

INCREASING STUDENT MOTIVATION IN HIGHER EDUCATION DURING A PANDEMIC

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Abstract

The rapidly spreading COVID-19 pandemic caused by the coronavirus SARS-CoV-2 (2019-nCoV) has led to an educational transformation of traditional academic activities in distance learning through intensive digital communication in an electronic environment. So we witnessed how universities in Bulgaria and around the world were forced to start using with flexibility different types of communication software applications, electronic and learning platforms and/or cloud platforms in their work environment for remote classroom management (Microsoft Teams, Skype, Zoom, G Suite, Viber, Facebook & Messenger, Google Classroom, Blackboard, Moodle, Dropbox, OneDrive, etc.). Unfortunately, the lack of direct contact between students and lecturers during classes in the process of distance learning had a direct impact on the level of student motivation. The long period of implementation of distance learning measures has shown that the effectiveness of distance learning directly depends on the conscious motivation of the learners. Therefore, the purpose of this paper is to study a model related to increasing the motivation of students during distance learning. The results of the research have been used to propose specific recommendations for increasing the motivation of university students during the educational process.

Keywords: *motivation; distance learning; e-learning; digital education; digitalization; information and communication technologies (ICT).*

JEL Codes: *I1, I0, I2, O3, O33*

1. Introduction

The digitalization of the modern world has strongly influenced the introduction of information and communication technologies (ICT) in education, as they were even more strongly sought after and implemented during the global pandemic caused by the coronavirus SARS-CoV-2 (2019-nCoV). It has led to the extensively recommended and sometimes mandatory transition to distance learning based on the widespread use of ICT. In this sense, innovative educational methods for higher education have been actively developed and implemented both in Europe and around the world with the aim of

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expanding the scope of university activities by creating an electronic information and educational environment. ICTs are a necessary tool for dealing with the difficult situation in all areas of social development and have facilitated the accelerated transformation of the way of learning in educational structures. Thus, the electronic information and educational environment at the university had to provide intensive interaction between the participants in the educational process, including synchronous and/or asynchronous communication via the Internet throughout the study period. Such type of digital learning required the active participation of both lecturers and students in the process of implementing e-education and led to the need to increase the knowledge and skills necessary to handle digital technologies, including the Internet.

The use of digital technologies in teaching is considered by researchers in the field of higher education pedagogy as one of the opportunities to increase the effectiveness of the formation of professional competence of students pursuing bachelor's, master's and doctoral degrees in the relevant scientific fields (Sunders & Werner, 2002; Swan, 2009; Shamova, 2019; Goncharuk & Khromova, 2019; Levina, 2019, Trifunović & Petrašević, 2021). The search for a combination of public web services and educational resources created as a result of the intellectual work of the pedagogical community has been used as an effective mechanism in the development of an e-learning environment. In this sense, the interaction of e-learning environments and the Internet provides an opportunity of organizing learning activities productively and creating a positive correlation between the intensity of the use of social networks and students' perceptions of the use of social networks for educational purposes (Lim & Richardson, 2016). Meanwhile, the Internet provides access to sufficient open educational resources and social software tools widely used in the academic activities of the university (Manca & Ranieri, 2016, Seaman & Tinti-Kane, 2013). The webspace has become an integral part of the learner's preparation, and no one can deny, for example, that Wikipedia plays a major role in the collection and research of information by students (Selwyn & Gorard, 2016). On the other hand, social media is widely used by students in the e-learning process in order to expand the learning experience beyond the limited learning time (Lee & Bonk, 2016).

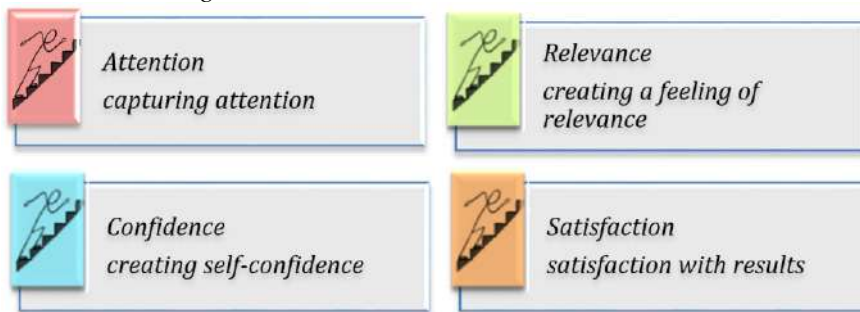
However, despite the arguments set out above, distance learning has become a real stress test not only for the students, but also a challenge both for the lecturers and for the Ministry of Education and Science in Bulgaria. Therefore, despite the fact that distance learning is quite a well studied and researched topic, unfortunately, many conclusions and recommendations have not been adapted to the unexpected COVID-19 pandemic (Reimers & Schleicher, 2020). For example, although modern electronic information and educational platforms for distance learning make it possible to ensure interaction between the learner and the teacher (Elkina, 2020), unfortunately, in this type of teaching, the student's ability

