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Transformation of Student Roles and Behavior Patterns in the Context of Digitalization

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Abstract

The predominance of consumption values in the structure of public consciousness, the increased focus of universities on achieving the goals of commercial efficiency, and the opening of new digital opportunities for receiving educational services contributed to changes in the needs and behavioral patterns of students. The purpose of the material is to study the processes of transformation of role positions and expectations of Russian students in the in the context of the dynamic development of digital technologies and the introduction of online education models. Taking into account the need to analyze the subjective opinions of students, the study uses a survey method (N=1107 students of Russian universities). The research materials were supplemented with data from focus groups (N1=10 and N2=9). It has been established that the digitalization of education creates inflated expectations of students regarding the personal characteristics and media competence of the teacher. 63.1 % associate their interest in learning with the teacher's competence, such as the ability to present material in an interesting way and introduce entertaining content into the course. Modern youth, who are characterized by integration into the media environment, dictate a special demand for the teacher's ability to present material in an interesting way, including using media technologies. The demand for a charismatic teacher is even more clearly expressed (78.1 %). These expectations are more typical of students who like to study online. It is concluded that the modern student transfers responsibility for the results of his studies and motivation to acquire knowledge to the teacher. The focus group materials allowed us to conclude that the development of digital technologies is reducing the importance of the teacher's functionality related to the transfer of knowledge. In the context of the dynamic development of digital services, competition for teachers comes from chatbots based on GPT technology. Strengthening consumer expectations is reflected in the formation of a request for loyalty on the part of the teacher, the opportunity to freely choose the quantity and quality of educational services. It was found that a significant portion of students considered it possible to independently determine the rules of online learning (72.3% – do not consider it necessary to always take notes on lectures; 53.7 % – use additional materials when taking a test/exam; 33.3 % – negatively perceive the practice of turning on the camera during classes). As a consumer of educational services, the student expresses a desire to have access to educational content to view it at a convenient time, the opportunity to revise it or stop at those aspects that raise questions or difficulties.

Keywords: digitalization, media environment, media competence, consumption of educational services, behavioral models of students, online learning, higher school teacher.

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1. Introduction

The active introduction of digital services and technologies into the educational space of higher education has had a significant impact not only on the digital infrastructure of the educational process and the content of teaching practices, but also on the conceptual transformation of the roles of student and teacher (Sarkio et al., 2023). The emergence of new educational opportunities and trajectories due to the active development of the media environment and changes in the digital landscape of higher education (availability of electronic content, demand for interactive technologies, etc.) has brought changes to the traditional expectations/demands of students. The transformation of higher education from a privilege and public good into an educational service and commercial product is due to the need to ensure the profitability of educational programs. The studentexperiences these changes, transforming his role to new digital and economic realities.

Scientific discourse is also changing. The focus of modern researchers is not so much on the quality of education as on the needs of students, their emotional and psychological well-being. In particular, A. Jakoet-Salie and K. Ramalobe talk about the need to change teaching practices in terms of increasing attention to the personal characteristics of each student (Jakoet-Salie, Ramalobe, 2023). The search for tools to increase student satisfaction is becoming one of the most urgent tasks facing university leaders today (Armas-Rodriguez, Barroso-Osuna, 2020). A number of scholars have raised concerns about the negative impact of digitalization on student well-being (Otterborn et al., 2023). Even the system of assessing and monitoring knowledge, according to scientists, should become more attractive to students and provide new types of feedback (Bayne, Gallagher, 2021).

Digitalization of education, despite its obvious advantages, has significant limitations in terms of socialization of youth (Gálik et al., 2024; Gálik,Gáliková Tolnaiová, 2022). The increasing share of digital technologies and online services during training leads to the displacement of traditional pedagogical communications between teacher and student (Frolova et al., 2023). However, according to a number of scientists, digital services cannot, unlike a teacher, form a student's intellectual virtues (Shanley et al., 2020). In addition, the excessive introduction of digital technologies creates risks of violating the ethical behavior of students (Schreiber, 2014).

