Students' representations of a university professor's leadership qualities in conditions of e-learning

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Abstract. The article deals with the problem of university professor leadership qualities in conditions of e-learning. The purpose of this study was to determine the leadership qualities of a university professor that are in demand in e-learning, according to the students. The main method of research was a survey of students aimed at identifying their attitude to e-learning, and their opinions on the necessary leadership qualities of the university professor in the condition of e-learning. The respondents were 146 undergraduate students enrolled in teacher training programs at the Smolensk State University. The study shows the relationship between the presence of leadership qualities in the university professor and the positive attitude of students to e-learning. The most important qualities of a university professor in conditions of e-learning, according to students, are highlighted. The authors emphasize the importance of developing professors' leadership qualities as an important factor in quality education at the university.

1 Introduction

Globalization, pandemics and the development of new technologies have changed the face of the educational process and become a challenge to education in general. Traditional University education is increasingly being replaced by various forms of e-learning. Despite the obvious advantages of obtaining education in distance format (the opportunity to study at any University in the world, affordable tuition, mobility, the ability to combine job and study, etc.), there are also problematic issues. One of them is the readiness of the university professor to implement distance learning. After all, the success of students' mastering the subject largely depends on how they will carry out their professional activities.

Numerous studies indicate that a modern educator should have leadership potential: the ability to encourage the desire for learning and self-education, coordinate the teaching process, make adjustments to it, etc. Currently, in the context of the pandemic Covid-19, which has led to changes in the course of the teaching process not only in schools but also in universities, the problem of e-learning is particularly acute [1]. More than a million courses, including lectures and seminars, were converted to distance learning. However, the

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majority of courses were completed on time, which was very important to ensure that the level of education is at a high level in any conditions, to maintain a sense of stability among students and professors [2]. To do this, it is necessary to actively involve students in the educational process, which is impossible without high-quality work of the professor in traditional conditions and in the conditions of e-learning, when they are separated in space and communicate only with the help of electronic technologies, should act as a leader who can not only transmit information but also teach, educate, inspire.

The growth in the use of distance technologies has led to significant changes in the higher education system. According to statistics, the demand for distance education is increasing by about 12-14% per year [3, 4], and recently even faster [5]. The opportunity to choose between traditional methods of education and e-learning has transformed the education sector as a whole. Abroad, before the pandemic, about 5.5 million students chose at least one online University course per year (National Center for Education Statistics, 2014), and the share of the online segment in the global education market was about 3%, or \$165 billion [7], after the pandemic by 2025, it will be \$350 billion [8].

The personality of an educator is a key component in the teaching process, and the success of learning is largely determined by the result of the relationship between the professors and the students [9]. Advanced technologies in the e-learning process do not always guarantee students' interest in the course and motivation to acquire knowledge. However, to date, there is not much research on what qualities a university professor should have in conditions of e-learning.

Studies by domestic and foreign scientists [10, 11, 12] emphasize that in traditional education, professors significantly influence the behavior and activities of students, provide them with all possible assistance, which is sometimes a difficult task in e-learning. Therefore, the appeal to the personal qualities of the professor in the situation of distance learning is of particular importance. In our opinion, there is a growing interest in studying the role of leadership qualities.

A leader is a person who influences others by positive actions, behavior, and [13], who has the largest set of relevant personality traits compared to other members of the group and encourages them to perform a group task [14, 15]. Leadership involves interacting with people and being able to direct them towards their goals [16].

A high level of leadership development gives the professor the opportunity to effectively build and direct the activities of each student and the group as a whole, build relationships with students and colleagues, professionally improve themselves and be in the process of constant personal growth.

The activity of the educators in the e-learning system in comparison with the traditional one has been the subject of study of Russian researchers Andreyev [10], Balatsky [11], Polat [17], and others. The researchers identified professional competencies, functional roles, and criteria for distinguishing the professor's activities in traditional learning and e-learning.

Research on leadership in the context of e-learning is more focused on the study of behavioral strategies and leadership style of the professor [18, 19]. According to Williams et al. [20], leadership in distance education requires several factors relating to organizational and administrative elements that include: (a) statements of mission, purpose, and objectives; (b) unified program, curricula, teaching, and learning strategies; (c) well-developed interdepartmental infrastructure, communication, and interaction; (d) the presence of administrative proponents; (e) policies regarding students, tutors, and proctors; (f) engaging additional staff and outside experts as needed; (g) materials development; and (h) disbursement, reimbursement, and evaluation (p. 14).

