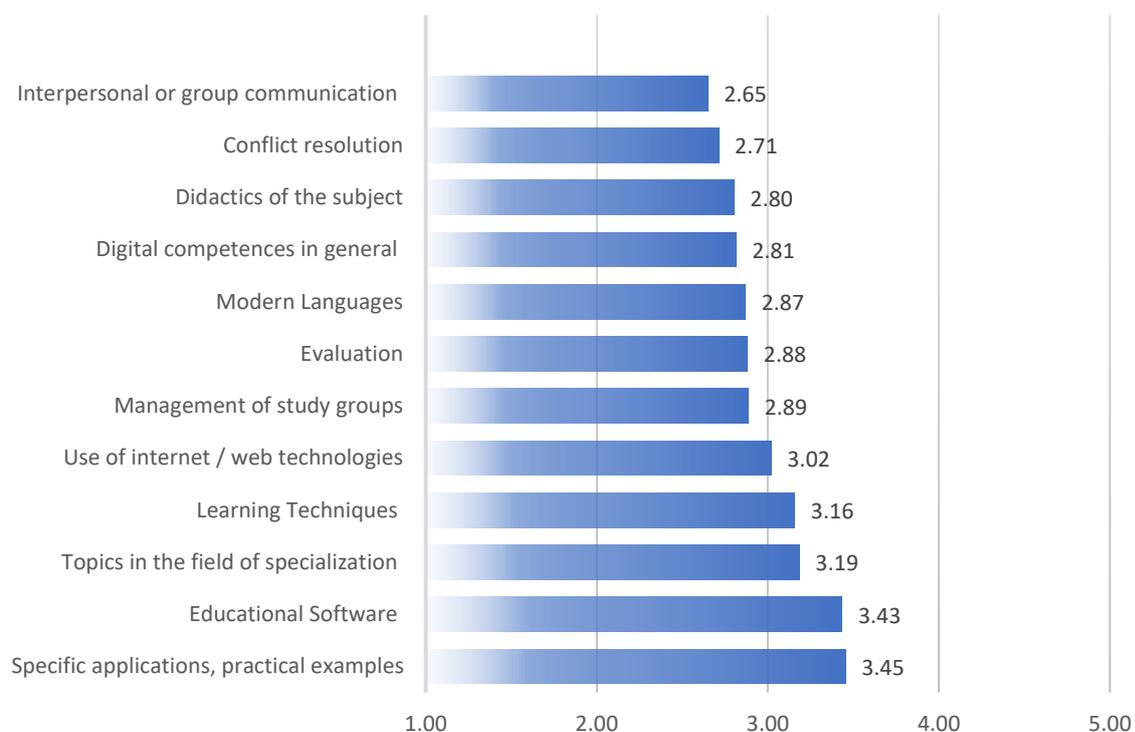


The professional activities for which online tools, applications and platforms are used are: searching for information and investigative work, documenting (searching for literature). These two activities are the ones that most respondents included in the list of current professional activities and obtained the highest average values. These two activities are similarly rated by male and female teachers. Thus, the gender does not induce changes in the frequency of academics search and documenting (academic literature search and review).

The least used activity is to build a community of practice, the use of the online environment to develop and support communities in which people share experiences and work together.

To what extent do you think you need training for the following?