As already noted, a student as a consumer of educational services cannot always adequately assess their quality, but his request for satisfaction from the educational process often becomes key. Thus, a student in modern conditions, as Russian studies emphasize, is primarily focused on interesting tasks with a low level of complexity (Puchkova et al., 2021). These dysfunctions can contribute to a decrease in the quality of professional training and increased risks of conflicts in the educational environment. In addition, the digital optimism of students increases the relevance of this problem and creates an extremely high bar for assessing, first of all, the interactivity of education. Let us note that centering education in the area of providing "interesting learning" contradicts the fundamental principles of university training.

Digitalization as a general trend creates a demand and increases the importance of developing qualities in a student that would meet the conditions of the ultra-complex digital era (Jandrić et al., 2018). In particular, Russian scientists note the need to develop competencies such as critical analysis of information, adequate use of digital devices and the functionality of social networks, carrying out financial and trading transactions in the virtual space, and developing digital content (Savka et al., 2022).

The large-scale use of information and communication technologies transforms the exchange of information and knowledge (Vuori et al., 2019), which sets new contours for the consumption of educational services and affects the professional and educational identity of the student (Wallin et al., 2022). We believe that a student's self-identification as a consumer of educational services is associated with his acquisition of new characteristic features. There is a transition from the need for traditional acquisition of academic knowledge to the formation of a request for the entertaining nature of learning, extracurricular communication practices, and the use of shock accents in the teacher's presentation of the material. The student's needs are illustrated in the request to expand the emotional component of the educational process by receiving reactions of surprise, admiration, and interest. These conclusions were partially confirmed in foreign studies. In particular, there is a demand for creating an atmosphere of fun in the educational space (Ideland, 2021); psychological comfort (Cena et al., 2023), increased enjoyment and a positive learning climate (David, Weinstein, 2023). However, a number of researchers have noted a decrease in students' interest in reading

books, the widespread use of practices of combining study sessions with viewing social networks, correspondence with friends and games (Singh, 2021; Frolova et al., 2023). Thus, it can be assumed that, without receiving impressions during the educational process, the student replaces them with emotions from his hobbies. The conclusion of foreign scientists about the formation of a new model of student behavior in the context of digitalization –cyberloafing (Arslantas et al., 2023; Demirtepe-Saygılı, Metin-Orta, 2021) is significant.

Digitalization of education is designed to provide the necessary conditions for the convenience of the educational process (choice of time, place, means of communication, etc.). At the same time, informal dialogue, which was previously not possible in an academic environment, is becoming today a key principle of education (Aldhafeeri, Alotaibi, 2023). In foreign scientific literature, the concept of a "smart educational institution" is actively discussed, which would include new technologies for assessing knowledge, measuring and monitoring the behavior of all subjects of the educational process (De Freitas et al., 2020). This concept can be a response to students' request not to expose themselves to risks caused by the subjectivity of knowledge assessment on the part of the teacher. As N. Selwyn notes, students feel vulnerable when they are assessed by a teacher (Selwyn et al., 2023).

Discussing such student needs would have been impossible just a decade ago. However, today, when a student acts as a consumer of educational services, choosing educational institutions, this scientific discourse becomes very timely. At the same time, digitalization creates new contours for the development of education related to meeting the psychological needs of the student. A number of researchers analyze the capabilities of digital technologies in reducing the subjectivity of knowledge assessment. On the other hand, the discussion about the acceptability of preserving traditional aspects of education in online learning conditions is becoming very relevant. In particular, the requirement to turn on the camera corresponds to the principle of inclusion, full-time presence. However, students in this case talk about violation of personal boundaries, psychological discomfort, and "total surveillance" (Williamson, 2020).