Such skills of a leader in e-learning as: the ability to teach the material, encourage the desire for learning and self-education, the ability to coordinate the educational process, the

ability to use various modern technologies, a creative approach to lectures and seminars, knowledge of online teaching methods, knowledge of distance learning skills, and willingness to help, allow the professor to work successfully in e-learning. Besides, a leader in e-learning must be prepared for any potential problem or obstacle that may arise at any time and adversely affect the entire e-learning process [21].

Thus, good professors-leaders should know not only how to implement, change, adapt the e-learning process, but also how to develop their qualities. They should be the initiators of innovation within their sphere of expertise the guiding force in achieving their goals.

2 Materials and methods

The following research questions arose as a result of the analysis of the problem of leadership qualities in conditions of e-learning:

1. What is the attitude of students towards e-learning and the role of the professor in it?
2. What leadership qualities are important for a university professor in e-learning, according to students?

The purpose of our research was to determine the leadership qualities of a professor that are in demand in e-learning, according to the students of teacher training programs.

The main method of research was a survey developed by the authors consisting of 12 questions. The questions were aimed at identifying the attitude of students to e-learning, their opinions about the necessary leadership qualities of the university professor in the condition of e-learning.

Based on the theoretical analysis of researches on the study of the professor's personality in the context of e-learning, we have identified a list of leadership qualities that can be in demand in this form of training.

All listed qualities have been divided into two groups. The first group includes qualities that contribute to successful interaction with students: a tendency to cooperate, emotional stability, respect for others, empathy, sociability, charisma, openness, and the ability to build relationships.

The second group included qualities directly related to the implementation of pedagogical activities: the ability to teach, the ability to coordinate the learning process, the ability to use various modern technologies, the ability to stimulate the desire for learning, self-education, interest in the subject, objectivity and fairness, erudition, creativity, flexibility for change, efficiency, organization, activity, understanding of modern trends in education.

The study involved first-third years undergraduate students enrolled in teacher training programs ($N = 146$) at the Smolensk State University, aged 18 to 24 years, who had the opportunity to study remotely. In this study, students of teacher training program were selected as participants, because they, as future teachers are familiar with the specifics of the problem, many have personal experience in electronic format as a tutor.

3 Results

3.1 Questionnaire

Analysis of the survey results showed that 100% of students had experience in e-learning. Moreover, about 52% have a positive attitude to this form of training. 21.6% said they would still prefer the traditional form. In addition to distance learning at the university, about 46% of respondents had some experience of independent e-learning, and 10.8% - extensive experience. 70.5% of all respondents believe that the existing form of education

is suitable for modern society, but the majorities (66.9%) are sure that the concept of face-to-face will certainly remain.

81% of respondents believe that after the coronavirus pandemic, students and professors should work in university classrooms, and not translate all communication in the online. It was also noted that there is a need for personal contact (66.9%), but some (12.2%) believe that communication can be carried out through various electronic services and messengers, and 20.9% of respondents believe that it is possible to completely transfer communication to an electronic environment, but such changes are unlikely to occur in the near future.

Analysis of the survey results by the group showed that the qualities associated with communication and interaction were rated quite high. In terms of e-learning actions, words and deeds of the professor not only did not lose its importance but, on the contrary, from its relation to students and to the educational process as a whole in many respects depends interest to a course, and also attendance and progress of students.

The importance of the qualities of the second group is high because, in connection with the new format of training, the professor's ability to explain new material in the changed conditions comes to the fore. If a professor likes your subject and knows how to use modern technologies, they will be more successful. One can clearly see the emphasis on the leadership characteristic "to encourage the desire for learning and self-education".

After analyzing the results of the survey, we identified three groups of professor leadership qualities in the implementation of e-learning according to the frequency of their choice by students during the survey:

- A - the most significant (60% and more);
- C - are less significant (from 30% to 60%);
- C - not significant (less than 30%).

Thus, in group A, such leadership qualities were identified as: a tendency to cooperate (77%), activity (74.1%), ability to teach (71.4%), sociability (69.8%), respect for others (69.1%), erudition (64.7%).

