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Psychological Readiness of Students for Joint Activity as Autonomous Actors in Online Education

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Abstract

The higher educational reform being currently in progress calls for the creation of an open digital educational space, which makes the joint activity of autonomous actors a topical issue, as it is central to the online educational process. In order to be able to actively and effectively participate in online education, students of higher educational institutions need to have formed a psychological readiness for carrying out joint as autonomous actors in online learning.

This article analyses the problem of students' psychological readiness for joint activity as autonomous actors in the process of online education and discusses theoretical and practical aspects of online education in higher school. It also reports empirical research carried out by the authors in order to classify students into groups with different levels of psychological readiness for joint activity based on the criteria of autonomy and jointness.

The methods for this research included interviews and questionnaire surveys, as they allowed us to identify the indicators of autonomy and jointness of activity.

The article describes indicators of low-level and high-level autonomy in the process of online education and joint activity. Based on these indicators, the authors describe different types of students with different levels of motivational, volitional and communicational readiness for joint activity as autonomous actors.

Our research enables us to argue that in the process of online education it is possible to create conditions for students to develop a high-level psychological readiness for joint activity as autonomous actors.

Keywords: joint activity, psychological readiness, autonomy of participants, educational process, online education.

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Introduction

It has become a universal truth that the student should be viewed as the central figure of the educational process, which caused a massive higher educational reform aimed at creating an open digital educational space based on the principles of joint activity of autonomous actors. Online teaching meets the fundamental needs of students. These are the need to act autonomously, independently from outside factors and motivations; the need to set own internally motivated goals; the need for communicative exchange and mutual evaluation.

Our experience of integrating online courses into the system of university education has demonstrated the following problem. While students generally have an overall positive emotional response to online education, their readiness for joint activity as autonomous actors remains low on a number of levels (emotional, volitional, and communicational).

Purpose of the study

The main purposes of this study are to determine levels of students' emotional, volitional, and communicational readiness for joint activity as autonomous actors in online education and to classify students into groups based on the criteria of autonomy vs. jointness.

Literature review

Analysis of literature has shown that the theory of online education as a whole and of students' psychological readiness for online learning, in particular, is far from being complete.

The majority of pertaining literature deals with empirical analysis of introducing online courses into the education of grown-ups, namely, university students and professionals receiving advanced training. Therefore, theoretical justification of students' readiness for online learning is restricted to the discussion of positive and negative aspects of using online resources in education.

Positive aspects of online learning appeal to students and form a positive emotional attitude to online format as a whole. However, this does not necessarily mean that they have successfully formed motivational, volitional, let alone communicational, readiness for joint activity as autonomous actors in online learning, as this form of activity is not as pleasurable and easy compared to browsing social networks.

Many researchers, namely, Kovrigina and Markova (2014), Korotkov, Saharchuk, & Sergeev (2019), Miheeva (2015), Romanova (2018), Rubleva (2014), Truhin (2002), point out that one of the main advantages of online

learning is that it gives the students the freedom of choice in designing their own educational trajectory and learning schedule, i.e., choosing convenient times to start and finish learning, adjusting the length of lessons and the number of breaks between them, having the opportunity to revise the material as often as needed and choose one's own learning pace, as well as creating an efficient educational space which enables the students to continuously widen their knowledge and receive advanced professional training. Another advantage worth mentioning is the higher overall quality of online education due to the use of a wider array of multimedia and communicative technologies, which enables the students to manage their own learning process independently, with the help of accessible digital teaching materials and online assistance from their instructors in the form of online consultations. Kostyuk, Levin, Fuks, A. L., Fuks, I. L., & Yankovskaya (2014) define online courses as massive collections of lectures, testing materials, quality computer demonstrations. According to Miheeva (2015), online courses have proven their efficiency, as a large number of students have successfully completed them. Yet another advantage of online courses, according to Lebedeva (2015), Bugajchuk (2013), is that they provide for academic interaction not only between students and their teachers but also among the students themselves, as well as between students and a wider non-academic community.