The inversion of the democratic principles of organizing the educational space creates the preconditions for the dominance of negative trends. These include violations of the ethical foundations of the educational process and the academic integrity of students. A number of scientists say that the transition to online learning makes it difficult to assess students' knowledge due to the increased incidence of cheating in the session (Balderas, Caballero-Hernández, 2020). The consequence of these destructions is the tightening of exam requirements (Lancaster, Cotarlan, 2021).

It can be assumed that the presence of these trends determines the presence of a conceptual ethical conflict. The student considers himself to have the right, having concluded a "contract" for an educational service, to dictate the conditions for receiving it. Including maintaining privacy in online learning, using additional sources when taking the exam. In essence, grounds are being created for denying among students the right of a teacher to evaluate knowledge for the consumer's money.

The purpose of the article is to study the processes of transformation of the role expectations of Russian students in the conditions of digitalization and the dynamic introduction of media technologies into the educational process.

2. Materials and methods

The following tasks were set during the study:

– Identification of new needs of students in the context of digitalization, including analysis of changes in student behavioral models;

– Assessing the risks of violating the ethical principles of academic integrity in the context of digitalization.

Research hypotheses:

1. The digitalization of education creates high expectations of students regarding the personal characteristics and media competence of the teacher. The hypothesis and consequence is the assumption that the modern student transfers responsibility for the results of his studies and motivation for acquiring knowledge to the teacher.

2. In the context of digitalization of education, there has been a change in the role models of student behavior. Strengthening consumer expectations is reflected in the formation of a request for

loyalty from the university, the introduction of entertainment content into the process of acquiring knowledge, and the ability to freely choose the quantity and quality of educational services.

In preparing the research materials, the authors used a complex of general scientific methods, including analysis, generalization, and systematization. The key method of collecting information was a questionnaire survey due to the possibility of mass coverage of respondents, as well as quantitative assessment of the ongoing transformations. The research design involves selecting respondents based on the snowball principle. The sign of representation was: the presence of the current status of a student at a Russian university. Other signs of representation were not taken into account when constructing the sample due to the difficulty of maintaining established proportions. Thus, the sample is represented by students from universities with a humanitarian orientation, all courses of study (1-5 years), such levels of training as: bachelor's, master's, and specialty. The total sample size is 1107 respondents.

The study results were processed using specialized software. Chi-square test was used for statistical analysis of data.In order to clarify the data obtained and obtain a qualitative assessment of the transformations of the student's role as a consumer of educational services, two focus groups were conducted (N_1 = 10 and N_2 = 9). Sign of representation – online learning experience, undergraduate level, senior courses. The sample was targeted; respondents were recruited via direct mailing.

3. Discussion

During the study, the first hypothesis was confirmed. In particular, the authors established that students have high expectations for the teacher's personal competencies: his charisma and ability to entertain during the educational process. These conclusions were partially confirmed by studies by foreign experts. In particular, the thesis is put forward about the changing needs of students, shifting the focus of preferences from accumulating knowledge to providing a creative atmosphere and fun in the classroom (Ideland, 2021). Moreover, a number of studies emphasize that it is boredom in class that reduces a student's level of motivation and creates his reluctance to continue studying. These factors become more significant in the context of online learning, the need to watch videos for a long time, and perform routine tasks (Cena et al., 2023).

This circumstance, as well as the results of the author's research, indicate the formation of a new role of the student as a consumer of educational services. The quality of this service is determined not so much by the set of knowledge as by the context of its receipt (for example, "easy", "fun", "convenient"). If previously a student came to a university as if it were a "temple of science", now higher education is viewed as a public space where necessary connections are made and interesting communication is ensured. Thus, the second hypothesis of the study was confirmed. At the same time, a number of aspects are debatable: do such changes represent a natural evolutionary process or a dysfunction of the consumer culture of modern society? In our opinion, these processes are dysfunctional, since the dominance of the entertaining format of education harms the formation of the necessary knowledge and skills of students. The conclusion about the loss of fundamentality of higher education is reflected in the works of Russian scientists (Apresyan, 2021; Brutova et al., 2022).