to self-educate and his/her motivation to learn play a key role in training effectiveness. Also, it should be borne in mind that as a rule the acquisition of knowledge in the respective field of study is closely related to the individual approach of the student for acquiring and applying knowledge, searching for the necessary sources of information, as well as the ability to work and process the acquired information. Thus, the effectiveness of the distance learning process directly depends on the conscious motivation of the learner (Asipova & Mamyrova, 2018). In this regard, this paper examines the question of how to motivate students to learn when they are isolated at a distance from their usual classroom activities, and considers models related to increasing motivation during distance learning.

2. The Li & Keller model to increase student motivation - ARCS (Li & Keller, 2020).

The name of the model comes from the abbreviation of the words: Attention; Relevance; Confidence; Satisfaction (*Figure. 1*). The concept of the model is focused on capturing attention, forming a sense of significance, self-confidence and as a final result getting satisfaction from the results obtained from the training. Let's take a closer look at all the procedures used by the teacher to motivate students.

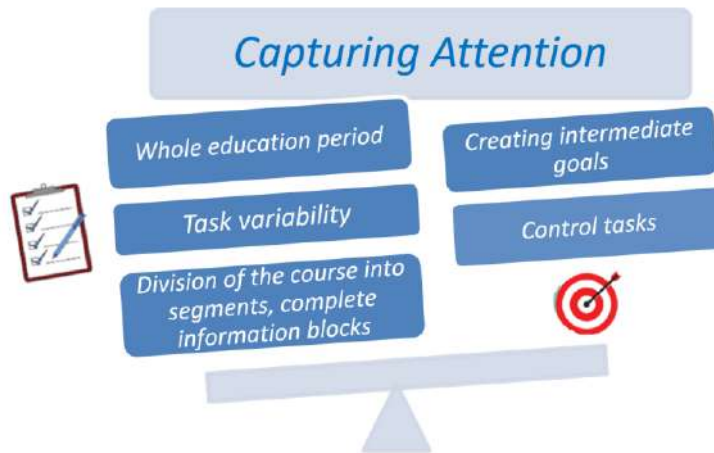
Figure no. 1. John Keller's ARCS motivation model



Source: Author's own elaboration

- **First: Capturing Attention** is important throughout the whole education period, so the method of task variability is used, as well as the division of the course into modules, containing complete information blocks, goals and control tasks (*Figure. 2*). Also, capturing students' attention and making them interested in the topic can be done by presenting complex material in a simpler way and at the same time diversifying the presentation by using understandable language, examples and allegories.

Figure no. 2. The elements of capturing attention

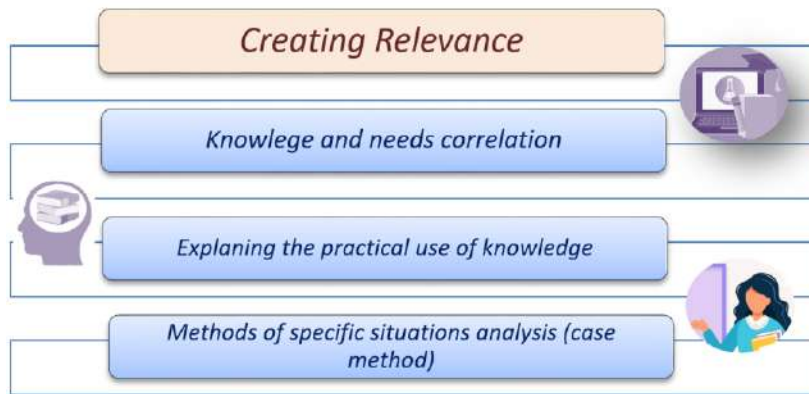


Source: Author's own elaboration

The lecturer must take into account that the student at university, unlike the student at school, evaluates the information differently. In this sense, students believe that being smart and studying at university is a prestigious endeavor, and the modern student has a greater ability to perceive and process information, especially with the help of modern ICT means of communication. Their motivation to study should be stimulated through exciting, interesting course assignments and projects, especially those that are related to their future profession and that make them display creativity while they complete their assignments. In this regard, the lecturer should involve students in discussions on interesting topics and encourage them to "talk", to present the results of their work and thus to draw their attention to the topic.

