

ASPECTS REGARDING THE EDUCATIONAL PROCESS IN DISTANCE LEARNING IN ROMANIAN UNIVERSITIES FROM THE PERSPECTIVE OF TEACHING STAFF

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Abstract

Education is changing and evolving, trying to adapt and respond to current needs and external events that may influence the content and context of education. The last few years, distance education has been continuously gaining more interest from students and instructors. Critical success factor in the case of distance education includes the instructors, who manage and orchestrate the distance education initiative and effort. In this context, the current paper is focusing on the role and profile of faculty, university professors who are involved in distance education programs. The research initiative collected data for the questionnaire survey participants - instructors. Male professors were the majority of the survey participants and most of them stated that they were married. The majority of the respondents are university professors or associate professors. It is very interesting to note that they are all working in a state government university. Most of the faculty members are indeed certified for distance education. It is also worth mentioning that regarding their level of computer expertise, all participants replied that they have an average to good level of computer level. Regarding the instructors' attributes it is true that they have a preferred way of doing things and carefully set priorities trying to follow them. Instructors like to be organized in their teaching style and prefer to be detail oriented. Finally, it becomes clear that instructors welcome team teaching.

Keywords: Distance Learning Education, Faculty Members, Teaching Preferences, Instructors' Attributes.

1 INTRODUCTION

Distance education is always an interesting subject because the technological advance recently offers a multitude of opportunities that can be exploited and that can offer new chances of approach and cooperation. The pandemic period posed immense challenges and made that at that time, much of the student-teacher interaction was characterized more by the solutions used predominantly by distance education, through the use of online platforms, real-time conference systems, and communication solutions with students. Thus, the idea of conducting many online courses and interacting personally with students has also radically transformed the way of supporting distance education activities in some universities in Romania.

It should be emphasized that the area under study is made up of representatives of two study programs in the field of engineering, and the challenges launched by this specific engineering framework, made the difficulties to be carried out in the online version seem even more difficult to overcome, but also, the extension the pandemic period made it necessary to look for more and more ingenious solutions that would make the applied activities carried out and understood by the students. As a result, this research captures the image of a distance education fresh out of the pandemic period and identifies some significant aspects of the opinions and approaches of the teaching staff regarding the ways of carrying out these activities.

The two programs that had personal teaching representatives in the analyzed sample are:

- The Economic Engineering in the Mechanical Field Program (IEDM-ID) that aims to train engineers / specialists for organizational strategy, marketing, personnel and administration activities for companies in the field of mechanical production and services. The Economic Engineering in the Mechanical Field study program aims to train licensed engineers with economic and technical training, in the mechanical field, with the acquisition of a level 6 qualification according to the national and European qualifications framework, for the following potential occupations: economic engineer; mechanical engineer; logistics specialist; process

responsible; product manager; supply manager; supplier relations manager; chief engineer of business firms and other commercial services.

- The Transportation, Storage and Distribution of Hydrocarbons reduced frequency program (TDDH) aims to train production, research and design engineers, managers of activities specific to the oil and gas industry, specialists in assisted design and in ensuring the quality of life and the environment, in line with global developments of research and design of installations, equipment and processes in the hydrocarbon industry. Targeted jobs: research engineer in installations and machinery for the transportation and storage of hydrocarbons; oil and natural gas research engineer (extraction-prospection); specialist engineer in the design of installations and machinery for the extraction, transport, storage and exploitation of hydrocarbons.

It must be stated that before the onset of the pandemic and the transition to a completely online teaching concept, all activities, both course and application, were carried out face-to-face all the time. So the paradigm shift, both at the level of the teaching staff and at the level of the students, was a brutal and significant one, therefore the adaptation and settling in this new direction had to be fast and without having a comfortable period of transition from a system to another. Many of the characteristics of the teaching staff determined that this rapid change was perceived quite differently: the age of those in the teaching area, the level of training and competences in the area of information technology, the abilities to adapt to change, created a quite interesting complex of factors, which at one point even led to a kind of “natural” selection among these professionals.

The return to the initial options, with the passing of the pandemic, was no longer total, many of the solutions used during the pandemic period, being still used because they offered more flexibility and ensured the participation in the didactic act of people geographically located extremely far away, but who, using distance education platforms, can access study programs to which they would not otherwise have had access.