A number of authors have underscored the advantages of using online courses in teacher training. Gushchina and Miheeva (2017), Kopytova (2015) point out that this format allows future and in-service teachers to both advance their professional training and acquire the experience necessary for effectively designing individual projects within the global digital educational environment. Andreev (2017) maintains that in this day and age online courses should have priority in the educational system of Russia, as this form of learning best builds motivation for future teachers' independent professional self-development and acquiring skills necessary for operating in digital professional space. Ross, Sinclair, Knox, Bayne, and Macleod (2014) point out the change of instructor's function that online courses have brought about. Unlike the teacher in traditional classroom environment, an online instructor can act as a coach, a content curator, a moderator or facilitator, depending on the model chosen. According to Miheeva (2015), the use of modern digital resources in online courses precipitates a transition from an authoritarian style in teaching and research counseling to a more democratic one, which meets the students' need for building their own educational trajectory.

Kazakova (2020) argues that digitalization of school teaching makes obsolete such highly ineffective traditional forms of evaluation as, e.g., selective control of knowledge and differentiation between homework and classwork, as now the instructor has the technology for checking every answer, listening (and giving feedback) to every student, while the students themselves now have the opportunity to see in advance the entirety of the work they have to do in order to study this or that topic. Additionally, the students can now decide for themselves which part of work they will do in class, and at home, depending on their individual learning pace and style. This makes it possible for the students to pay more attention to

some of the topics, using more extensive, in-depth extra-curricular materials. Apparently, these advantages of online teaching are equally valuable for higher education, as they represent the freedom of choice quite unattainable in a traditional classroom.

According to Korotkov (2003), education is a joint activity of at least two individuals in a suitable environment, which means that for effective education to ensue, the individuals must not only be prepared and co-present in the same environment, but also, and more importantly, have a strong stimulus for a joint activity as autonomous actors. The search for such stimuli has been ongoing in online teaching, which has become an integral part of the contemporary educational system, as it lends unprecedented opportunities for managing educational interaction through various resources within the global digital infrastructure. This makes students' and teachers' psychological readiness for joint activity as autonomous actors a topical issue.

We define psychological readiness as a set of personal qualities and habitual practices, which allow the individual to become successfully integrated into a certain activity, e.g., in our case, online learning. We have established three components of psychological readiness: motivational, volitional and communicational readiness. Each of these components was studied from the point of view of at least two criteria: the autonomy of the actor and jointness of the activity. This construct is based on the understanding of the joint activity of autonomous actors as a system which consists of autonomous activity (the actions of transformation, modeling, control and evaluation solution-seeking methods) and a system of joint activities (introducing and coordinating various action models, cooperative modeling of joint activity organization, building models of communication in the process of cooperation).

The categories of autonomy and jointness have often been used in philosophical, psychological and pedagogical theories.

Autonomy is one of the basic personal qualities, which refers to the individual's readiness and ability to act independently, irrespective of the outside factors, solely based on their internal motivations and goals (personally determined goal setting). Andreev (2015, p. 61) argues that autonomy is the core characteristic of a "self-sufficient personality", which is also characterized by "a high level of ethics and morality, civic consciousness and public spirit, ... highly developed ability for self-determination, self-actualization and self-regulation combined with high creative potential and a healthy practicalism". Korotkov et al. (2019, p. 53-54) point out that "autonomy should not be understood as isolationism, but as a freedom of goal-setting and distribution of attention between various goals, ability to prioritise, non-restricted behavioral distinctiveness". According to the author, "such freedom of choice presupposes an adequate level of responsibility for the activity's outcome".

The importance of jointness in online learning has been underscored by the president of Massachusetts Institute of Technology, Reif (2013) in his talk *Extension of online learning will advance the revolution in education* at the 2013 Davos Forum. He stated that online education should contain more than a set of lectures. Students have to undergo a process of socialisation, learn to persuade, negotiate, teamwork, and no adequate substitute for this method of teaching has yet been found.

Rogozin and Rogozina (2017) maintain that for digital education to be effective, it should be based on action, interaction, and research, as such forms of organisation allow the students to acquire meta-competencies; another important factor is a variety of teaching forms and methods for both individuals and groups.

Kuharenko (2011) argues that active participation of students who independently organise their interaction in accordance with their learning goals, skills, interests, and knowledge is a sine qua non of successful online teaching.

Methodology

Theoretical methods: systemic analysis and generalization of published psychological and pedagogical experience of online teaching.

Empirical methods: questionnaire survey, interview, observation, analysis of activity outcomes.

For the results at every stage of our research, we used content analysis in order to identify the characteristics of autonomy and jointness by the three components of the psychological readiness of students for joint activity as autonomous actors in online education.