- **Second: Relevance.** It should be remembered that in the learning process the student compares the acquired knowledge with his/her practical needs formed before the beginning of their studies (Figure. 3). The lecturer can create a sense of significance through a specific explanation of where and how, on a practical level, the acquired knowledge and skills can be useful. It is even more effective to create practical tasks related to real-life practice. Therefore, the "case method" is used for situation analysis, which is a teaching technique using descriptions of real or near-real situations. In solving such a task, the student must study the proposed "case" and understand the nature of the problem, then consider options for possible solutions and choose the best one.

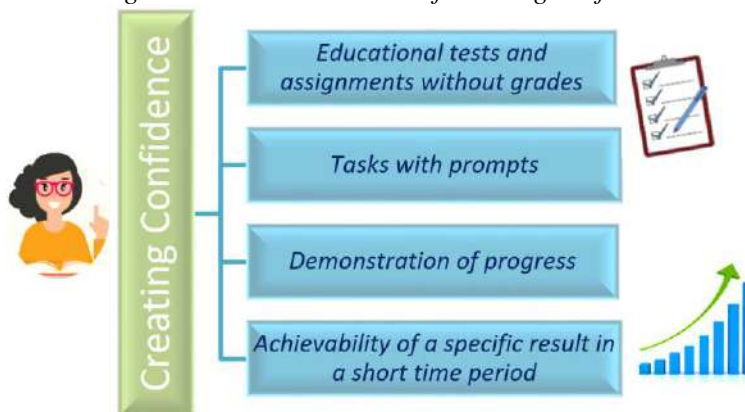
Figure no. 3. The elements of the relevance of knowledge



Source: Author's own elaboration

• **Third: Confidence.** The student should never doubt that the acquired knowledge will be useful in his profession. The lecturer must help the student maintain this confidence at all stages of the course (Figure. 4). Building confidence in the student is reinforced through the stages of intermediate tests of knowledge, through which the student can answer exam questions, and the error in the answer should not have negative consequences. It is recommended to give feasible tasks that do not go beyond the scope of the study material, as too complex tasks can cause a sharp negative reaction in case of failure. Moreover, during distance learning, the lecturer must regularly show the learning course progress – what part of the material has been covered and how much remains; what students will learn by the end of the course; what lies ahead at the end of the course; where this knowledge will be applied – not only in connection with the study of other disciplines, but also in the real-life practice and future professional realization of the learner.

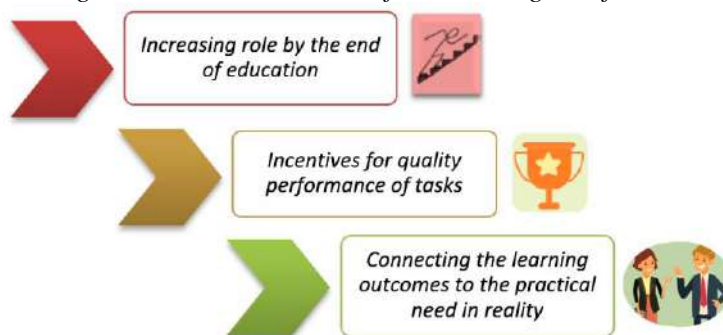
Figure no. 4. The elements of creating confidence



Source: Author's own elaboration

- **Fourth: Satisfaction.** Towards the end of the training, the lecturer should focus on student satisfaction (*Figure. 5*). The level of student motivation falls with the approaching graduation. This is understandable, as fatigue accumulates over the long period of training, and the large amount of information requires understanding and primary analysis. In addition, doubts begin to arise in the learner, such as: will the knowledge gained be needed in my work? As the effectiveness of the efforts generates satisfaction, during the course the lecturer must provide incentives for the quality performance of the tasks. And in order to achieve effective motivation of students during distance learning, it is recommended that training courses take into account and apply these motivational aspects to students.