2 METHODOLOGY

This paper represents an extract from a much wider research that was carried out within a project and which, based on bibliographic analyses of the specificity of distance teaching in several countries (Greece, Italy, Serbia, Romania). Based on this research it was proposed a questionnaire that was administered at the level of six universities in this geographical area, in order to identify various aspects related to this type of education and the profile of the teaching staff, specific to each region, as well as the common elements.

The questionnaire was designed together by the participants in this project, most of the work meetings were done online, and most of the communication was done by sharing the information in the cloud, so that it was visible and accessible to the whole team. After establishing the questionnaire, it was used in the English version or was translated into different languages to be easier to understand and interpret. The final versions were built in Google Forms and the links were sent and posted on the teaching platforms used by each entity, and then the answers received were analyzed and managed using the SPSS program.

For the most part, the responses to the questionnaires were received between May and July 2023 and then, to increase the number of responses, an investigation session was carried out between October and December 2023.

In a first phase, we took over the specific data received from the teaching staff from the two study programs in Romania, caught in the sample, the main frequencies of the recorded answers being analyzed, and more complex analyses of the answers received will follow.

3 RESULTS

3.1 Efficiency of distance education

Only a very small percent (4%) believed that distance education is inefficient as a method of education (see fig. 1).

How efficient do you consider distance learning as a method of education 1 inefficient, 5 most efficient

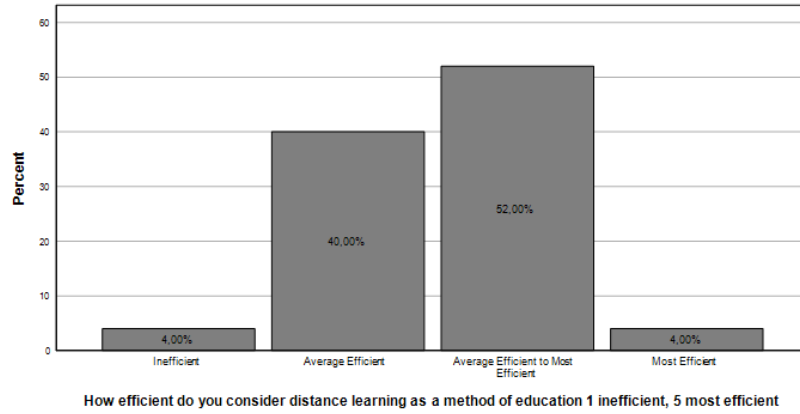


Fig. 1

3.2 Face-to-face (in-person) or distance methods in distance education

Almost 3 times more were those (72%) who declared that they prefer face-to-face (in-person) methods instead of distance ones (see fig. 2).

Do you prefer face to face educational methods or distance education

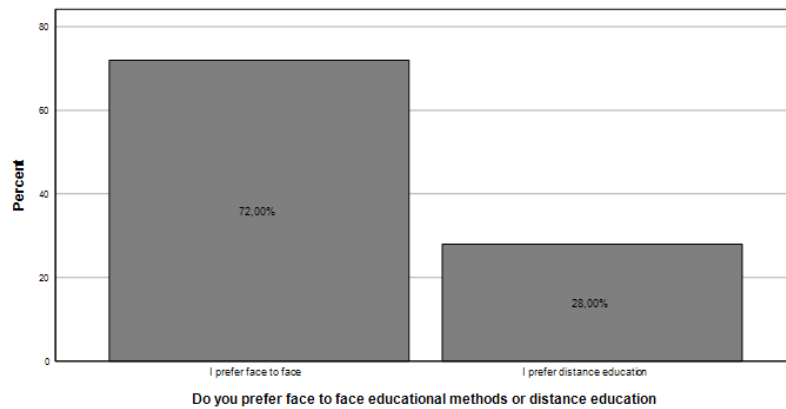


Fig. 2

3.3 Student group size preferences

More than 3 times more were those (76%) who prefer smaller (30 students) over larger number of student groups in distance education and online courses (see fig. 3).

In distance education and online courses do you prefer larger (>30 students) over smaller number of student groups?