Table 1. Indicators of psychological readiness for online education

Type of readiness	Autonomy indicator	Jointness indicator
Motivational	strong learning needs, goal setting	affiliation with the online learning group, willingness to communicate about the educational process
Volitional	self-organisation, self-regulation, resource allocation (intellectual, temporal, etc.)	ability to formulate one's educational needs, correction of one's activity with regard to evaluation of activity results
Communicational	self-representation of results, suggestion to the group to use well-tested ways of learning	mutual understanding, mutual evaluation

Results

In our experience, all the participants of online education (authors, experts, school and university students, teachers, etc.) identify its numerous advantages, such as open access, informal setting (as opposed to university auditoria), temporal flexibility, which allows the students to choose the most convenient times for learning.

At the same time, it is obvious that online education places a high demand on the students' level of preparation and educational motivation, as the function of control is significantly less important for online education than for other forms of teaching. Also, there are still some students with zero computer literacy. In addition to the technical difficulties that some users of online courses face, there are some psychological ones, such as insufficient self-regulation, a lack of socialization skills and abilities, loss of orientation for those who are used to the strict framework of traditional academic courses.

We have found that although contemporary youth receives the extensive personal experience of digital interaction and communication as early as in their childhood, the participants of our research have not always been able to successfully transfer this experience into the educational process. Today school children and (even more so) university students are highly active in social networks, on online fora, and their personal blogs. They see online communication as quite normal and mundane, and yet they face difficulties in online education. In our opinion, these difficulties are caused by the students' initial mindset, which excludes the possibility of academic disciplines having interesting and worthwhile content. Another reason may consist in a low level of self-discipline, which is the main prerequisite for quality online education. Consequently, many of the students do not see an online course as an efficient tool of professional training, rather as a source of extra-curricular material, intellectual entertainment, or self-development.

In this regard, our main goals were, first, to identify the peculiarities and levels of formedness of psychological (motivational, volitional, and communicational) readiness of students for joint activity as autonomous actors in online education and, second, to classify students into groups on the basis of two criteria: autonomy and jointness.

All the 112 participants of our research were students of the first, second, and third year at the Volgograd State Socio-pedagogical University, who were taking the online courses "Educational psychology", "IT, communication technology and media literacy". All the students have reported an overall positive attitude to online learning. On the basis of how well-formed different types of readiness were, we divided the

students into the following three groups: 1) students with high-level readiness for autonomy and low-level readiness for jointness; 2) students with high-level readiness for jointness and low-level readiness for autonomy; 3) students with high-level readiness for autonomy and high-level readiness for jointness in the process of online learning. We did not study the low autonomy/low jointness type, as we only surveyed the students who had chosen to be part of the online courses in the first place.

The high autonomy/low jointness students had the following distinctive features. Firstly, they displayed a high-level ability for reflection. During the interview they actively analysed their own experience: "The thing I liked was that I was the person to choose where to start learning and how much time to spend on a particular topic", "Self-control section for each topic was a real life-saver. Whenever I studied the theory and then did the self-control, I felt like everything fell into place, and I had mastered the material", "I found the video lectures section quite convenient, as it is well-structured, and you can always go back again", and even made suggestions to improve the quality of the course: "At the intermediary control level, the time between attempts should be shortened, as you have to wait a lot, even if you have already understood your mistake". Another feature these students have displayed is a high-level responsibility for their own learning choices: "I choose to do a particular task or to skip it not because I want to make life easier, but simply because I want to go back to some of the tasks at a later stage". This group was especially noticeable for their discipline: they were quite effective at time management and quite independent in controlling their own learning progress through intermediary tests. Their high-level autonomy manifested itself in independent decision-making combined with a high-level motivation and readiness to cooperate with their peers and the teacher alike. One example of such autonomy was our experience of working with third-year students who were doing an internship in China at the time. Because they were away, they, unlike their group-mates, were initially not invited to be part of our pilot launch of the "Educational psychology" course. Having learnt from their friends that the course had started, they independently decided to take part in it, registered for the course, studied the course description and very successfully participated in it together with the other students. They demonstrated a healthy combination of independent decision-making and high-level motivation with effective peer interaction: they often asked for clarifications about the tasks and completed them in cooperation with their group-mates.

