

BEYOND THE SCREEN: HOW ONLINE EDUCATION RESHAPED THE TEACHING STRATEGIES AND PEDAGOGICAL RELATIONS

Roxana Constanța ENACHE¹, Ana Maria Aurelia PETRESCU², Gabriel GORGHIU³

¹Technical University of Civil Engineering of Bucharest

^{2,3}Valahia University of Targoviste, Teacher Training Department
ROMANIA

E-mail: ¹rocatare@yahoo.com, ²anapetrescu2007@yahoo.com, ³ggorghiu@gmail.com

ABSTRACT

The shift toward online and hybrid education remains a critical focal point across all levels of the Romanian pedagogical landscape. Transitioning from traditional face-to-face instruction to digital environments imposed a fundamental restructuring of didactic strategies, including methods, tools, and organizational frameworks. As a whole, the transition impacted three core dimensions: (a) the fortification of pedagogical relationships and interaction intensity; (b) the holistic development of student personality traits, such as autonomy and motivation; (c) the recalibration of instructional styles. In this respect, the paper tries to analyze the perceptions and attitudes of over 150 primary and secondary teachers from several Romanian counties, concerning the effects generated by the educational process carried out in the online environment, in strong relation to the levels mentioned above. The resulting data provides evidence-based socio-psycho-pedagogical guidelines designed to ensure high-quality standards in the contemporary learning process, which include the online format in a great extent.

Keywords: online education; teaching strategies; pedagogical relations; teachers' perceptions; teachers' attitudes;

INTRODUCTION

The issue of online education is a topical one at all levels of the Romanian educational system structure. The transition from face-to-face education to an education that includes the online component or the hybrid one (to a small or great extent) has led to a series of changes in teaching methods, teaching materials, and forms of organizing the instruction process. This fact generated significant effects, structured on the following levels:

- at the level of pedagogical relationships - in terms of their depth, duration, and intensity.
- in terms of developing the students' personalities, in relation to a series of aspects concerning: self-confidence, self-esteem, curiosity, involvement, motivation, awareness, attention, desire, etc.
- the teacher's teaching style - considering personality traits, teaching experience, professionalism, pedagogical tact, etc.

- in terms of the involved teaching strategies - traditional or modern, creative or routine, teaching-centered or learning-centered, etc.

In general, online education has become a pandemic reality in a significant proportion of most education systems worldwide. Recent and multiple studies on the subject attempt to answer several problems related to how to deliver training in the best format, while also outlining various advantages and limitations. In this context, some answers to the following questions are considered important:

- Is online education a vector for ensuring quality education?
- What kind of competences will it generate in the trainees?
- What kind of effects will it have on pedagogical relations, on the personality of educators and learners?
- What effects will it have on future educational policies and practices?
- Are there any aspects that need to be maintained in the training practices (as those defined during the pandemic time)?

Referring to the dimensions configured through those questions, we have tried, in the context of this study, to capture and analyze the opinions of the responding teachers on all those aspects, starting from the premise that educational reality is perceived objectively, primarily by those who directly design and manage the daily educational experiences. As such, the main purpose of this study is to identify the perceptions and attitudes of the teachers (considering the limitations of the investigated sample), regarding the effects generated by an educational process carried out in the online environment, over a considerable period of time (about 2 years). We believe that the results obtained in the context of the investigative approach can contribute to the configuration of valid methodological benchmarks - from the socio-pedagogical point of view - for designing and implementing a quality education in online or hybrid systems.

1. THE CONCEPT OF ONLINE EDUCATION

As stipulated since the first decades of this century, there is a pressing need to move beyond traditional classroom routines by aligning scientific curricula with contemporary societal challenges. This shift requires a fundamental restructuring of the training process, leveraging Information and Communication Technologies to access high-quality data and implement modern, problem-solving methodologies. In this sense, e-Education appeared as a key concept, being enriched by the development of online platforms that offer a unique advantage: the ability to automate administrative and instructional tasks that previously relied solely on the teacher's manual intervention (Gorghiu, Gorghiu, & Pascale, 2018). On the other hand, it is very difficult to configure an ideal conceptual framework specific to online education, but in this sense, various sources approach the issue from different perspectives: ways to implement it, advantages, basic characteristics, forms of implementation, etc.