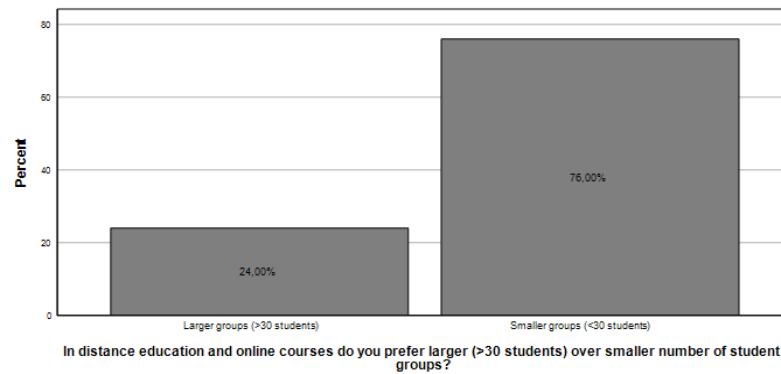


Fig. 3

3.4 Experience with foreign students

Only 44% of respondents taught foreign students (see fig. 4).

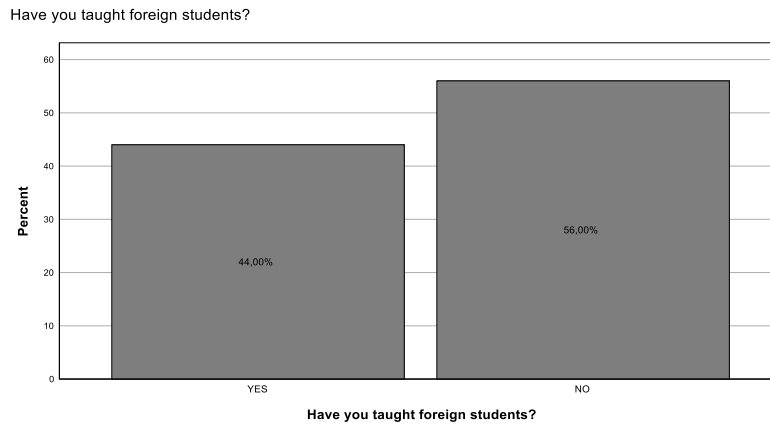


Fig. 4

3.5 Aspects in instructors' self-description

Just over half of respondents (52%) said they prefer a certain way of doing things, rather than doing them another way (see fig. 5).

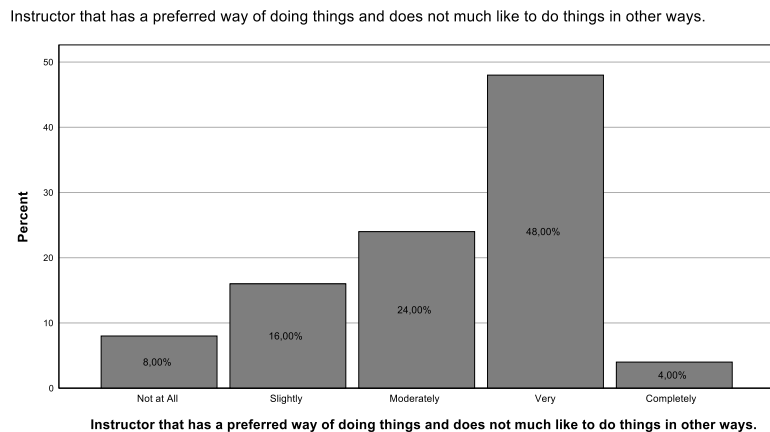


Fig. 5

Except for only 8% of the total, the instructors said they carefully set priorities and then stick to them (see fig. 6).

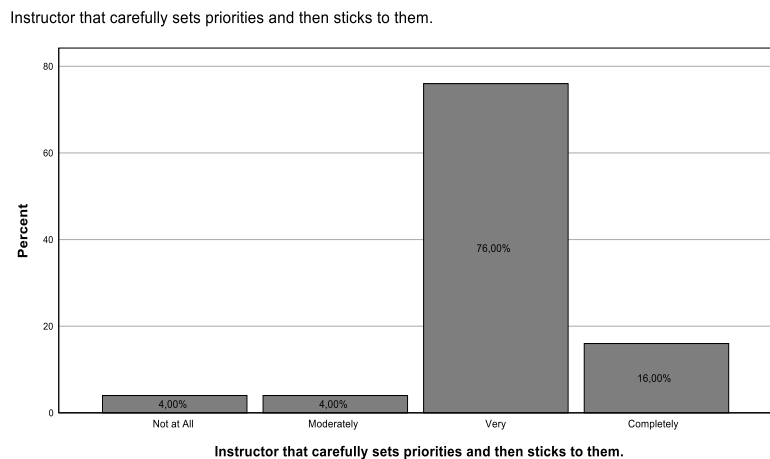


Fig. 6

36% of instructors typically have difficulty in managing the classroom time so that the most important things get the most coverage. Another 40% of the total could experience such problems in half of the cases. (See fig. 7).