Students of the high jointness/low autonomy group were strongly oriented towards the teacher as the central figure of the educational process. They felt much more comfortable if they did not have to make their own choices about what to do. Such students tended to expect to be organized and given tasks by the teacher. They avoided evaluating their own progress and were content to keep up with the group, to go at

"the normal pace", which, as we know, is a popular myth. During the interview, such students underscored the necessity for having video lectures with subtitles, in which the key ideas of the lecture would be represented: "you hear the teacher and at the same time you have all the main ideas on your screen". High readiness for joint activity was especially obvious in the students who took part in our pilot projects. Some of them took a mature position of cooperation. They identified inaccuracies and mistakes, e.g., in self-control and intermediary control sections, gave feedback to the author of the course. As a whole, students of the high-level jointness group actively communicated with the teacher about the difficulties they faced, spoke about their readiness to share their experience and knowledge with others, expressed their desire to take part in the creation of the learning content.

The third group (high autonomy/high jointness) is by far the least numerous. They possess the following characteristics. In the motivational sphere, they demonstrate a fully-formed internal motivation to be autonomous actors within a joint activity in the open digital educational environment; in the volitional sphere, they display the ability to plan their own educational activity and independently set educational goals, carry out effective self-control of both the procedural (the management) and the qualitative (how well the material is learnt) aspect of the process; in the communicational sphere, they demonstrate the ability to make and successfully maintain contact with other participants of the online course, the ability to take on various social roles: the student, the expert, the author of the educational content, the manager of the educational process, etc.

All of the three groups of students have successfully completed the online courses, and yet there are grounds to think that the students with a combination of high-level autonomy and high-level jointness were able to get the most of all the resources of online learning. This balance of high autonomy and high jointness is an indication of a high level of readiness for joint activity as autonomous actors in online education.

Discussions

The category of jointness has always been viewed by researchers of the learning process as a characteristic of students' collective organization, but there are almost no publications dedicated to categories of autonomy and jointness in the teacher-student diade. This self-evident example of interaction has never been used as a prototype for students' joint activity, and yet in highly organised student communities, students can start taking the roles of content makers and organizers of the learning process. This trend is especially well-pronounced in online education, as our empirical research has shown a high-level of students' jointness with the teacher (the author of the course). In our opinion, such jointness serves as a

prototype for the student's jointness with the group in the online course. This model is impossible in the traditional classroom education. The online format puts the teacher on equal footing with the students; now the teacher's role can, with proper training, be played by any of the members of the online course: by a student, an expert, a content-maker, an educational manager, etc.

Another practically underresearched characteristic of online courses is that, depending on the form, the goals and the methods of interaction relevant for a given educational activity, all the participants may "try on" various educational and professional roles: in some situations they can be "students", in others – "teachers", "experts", "methodologists". This depends not so much on their age and formal status as on their competence levels, relevant experience, and personal goals. Thus, we can speak not only about distribution of various kinds of activity between the participants of the educational process, but also about each of the participants' management of their own activity depending on their goals, the current situation, and their functional role.

Conclusion

The results of our theoretical research allow us to argue that nowadays online education in higher school is an important tool for professional training of future specialists. Its strong features include easy access to opportunities for autonomous activity (independence and responsibility) and organization of constructive joint interaction between all the participants of the educational process.

Our research has shown a high potential for online education for university teaching. The advantage of online format and its special didactics allows for a steady improvement of the quality of higher education. Problems and difficulties in integrating online courses into university curriculum are usually connected with a lack of readiness (including a lack of psychological readiness) of the participants of the educational process for a constructive and effective usage of online resources to achieve those educational goals which cannot be achieved through traditional educational technologies.

That is why students' psychological readiness for joint activity as autonomous actors in open digital space is a topical issue for contemporary educational theory and practice. Students need to form an internal motivation to be autonomous actors in a joint activity in an open educational space, they need a high motivation for joint activity, a willingness to choose educational content, to set their own educational goals, to choose educational tools, to plan and manage their time, to control and monitor their own educational process and the quality of their own learning outcomes, to initiate interaction with other actors in the online course, to share information and experience, to carry out a mutual evaluation, they need an opportunity to try themselves at different social roles: student, expert, content-maker,

educational manager. It is not possible to develop the majority of these competencies in the traditional intramural classroom environment.

In order for students to form a high-level psychological readiness for joint activity as autonomous actors in online education, it is necessary to utilize the experience and skills obtained in their "digital life", e.g., their social network experience. It is important to build the methodological and organizational structure of online courses so that the students can build their own educational trajectory through various forms of joint activity.

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