Figure no. 5. The elements of the creating satisfaction



Source: Author's own elaboration

3. Research results and discussion

According to the adopted methodological recommendations, the training at the University of Forestry in the 2020/2021 academic year was organized by using distance and mixed forms of training and by using offline and online mode of work and training, observing all imposed health measures in the country. All academic policies as well as requirements for compliance with sanitary standards, social distancing rules, library resources, technical support services, academic and non-academic support services for students and applicants were posted on the university's website.

The paper examines the issue related to the level of motivation in students during isolation at a distance from their usual classroom activities. In this regard, an independent survey was conducted during the distance learning period for the 2020/2021 academic year at the University of Forestry in compliance with the health care measures imposed by the Ministry of Health in the Republic of Bulgaria. The purpose of the survey was to get feedback from students on the transition to a distance learning form of education. The content and results of the study are presented in *Table. 1*.

Table no 1. Rating of criteria for conducting distance learning

<i>Criterion</i>	<i>Rating</i>
<i>How did you adapt to the new distance learning conditions?</i>	5,3/6
<i>Have you been informed about the changes in the distance learning process in time?</i>	5/6
<i>To what extent do you use ICT tools and electronic applications to conduct distance learning?</i>	5,4/6
<i>How would you evaluate the work of lecturers online?</i>	5,6/6
<i>How would you assess the level of the learning load during distance learning and relating the theoretical material to specific examples?</i>	5,5/6
<i>What is the correlation between the speed of new knowledge presentation and its acquisition?</i>	4,8/6
<i>Are the explanations of the basic concepts and definitions on the topic sufficient?</i>	6/6
<i>How would you rate the availability of the presented teaching materials?</i>	5/6
<i>How would you rate the assignment and ability to perform interactive tasks during distance learning?</i>	5,2/6
<i>How would you rate the availability of feedback provided by the lecturer?</i>	5,2/6
<i>How would you rate the techniques used to maintain students' attention and motivation</i>	4,5/6
<i>How would you rate your level of motivation to learn during distance learning?</i>	4/6

Source: Author's own elaboration

The results of the study showed some difficulties encountered by students in the process of distance learning, such as insufficient knowledge and skills to work with computer technologies and e-learning platforms; difficulty in performing practical tasks without direct contact with the teacher; reduced concentration and acquisition the study material when working at home, etc. Therefore, it can be noted that effective learning, even with the application of the most advanced information technology, is impossible without constant interaction between teachers and students, which today requires the application of

a new form of teaching by creating webinars, organizing group and project work and actively applying techniques to maintain students' attention and motivation.

Ultimately, however, it can be said that during the period of distance learning, teachers and students managed to build skills for a digital way of working and learning. And the experience of distance learning reveals not only problems, but also a number of interesting opportunities, including how the stimulation of student motivation plays an important role in the educational process.

4. Conclusion and Recommendations

The digitalization of the world around us and the continuous use of web resources have become an important tool for the educational activities of students and lecturers in higher education.

This is exactly what we have witnessed thanks to the COVID-19 pandemic, which has proved to us that in a world of ever-evolving technologies, if they are properly mastered and targeted, we can not only deal with a difficult period for all of us, but also grow digitally, improve our educational system and develop key competencies at a professional level in accordance with the new generation of educational standards. Undoubtedly, it should be noted that effective teaching, even through the use of the latest information technologies, is impossible without constant interaction between students and teachers, which today requires the formation and operation of a new form of education based on free operation of ICT tools and technologies, both by students and teachers. Also, the experience we gained from the past educational process in 2020 and 2021 revealed not only the problems of distance learning, but also a number of interesting opportunities, including how student motivation achieved through an ICT-transformed learning process can play a vitally important role. In this sense, the traditional motivation and organization of the educational process turned out to be insufficient and, in the foreground, there is a need to transform and complement it with the need of motivation to learn and work through ICT for education.

The conducted investigation of students' and lecturers' motivation for working with ICT and conducting digital education, together with its capabilities and shortcomings, allows for the creation of more effective pedagogical strategies and the definition of guidelines for further work that can be applied in practice in relation to the digitalization of the educational process in higher education. The introduction of such an approach to e-learning has led to the transformation of the traditional understanding of research, teaching and learning activities at the universities and will be a key experience in their future development.

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