Instructor that does not easily allocate class time so that the most important things receive the most coverage.

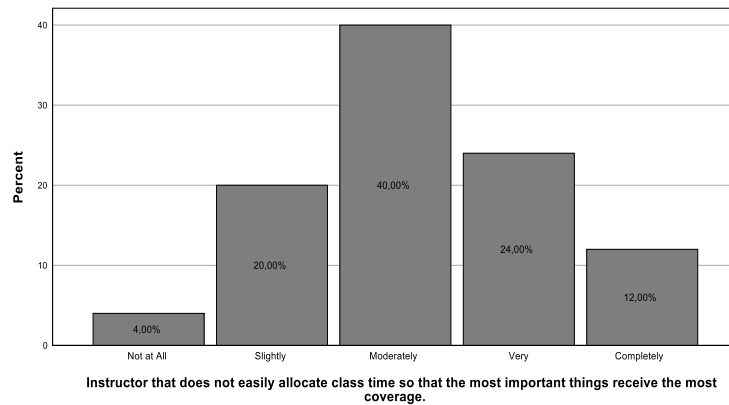


Fig. 7

Only just over a quarter of respondents (28%) consider themselves to be very or completely creative in their teaching style, thus succeeding in inspiring creative ideas in their students. An additional 24% believe that they only possess an average amount of creativity during teaching time. (See fig. 8)

Instructor that is not so organized in the teaching style, but is very creative, and sparks creative ideas in his / her students.

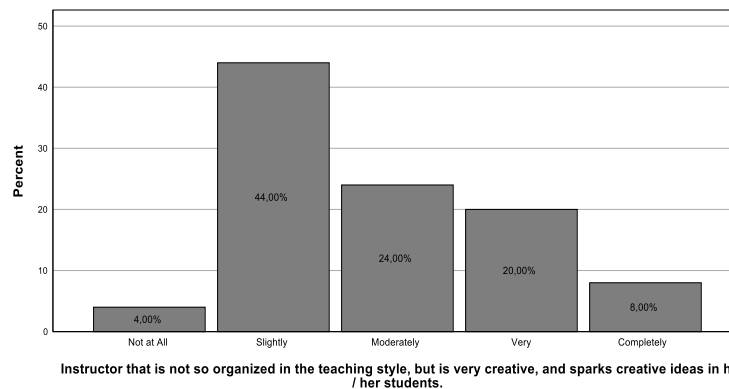


Fig. 8

Just over two-thirds of instructors (68%) tend to focus a lot or extremely on details during lectures. Only a small percentage of them (12%) do not like to pay much attention to details in teaching. (See fig. 9)

Instructor that tends to be very detail - oriented in lecturing.

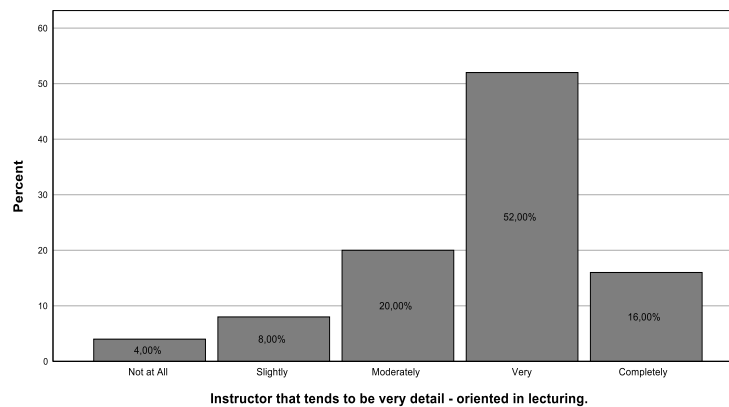


Fig. 9

40% of those surveyed clearly prefer that in teaching they focus on the big picture and not on the details. The percentage is very close to that of respondents (36%) who attach low importance to the overall picture. (See fig. 10).