Group B includes emotional stability (59%), interest in subject (58.6%), ability to build relationships (54%), ability to use various modern technologies (49.6%), objectivity and fairness (42.2%), ability to encourage the desire for learning, self-education (41.2%), and creativity (34.2%).

The following qualities were assigned to Group C: charisma (35.3%), empathy (26.6%), flexibility to change (21.1%), efficiency (14%), organization (9.1%), ability to coordinate the learning process (9.1%), understanding of modern trends in education (4.9%), openness (2.4%).

4 Discussion

The research has shown that a professor's leadership skills in the conditions of e-learning are extremely important for their success, and they are largely responsible for the successful completion of the distance course by students. Among those who responded positively about distance learning, the professor's personality was called "decisive in the learning process".

The study found that the presence of certain leadership qualities in a professor largely affects the positive attitude of students to e-learning in general, because such qualities as creativity, the ability to use various modern technologies, and emotional stability were evaluated quite highly. As one of the respondents noted, "if the professor is interested in what he tells us, if he offers us different ways to study the material, then we all also become interested in learning."

According to the survey, the qualities of a professor related to communication are more important than, for example, their professional and personal characteristics, which is quite

understandable. After all, in the information space, personal communication cannot be replaced by anything, it occurs in new forms when well-developed communication skills are simply necessary. It is not for nothing that many respondents highly noted the "tendency to cooperate", "sociability", and "activity".

However, certain professional qualities ("erudition", "interest in subject") were also rated quite high, which is not surprising, because, with the development of distance technologies, the professor's skill is still the main guarantee of success of his activities.

It should be noted that because students do not fully understand the meaning of working in an e-learning environment, many leadership's qualities were evaluated as insignificant and insignificant. For example, "ability to use various modern technologies", "understanding of modern trends in education", "ability to coordinate the educational process", "organization" were not noted by all students, while, according to researchers, they are one of the key characteristics of a professor-leader in e-learning. Therefore, the leadership qualities of students should begin to form from the first year, primarily within the framework of psychological and pedagogical disciplines and pedagogical practices, and then the result achieved by the time of graduation will be much more effective.

5 Conclusion

Thus, based on the understanding of the leader as a person who can influence people through positive behavioral decisions or actions, we can conclude that the importance of developing the selected skills and qualities of the professor as a factor in improving the effectiveness of e-learning. The professor needs to understand that it influences the activity of students during distance classes. The professor-leader should use various strategies aimed at achieving a specific goal, and show interest in the subject itself. It should explain to students why a particular task is important and maybe interesting for them. Perhaps you should link the task to practical activities that students can later use in their profession.

However, according to students, not all professors have such characteristics, which greatly complicate the learning process. Most of the professors were not specially trained for this format of work. That is why it is important to develop the above-mentioned leadership qualities, as well as to overcome technical, psychological and oratorical difficulties, because the quality of education of students depends on the ability of teachers to properly organize the educational process, coordinate the actions of students and monitor the assimilation of the material. In addition, the professor's ability to involve students in the learning process will allow them to gain knowledge on their own experience not only in the subject but also in conducting classes in electronic format, which will greatly contribute to their future success in professional and pedagogical activities.

According to the analysis of the survey results, it was found that, in the opinion of students, the leadership qualities of professors in e-learning are no more important than in traditional education. This issue requires closer attention and further research.

The problem of the professor's personality in e-learning has not yet been fully studied. The question of full-fledged training of professors to work in this format, as well as the system of assessment of formed leadership and other qualities necessary for working in e-learning is of interest.

Thus, in the face of new threats of the continuation of the pandemic, distance education can well become a common practice in higher education institutions. Now, most of the world's universities have transferred full-time and part-time students, additional professional training, either to a mixed-model or completely distance learning model. E-learning, which has become a necessity in 2020, represents a completely new understanding of the concepts of learning and teaching. In conditions of unstable development and possible threats, it is extremely important to maintain a high quality of education. The

situation with the pandemic has become a kind of stress test for Russian education, which showed the most important thing – although the Russian system successfully coped with this challenge, however, the majority of society shares the opinion that a number of the most important processes of University life cannot be transferred to the virtual space, and full implementation of programs in remote form is impossible [22]. Therefore, the role of a professor with leadership qualities increases every year, as it helps to train young professionals so that in the future they can stand up for the intellectual, economic and social well-being of their country.

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