In this regard, a promising direction of research may be the study of the transformation of the qualitative characteristics of the teaching staff of universities. Changing student demands leaves its mark on the personnel policy of higher institutions, reducing the demand for a teacher's academic knowledge and increasing the importance of his personal traits.

The transformation of the role of a student who sees himself as a "consumer of educational services" largely determines his request for independent establishment of rules and norms for conducting classes. Thus, a completely justified requirement to turn on the camera during online classes causes a negative reaction in every third student. The data obtained suggest that online learning may lose the academic nature and fundamental nature of the educational process, transforming into a "background mode." The lecture is often perceived by the student as an "entertaining podcast", which does not require his active role. The results obtained are confirmed by foreign studies, which note increasing cases of cyberloafing of students in the educational process. However, these negative practices, according to scientists, are not associated with the student's transition to a new role as a consumer of educational services, but with a low level of digital literacy (Arslantas et al., 2023).

The study found that a significant proportion of students have encountered cases of violation of academic integrity. The results obtained are confirmed by other studies in which the problem of violation of academic ethics in universities is considered as a key threat to the devaluation of education and the decline in the prestige of higher educational institutions (Janke, 2021). Empirical data obtained from a survey of Chinese students showed that incidents of dishonest behavior are largely associated with the presence of strong justifications for dishonest behavior in the mind of the respondent. A relationship has been established between justification for cheating and intention to cheat (Juan, 2022).

Another destruction is a phenomenon that is associated with an insufficiently high proportion of students who are ready to take notes on educational materials during a lecture. The authors suggest that this approach on the part of students is dysfunctional, as it reduces the cognitive and analytical skills of students: the ability to work with text, to synthesize various aspects of the topic (Frolova, Rogach, 2022). At the same time, correlation analysis showed that there is no relationship between this parameter (willingness to take notes) and students' preference for online learning. However, this conclusion requires a more in-depth study of the relationship of a number of parameters that were not used in this study. It can be assumed that the refusal to take notes is an attribute of the new era of universal access to information. The consequences of these practices should be the subject of further research by Russian and foreign scientists.

4. Results

Empirical data indicate a change in students' value attitudes in terms of education and interaction with the teacher. The student sees his role in "consuming" interesting educational content, receiving services, the quality and composition of which he will determine independently. Thus, 63.1 % associate their interest in learning with such a teacher's competence as the ability to "teach and entertain". At the same time, among students who like to study remotely, the share of those who chose this answer option is slightly higher (66.4 %, which is 3.3 percentage points higher than the average for the sample). It is concluded that the student transfers responsibility for the results of his studies and motivation to acquire knowledge to the teacher.

The demand for a charismatic teacher is even more clearly expressed (78.1 %). These high expectations are more common among students who like to study online. The results of the correlation analysis showed the relationship between the choice of form of training (remote format) and interest in learning (according to the parameter "charisma of the teacher").

Table 1. The relationship between satisfaction with studying online and interest in learning in connection with the charisma of the teacher, pers

Do you like studying remotely online?	*Statement: "Interest in studying online depends on the charisma of the teacher".*			*Total*
	yes	no	difficulttoanswer	
yes	494	95	13	602
no	166	58	2	226
difficulttoanswer	212	62	5	279
Total	872	215	29	1107
*at the significance level p = 0.05 the critical value of χ2 is 9.488				

Thus, the results of the analysis of an arbitrary contingency table using showed the presence of a statistically significant relationship (Table 1).

The materials that were obtained during the focus group allowed us to conclude: modern students rate teachers who maintain informal communication with them significantly higher. The media environment creates new trends in the communication system, including simplification and dominance of the informal context.

Ivan P., 3rd year: "A teacher should not put himself above the student, he should communicate with us as equals. And in general, it's better to be addressed by name than so formally".