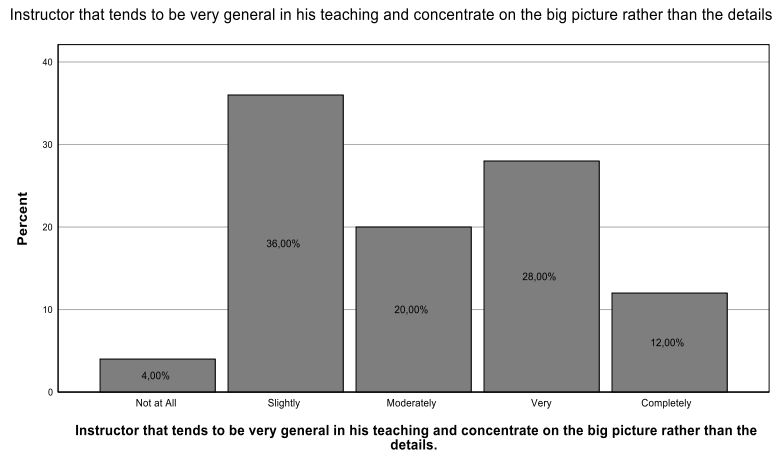


Fig. 10

When it comes to team teaching, the balance tilts slightly in favour of those who prefer to work on their own (see fig. 11).

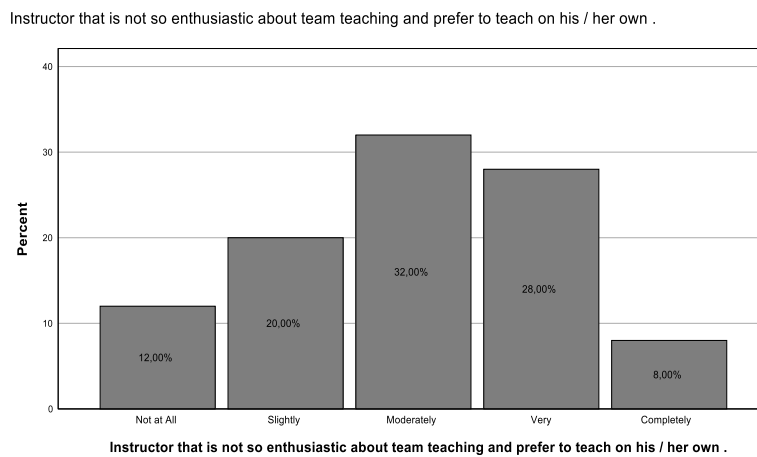


Fig. 11

However, just over two-thirds of instructors (68%) clearly welcome team teaching or other opportunities to collaborate with fellow instructors (see fig. 12).

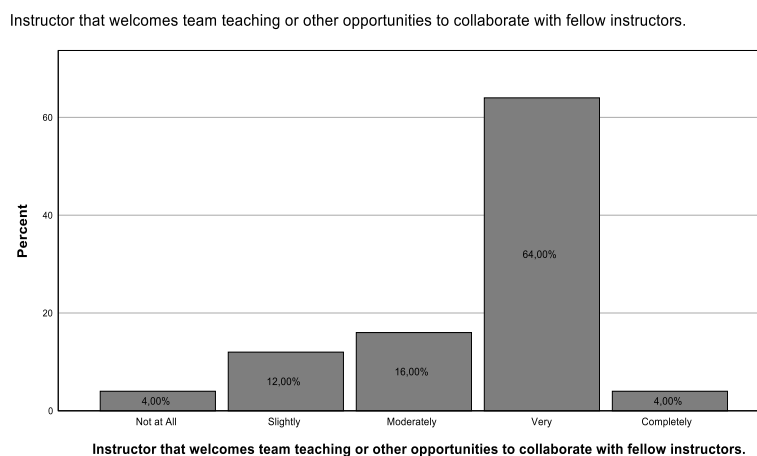


Fig. 12

A large number of respondents (84%) enjoy teaching in new ways and trying new teaching techniques (see fig. 13).