Online education represents “a new way of looking at the learning process, in which the fundamentals remain the same, only the means of exchanging and acquiring knowledge change.” (Benchea (coord.), 2021). Thus, online education can be defined as the “electronically supported learning that relies on the Internet for teacher/ student interaction, and for the distribution of classroom materials”. (<https://www.indiaeducation.net/online-education/articles/what-is-online-education.html>).

From another perspective, online education is associated with “an educational experience that has no physical boundaries” which gives learners the opportunity “to attend

classes and interact with colleagues in any location”. (<https://www.igi-global.com/dictionary/emergence-successful-online-courses/20963>). Moreover, “online education is a flexible learning system that encompasses any type of learning that takes place over the Internet.” (<https://www.encyclopedia.com/finance/finance-and-accounting-magazines/online-education>)

In general, the term “online education” is used to encompass all forms of teaching and learning, using the internet (...), including: online learning, e-learning, blended learning, web-enhanced learning, hybrid learning, flipped classrooms, MOOCs (massive open online courses), and adaptive learning. (Picciano, 2017)

With a direct focus on how online education was carried out in Romania during the pandemic period, we note as significant two studies by nationally and even internationally renowned authors. The first is a study conducted by a team of authors from the most prestigious Romanian universities, specialists in the field of psychology and educational sciences (Botnariuc et al, 2020). The authors mention, in the introduction, that during the pandemic, the education system was under great pressure due to the exclusive use of distance communication tools. The assumptions on which the authors of the study are based are as follows:

- the Romanian education system is partially ready to implement online education;
- there is a significant number of teachers who do not possess sufficient skills specific to exploiting ICT in their classrooms;
- the current curriculum allows - for distance learning activities - limited extent;
- edu-tech companies have not been stimulated to build interoperable solutions adapted to the real needs of the Romanian educational system.

Another important point of view was formulated by the office of the Presidium of the Romanian Academy in July 2020. In this context, while noting that “information and communication technology, artificial intelligence and collaborative robotics represent a remarkable support in the process of education and training”, it is emphasized the fact that “their use must be done with caution and responsibility”. Moreover, online education can have negative effects on the psychological and social development of pre-school and primary school children. From the teacher’s point of view, online education implies “a change in paradigm” which means, in fact, a change in the way teaching activities are designed and carried out, but which cannot produce higher quality effects without an adequate infrastructure. Moreover, attention is drawn to the fact that the generalization of online training approaches may compromise the entire education system, both through direct consequences on quality and through the requirements of ensuring equitable access for all students/ teachers to a high-performance infrastructure. ([https://acad.ro/mediaAR/pctVedereAR/2020/d0728-Punct de vedere Educatia on-line si educatia in clasa.pdf](https://acad.ro/mediaAR/pctVedereAR/2020/d0728-Punct_de_vedere_Educatia_on-line_si_educatia_in_clasa.pdf))

2. RESEARCH AIM AND METHODOLOGY

The present research proposes to analyze the perceptions and attitudes of more than 150 primary and secondary educators across several Romanian counties, focusing specifically on the impact of prolonged online instruction within three clear dimensions: (a) strengthening of pedagogical bonds and increasing the educational interactions; (b) facilitating the growth of student personality, specifically regarding autonomy, intrinsic

motivation, and self-regulation; (c) systematic adapting of instructional methodologies and teaching paradigms.

The main method used for data collection was the questionnaire survey. For this purpose, a questionnaire with 12 items was developed, comprising 3 subjective, open-ended items, 1 semi-objective, completion item, and 8 closed-ended, predetermined-response items. The questionnaire was administered online via Google Forms, respecting the anonymity and confidentiality of the responses. All formulated items comply with the principles of professional ethics, being in accordance with the regulations of the European Union - the Directives on cyber security and processing of personal data (Regulation (EU) 2016/679 of the European Parliament and of the Council of the European Union of 27 April 2016 on the protection of individuals about the processing of personal data and on the free movement of such data - General Data Protection Regulation). All respondents agreed to the processing of personal data for research purposes. In order to clarify some feedback mentioned in the questionnaires, an interview survey was also conducted with some of the respondents, considering the same items included in the questionnaire.