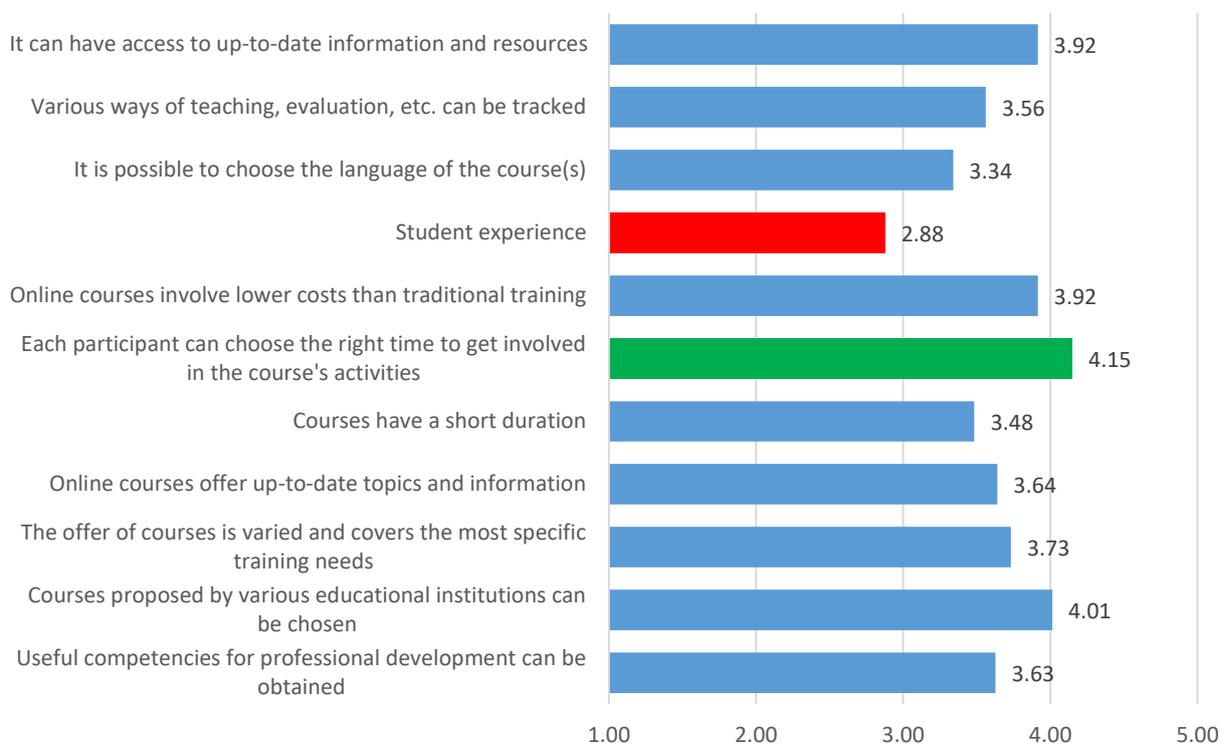
Teachers appreciate that they need training in specific applications and practical examples. To the same extent, training needs are mentioned in the use of educational software. The area that raises the least of the teachers' problems is the communication area. Thus, interpersonal and group communication obtained the smallest average ($M = 2.65$) from the list of training subjects proposed for evaluation.



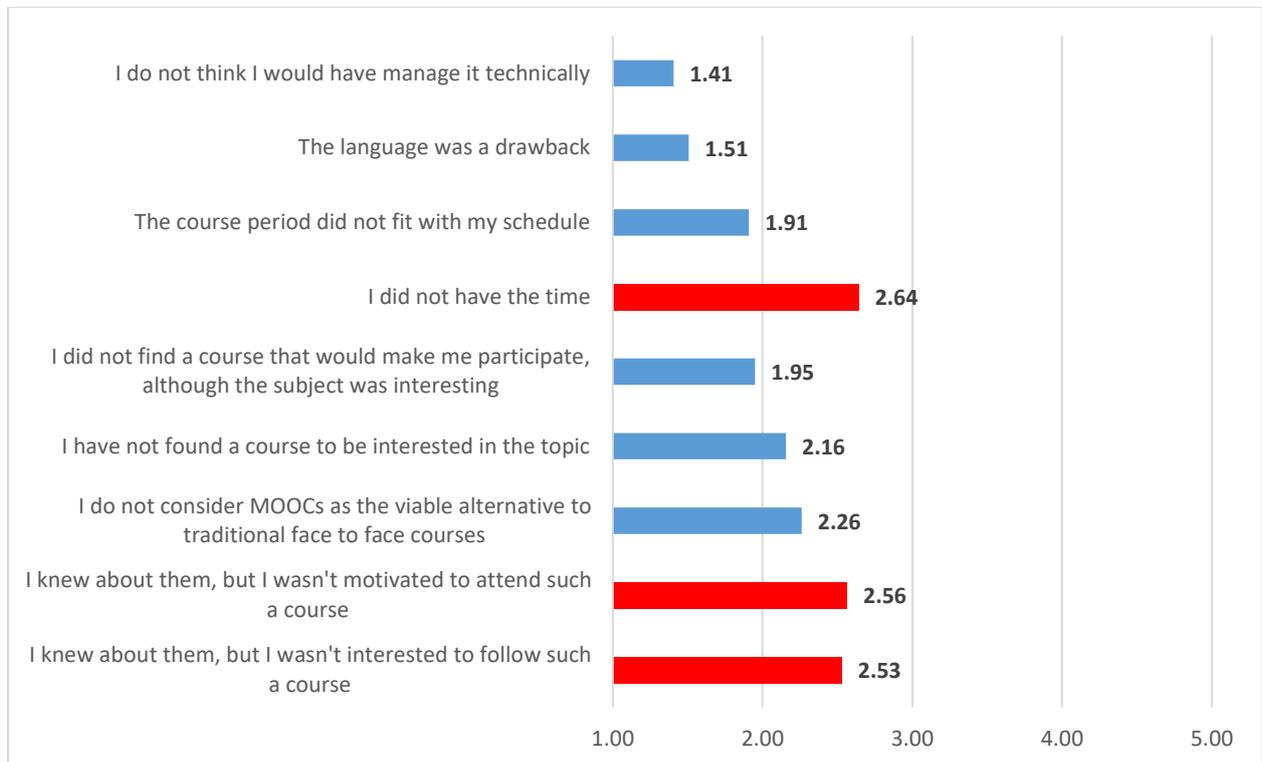
Do you think online training is a viable alternative to the professional development of educational actors in the university?