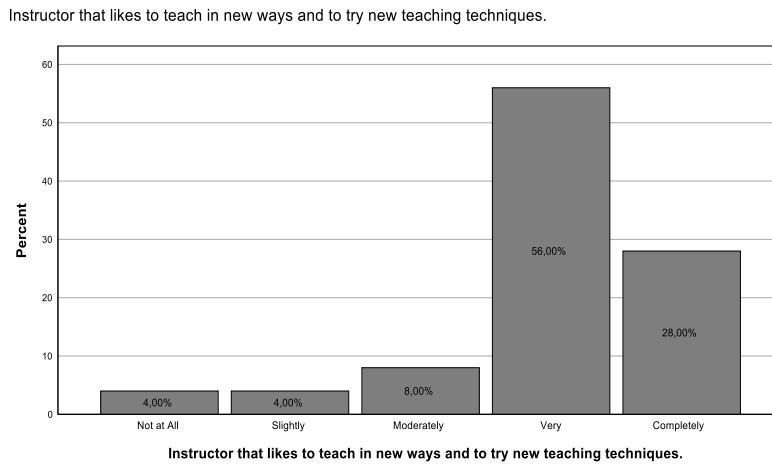


Fig. 13

The previous result does not match exactly with the one highlighted by figure 13. Thus, although the percentage of those very oriented towards traditional methods is still 16%, a higher share of those who are moderate in this regard is observed (20%, compared to the 8% of those who previously declared themselves as moderate in embracing innovation new teaching techniques). (See fig. 14)

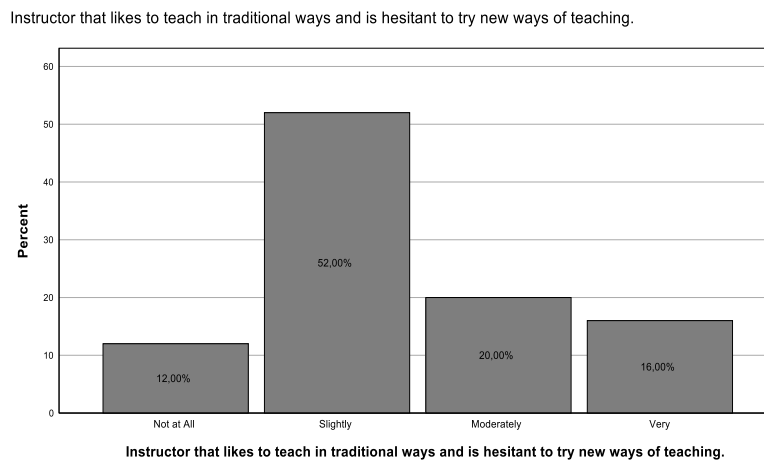


Fig. 14

4 CONCLUSIONS

It seems that a large part of those surveyed, although they have tried online teaching, still strongly prefer an on-site way of working, where they feel very close to the students (face to face). It is possible that these aspects are related to the engineering specifics of the study programs, where there is a large amount of applied information that must be transmitted to students, and their presence in the same place with the teacher allowing for safer, faster and easier acquisition of new information and learning. Although this method of teaching is still preferred, most of the respondents are also willing to use the distance education system to enjoy the benefits it can offer. Thus, there is a tendency to combine traditional teaching methods with those that have become available in recent years through the possibility of online courses.

Other general elements resulting from this study are related to the specific aspects of how the teaching staff approach the activities: the vast majority of respondents prefer working with small study groups (under 30 students), they establish their goals and the priorities related to the act of teaching quite clearly from the beginning, probably because time is limited in the distance education area, oscillate between a greater detail of what is taught to the idea of concentrating the subjects in order to have a rigorous time

management, and from the point of view of collaborating in a team with other colleagues and getting involved in interdisciplinary activities, it seems that the level of individuality is still high and the vast majority of activities are carried out individually and focused on the topics addressed.

That is why the proposals for future approaches refer to the adoption of good practice models and the attempt to involve more information technology support in order to succeed in achieving a greater attractiveness of the subjects exposed and to be able to use as large a quantity of materials as possible to be a support in teaching and can lead to better time management. Solutions must also be found to encourage collaboration between colleagues and to increase the interdisciplinarity of courses so as to increase their attractiveness and offer solutions for better understanding of information and to create more developed skills in the engineering area.

Of course, a direction of further research is the one that considers a more extensive statistical analysis to shed light on other valences of the study and to enrich the conclusions developed at this moment. A limitation of the research is the one related to the potential expansion of the sample subject to the research so that the results have a much greater relevance and can be extrapolated to establish some clear characteristics of the position of the teaching staff in Romania, in relation to distance education supported by learning platforms and information technology.

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