The surveyed teachers are involved in Romanian pre-university education, from different specializations and levels of schooling (preschool, primary, lower secondary, and upper secondary). The data obtained were initially processed quantitatively, using statistical-mathematical methods, and then analyzed qualitatively.

3. RESEARCH RESULTS

The following results were recorded after the administration of the above-mentioned questionnaire. Thus, for the first item, concerning the extent to which respondents consider that education is carried out effectively in the online environment (illustrated in Figure 1), the data obtained leads us to consider that respondents who consider that, can manage to design effective educational approaches also in the online environment, fully benefiting from the advantages offered by digitalization and its adequate logistical support. However, 12% of respondents considered online education to be effective only to a small or very small extent, and this figure should not be neglected. In this case, we believe that the reasons and arguments supporting this perception should be identified and analyzed.

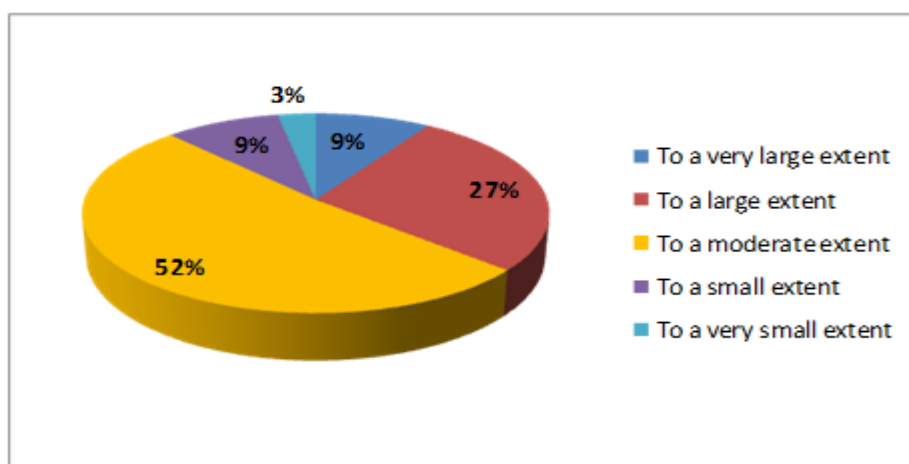


Figure no. 1. Teachers' perceptions related to the extent to which they feel education as being delivered effectively online

Source: Personal authors' archive

The reticence of some respondents invoking the lack of teachers' experience with the online education system can be explained taking into consideration the fact that they are not familiar as expected with the educational platforms; perhaps there is a diversity of platforms which are used in school, in initial or in-service training, in evaluation, inspections, etc. and, by sure, the reaction to change in a relative short time - teachers being quite conservative, in general. During the interviews, the respondents also mentioned the lack of time and motivation to invest in developing skills they consider temporary or only necessary in the pandemic.

Another item asked respondents for their personal meanings of online education, and the open-ended responses offered a variety of views, interpretations, and reactions, which are illustrated as follows:

- “a challenge, a continuous adaptation, a permanent search, an intense creativity”;
- “rethinking activities, using limited teaching material, taking into account the concrete intuitive thinking related to students (especially at 3... 6 years old)”;
- “improving the use of digital technology and creating open educational resources”;
- “a surrogate, a necessary transitional alternative, from which there is a lot to learn”;
- “possibility to participate remotely in various courses”;
- “an extra effort with no measurable results”;
- “effort, stress, inefficiency”;
- “natural transition to a modern system, which has been implemented for over 10 years in developed countries”;
- “personal and family health safety”.