Ekaterina A., 3rd year: "It's difficult to communicate with a teacher who does not use social networks and instant messengers for communication. Make promotion courses for teachers, today you need to work with media activity".

It is fair to note that not all students are so radically inclined to transform the practice of interaction with the teacher. However, the request to increase loyalty and reduce formalization in communication with the teacher is becoming the dominant trend.

Anna V., 4th year: "The teacher must understand that we work, we have our own interests and in general we will send here to receive a service, let them provide it, and not require us to perform unnecessary tasks. I mean that there are tasks that will not teach us anything and will not be useful in life, and there is also an additional burden that I did not buy by paying for education."

Ekaterina D., 1st year: "The teacher must be charismatic, interesting with a sense of humor. In general, I believe that when selecting for a position, teachers should be assessed on these competencies and, if necessary, sent to personal growth training".

During online learning, compliance with the attributes of the traditional class format has become important: "seeing the interlocutor's face", turning on the microphone, working in groups. However, a significant portion of students considered it possible to independently determine the rules for studying remotely. Thus, the answer to the question about students' attitude to the requirement to turn on a camera in class showed that every third respondent had a negative attitude towards this practice (33.3 %).

Table 2. Relationship between satisfaction with studying online and students' attitude towards the teacher's requirement to turn on the camera during classes, pers

Do you like studying remotely online?	How do you feel about the teacher's demands to turn on the camera during class?			
	Positive, I like it, it creates a feeling of live communication	Neutral, that's normal, it's no problem for me	Negative, it is not always possible to turn on the camera	other
yes	156	265	177	4
no	47	83	94	2
difficulttoanswer	34	132	109	4
* at the significance level p = 0.01the critical value of χ2 is 16.812				

The results of the analysis of an arbitrary contingency table using showed the presence of a statistically significant relationship (Table 2).

Empirical results indicate a relationship between perceptions of online learning and positive/negative attitudes towards the requirement to turn on the camera. Among respondents who have a negative perception of online learning, there is a higher proportion of those who would prefer not to turn on the camera (above the average by 8.3 percentage points).

During the focus groups, students' opinions on this issue were divided. On the one hand, comments were made such as: "*demands to turn on the camera violate my personal boundaries*", "*by paying for an educational service, I am not obliged to demonstrate my personal space*".

On the other hand, opinions were expressed that characterized the neutral attitude of students to the requirement to turn on the camera in class: "*what difference does it make, I can turn it on*", "*I want to see faces, not a dark screen*". Note that, while generally recognizing the fairness of the requirement to turn on the camera as confirmation of their activity in class, students still prefer not to do this.

Note that in the online format, only every fourth student (27.7 %) always takes lecture notes. 8.7% never do this. The remaining respondents were divided between the "often" and "rarely" answer options. Online learning deepens the distance between participants in the educational process and reduces the student's involvement in the topic of classes. As a consumer of educational services, the student expresses a desire to have access to educational content to view it at a convenient time, the opportunity to revise it or stop at those aspects that raise questions or difficulties.

As a consumer of educational services, the student expresses a desire to have access to educational content to view it at a convenient time, and the ability to replay those aspects that raise questions or difficulties.

Table 3. Relationship between satisfaction with studying online and students' willingness to take lecture notes, pers

Do you like studying remotely online?	Do you take notes during online lectures?			
	yes, always	often	rarely	never
yes	175	220	149	58
no	64	78	67	17
difficulttoanswer	68	109	81	21
** at the significance level p = 0.01 the critical value of χ2 is 20.09*				

The results of the analysis of an arbitrary contingency table using showed the presence of a statistically significant relationship (Table 3).