The training of teachers in the university environment through online courses is considered as a variant for those interviewed. On a scale of 1 to 5, this idea was rated 3.56. If we compare opinions based on gender, we can see that women are more confident in the alternative of online courses for the training of university teachers. Female teachers ($M = 3.81$, $SD = 1.10$) obtained a higher average than male teachers ($M = 3.29$, $SD = 1.29$). The value of the t test, $t(151) = 2.69$, $p < 0.01$, confirms that the observed difference is significant.

Please evaluate the following "benefits" of online courses



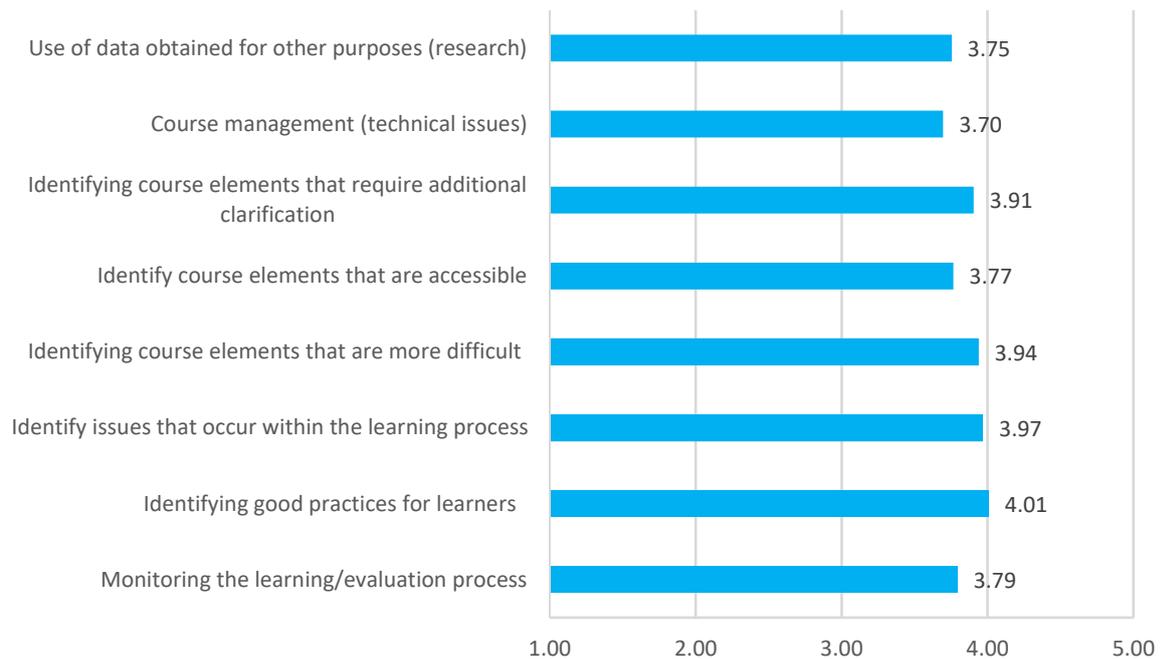
The most important advantage of online courses is that each participant can choose the time and pace of the course ($M = 4,15$). On the other hand, the experience of being a student at online courses is the "least advantage" that respondents have the least value ($M=2.88$). Less expensive courses are also seen as advantages and the fact that this way of training is accessible to up to date information.



Please appreciate to what extent the following MOOC issues are valid for you:

A list of possible reasons for "non-participation" in MOOC type courses was presented to the respondents. The interviewed teachers placed in the first position: lack of time (M = 2,64), lack of motivation to attend such a course (M = 2,56) and the fact that there was no interest, maybe a clear goal, of participation in such a course (M = 2.53). The least punctual reasons for non-participation were: lack of knowledge of computer use and knowledge of the language of the course (most of the time English).