Thus, we observe a predominance of positive, desirable meanings over negative ones, which often are correlated with the reluctance for change. This can be explained by a strong desire to adapt to the new socio-educational context and to meet the students' needs.

In the respondents' opinions, the most important advantages of the e-learning format, in descending order of frequency, are the following:

- time gained from not having to travel (35%);
- ensuring personal and student health (24%);
- comfort of the home environment (21%);
- using interactive digital applications (18%);
- exploiting educational videos (17%);
- more time considering how homework is evaluated (12%).

In general, the respondents' feedback is focused on the positive aspects of online education, with the priorities of teachers being clear, related to time, health, and family.

Complementarily, the most common disadvantages seen in online education were related to:

- getting the attention of all presented students (36%);
- time spent on designing the teaching strategy (33%);
- technical difficulties independent of the teacher's skills: poor internet connection, poorly performing devices (33%);
- ensuring objectivity in assessment (32%);

- obtaining feedback (20%);
- difficulties in using digital platforms (15%).

The disadvantages of the online education system draw our attention to the limitations of some teachers in terms of their digital skills, which explains why the educational potential of educational platforms in the field of attention, motivation, planning, etc. cannot be fully exploited, as well as issues related to the relatively modest digital infrastructure of the Romanian education system.

As possible solutions to those problems, the respondents considered that the main aspects to be changed/ improved in the context of online/ hybrid education are related to:

- teachers' digital skills - 48%;
- proper instructional strategies - 40%;
- proper evaluation methods and tools - 38%;
- adapted teaching style - 36%;
- adapted learning style - 27%;
- duration of teaching activities and format of communication - 24%.

Thus, we observe that embracing online education, a series of aspects are perpetuated, being not functional in the face-to-face system: lack of linking of theory to practice, difficulties in making content accessible, inauthentic, impersonal communication, subjective evaluation, inadequate/insufficient initial and in-service teacher training, etc.

The following item: *“To what extent do you think that online/ hybrid education produces changes in the pedagogical relationship, in terms of depth, duration, and intensity of social interactions during lessons/ teaching activities”* brings to our attention the following answers, illustrated in Figure 2.

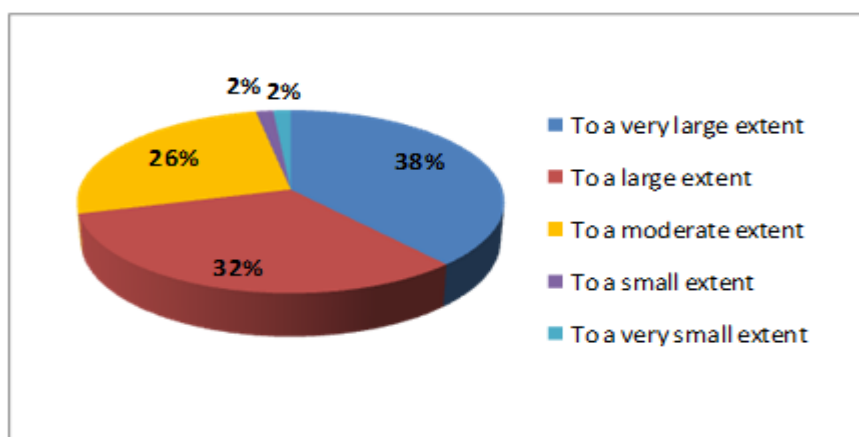


Figure no. 2. Teachers' perceptions related to the extent to which they value online/ hybrid education as producing changes in the pedagogical relationship

Source: Personal authors' archive

As seen in the figure, there is a balance towards the upper end of the scale, which leads us to adopt a reflective and realistic attitude towards those psycho-social changes. In relation to the main aspects that would make e-learning more attractive and effective, respondents considered several aspects of its dimensions, which can be identified in Figure 3.

In relation to the obtained feedback, we consider that the educational resources used in online education can also be successfully exploited in the face-to-face format, teachers' competences gained in the digital field being introduced in ordinary classrooms; more frequent use of practical assessments brings to teachers' attention the advantages of this form of assessment; all the efforts and changes brought by online education will generate medium and long-term effects on the educational process and consequently, in the education system.