However, correlation analysis did not show the presence of a statistically significant relationship between these parameters. The relationship between factor and performance characteristics is not statistically significant (the critical value of χ2 at a significance level of $p < 0.05$ is 12.592; significance level $p > 0.05$). In connection with this circumstance, it can be assumed that a student's refusal to take lecture notes is not so much a consequence of the digitalization of education, but rather a consequence of the dynamic development of information and communication technologies and maximum availability of information.

The focus group materials allowed us to conclude that the development of digital technologies is reducing the importance of the teacher's functionality related to the transfer of knowledge, presenting cases on the topic of the training course, selecting interesting sources, etc. Among students, opinions were expressed: "*chatbots with GPT technology will give all information is simple and structured*", "*working with a neural network is more interesting than working with a teacher, stupidly recording a stream of incomprehensible speech*".

The following data is of interest. Among students who do not like studying online, there is a higher proportion of those who state the frequency of cases of dishonest behavior during the session (34.5 %, which is 7.2 percentage points higher than the sample average).

Table 4. The relationship between satisfaction with studying online and the presence of cases of dishonest behavior of students during online sessions, pers

Do you like studying remotely online?	What do you think was the behavior of students during the online session? Have there been cases of dishonest behavior by students (using additional materials when taking a test/exam)?				
	often	rarely	never	Difficulttoanswer	other
yes	148	181	100	165	8
no	78	57	35	55	1
Difficult to answer	76	54	47	97	5
** at the significance level p = 0.01 the critical value of χ2 is 20.09*					

The relationship between factor and resultant signs is statistically significant (Table 4). These results require clarification due to the possibility of the subjective characteristics of the respondent influencing the answers received. Negative attitudes towards online learning can trigger a distorted view of the size of the problem. However, it is fair to note that the problem of unethical behavior (using additional materials when taking a test/exam) is widespread. The presence of such cases is noted by more than half of the respondents: "often" – 27.3 % and "rarely" – 26.4 %.

According to the results of focus groups, modern students often justify their dishonest behavior by external factors: "*everyone does it*", "*I won't need it in the future anyway*".

5. Conclusion

The dominance of consumer trends in modern society has left its mark on the field of higher education. This is due to giving education the status of a paid service, as well as new opportunities

provided by digitalization and the development of the media space. Also, the digitalization of education has provided new opportunities for consuming educational content. Online learning, which was accelerated during the pandemic and did not have a long-term methodological and organizational transition, created an illusion for students about the simplicity of distance education.

The change in the training format has increased the consumer demands of students. At the same time, the return of students to classrooms after the pandemic for many of them was marked by a reluctance to change the convenience of the remote learning format to the traditional format of obtaining higher education. Perhaps this became a predicate for increasing demands on the teacher, his personal and professional qualities. The results of the study confirmed the first hypothesis. It has been proven that in online learning conditions, students have inflated expectations regarding the personal characteristics of the teacher. Students expect loyalty, informal communication, and charisma from the teacher. Of interest is the fact that in the context of digitalization, the teacher's competition comes from chatbots based on GPT technology. The study also confirmed the second hypothesis about the change in role models of student behavior. The possibility of turning to artificial intelligence and media space reduces the student's willingness to take notes (notes), listen carefully, and carry out academic communication with the teacher. The assumption is confirmed that the modern student transfers responsibility for the results of his studies and motivation for acquiring knowledge to the teacher. Thus, in the conditions of digitalization and the dynamic development of the media environment, there is a transformation of student role models of behavior. There is a strengthening of the student's consumer position as a recipient of paid educational services and the formation of requirements for the media competence of the teacher.

Limitations

A limitation of this study is its reliance on empirical results obtained from a single measurement of student opinions. The findings cannot be extrapolated to the entire higher education system. In addition, the limitations of the study are related to the specifics of developing survey instruments, the difficulty of interpreting and analyzing the student's subjective perception of the transformation of his role, and assessing his own behavior patterns.

Declaration of Competing Interest

The manuscript's authors declare that there is no interest in conflict, and all reference materials were dully acknowledged.

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