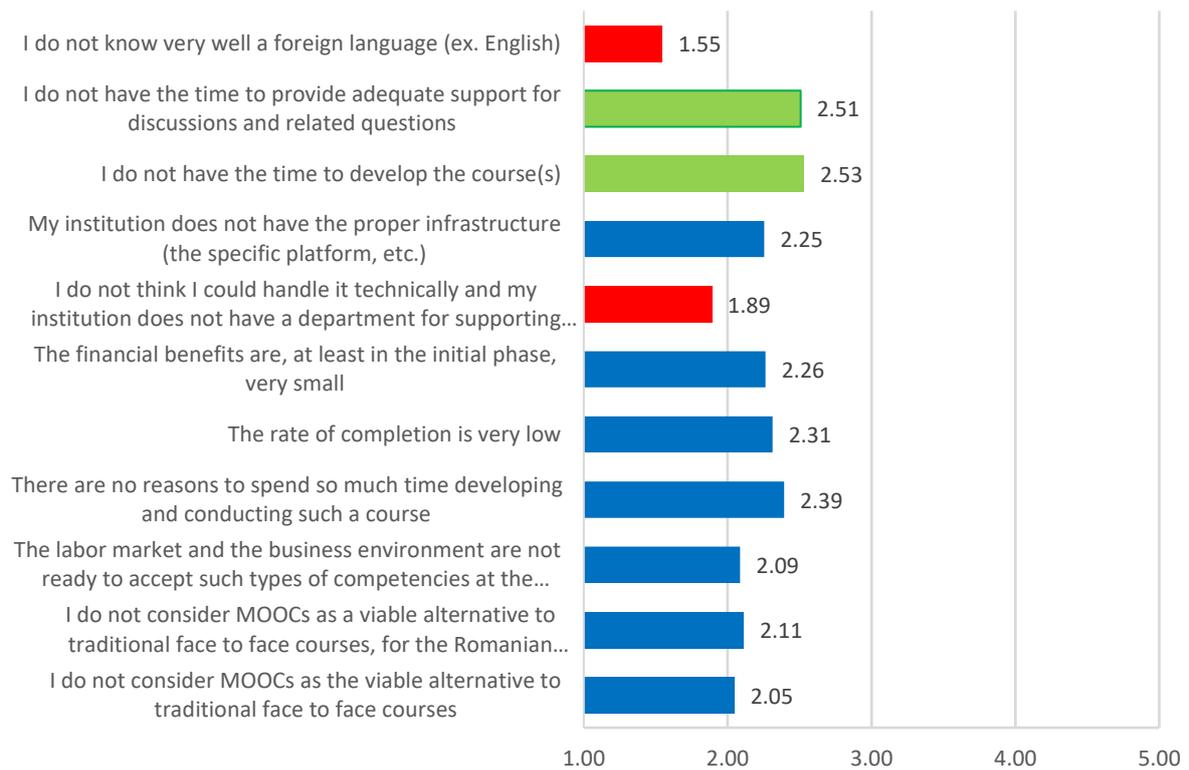
If you were a facilitator of MOOC type courses, what experiences do you think would be useful in the future for teaching and / or other educational activities?



All aspects of the evaluation were evaluated with high grades on the scale of 1 to 5. Thus, it can be considered that on all the evaluated elements, the teachers considered that they needed more experience and training to facilitate MOOC type courses in good conditions. While not much different from the rest of the evaluations, the most important aspect was the identification of examples of good practice of the students ($M = 4.01$) and, the least important, the aspect related to the technical management of the platform through which online courses will be offered ($M = 3.70$).

Please rate on a scale of 1 to 5 reasons why you would not facilitate a MOOC course

The teacher's assessment on the list of reasons for not facilitating a MOOC course reveals no technical limits ($M = 1.89$) or knowledge of a foreign language ($M = 1.55$) make teachers unable to become facilitators of Mooc, but lack of time for training ($M = 2,53$) and lack of time for managing such a course ($M = 2,51$).



CONCLUSIONS

Respondents said that online learning can be an alternative to traditional learning (face to face) and moreover, it can be integrated with traditional learning into a modern and efficient learning process.

Online tools are used by teachers in professional activity, especially those for file sharing. Also, Document sharing / books applications are well represented in teaching or research.

Searching for academic information and materials (articles, research reports) are the main types of work-related activities for which teachers use online tools.

Training needs that have reached a high score from teachers are related to examples of good practice in teaching / research and the use of educational software.

The most important advantage of online courses for the teachers who responded to our questionnaire is the one about the flexibility of online courses in terms of the time and pace at which courses can be attended.

The lack of time is invoked as a reason both for non-participation of teachers in online courses and as a reason for lack of willingness to facilitate such courses



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