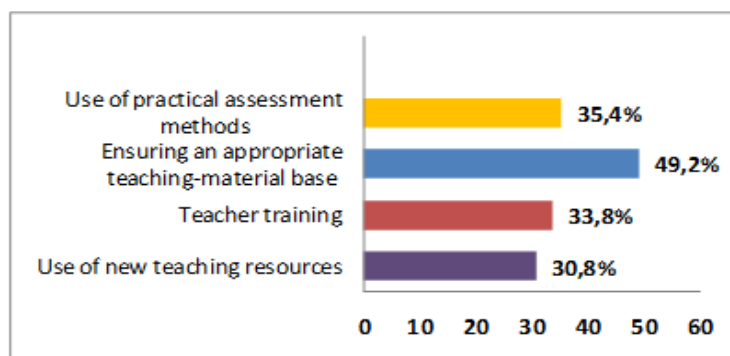


Figure no. 3. Teachers' perceptions related to the main issues that would make online education more attractive and effective

Source: Personal authors' archive

Regarding the main aspects that motivate students in the context of online education, the teachers highlighted:

- use of interactive digital applications - 72%;
- alternating synchronous and asynchronous activities - 29%;
- effective communication - 15%;
- using examples from everyday life - 12%.

Thus, the responding teachers discovered ways of motivating students that they were reticent about or considered unusual, inappropriate in face-to-face education. The use of new information technologies in lessons, especially at early ages, for some teachers (and even for some parents), was unthinkable, forbidden, or limited. However, during the pandemic, it became the only saving solution, bringing them closer to students, motivating them, making them curious, attentive, and ready to participate in their own learning.

Having the opportunity to express open-ended answers on what specific elements of online education teachers would keep in their current teaching practices, most of the respondents mentioned:

- interactive digital applications;
- online activities with parents and peers;
- storage platforms for learning materials;
- posting homework on e-learning platforms;
- using Open Educational Resources (OER).

Thus, it is confirmed that during the pandemic, and surely, after that period of time, teachers developed educational communities, collaborated, shared resources and experiences with other colleagues, and implemented projects. They realized that together they could exploit and value all those experiences and make the lessons successful.

At the same time, the respondents frequently chose the following fields in which they consider that online education has produced changes in the mental processes and functions involved in learning, as well as in the students' personalities:

- students' attention and curiosity - 35% - to a great extent;
- motivation for learning - 36% - to a great extent;
- critical thinking - 36% - to a large extent;
- self-confidence and self-esteem - 30% - to a very large extent;
- sociability, communication, interpersonal skills - 35% - to a very large extent;
- creativity - 29% - to a very large extent.

Based on the analyzed results, we believe that a reconfiguration of current educational theories and practices is strongly needed, aimed at gathering an authentic, quality education, realistically centered on the learner's needs, interests, and personal characteristics.

The challenge to identify what has been changed in terms of teaching style - as a result of the online/ hybrid teaching experience - was filtered through the respondents' own experiences. In this respect, the responses were diverse, and here are presented the most common ideas, formulated as follows:

- "I am more interested in how my work is evaluated by students".
- "The way I structure a teaching sequence and the way I communicate with my students are much more important to me now".
- "I have acquired a much greater degree of flexibility in teaching, assessment, and in the use of differentiated strategies".
- "I am much more open to the use of digital applications".
- "I have been looking for more dynamic teaching solutions to capture and maintain my students' interest".
- "I have experimented with teaching with self-created digital resources, and checking knowledge with digital apps";
- "I have carried out continuous training activities through webinars from my home."
- "I have become more permissive, and I improved my ICT skills."

4. DISCUSSION

Through the present micro-research, we tried to capture as realistically as possible the teachers' perceptions regarding the education carried out in online or hybrid systems, in Romania, especially in the period started with 2020 and continued till today. Mostly taking into consideration the post-pandemic time, perceptions of Romanian teachers regarding online and hybrid education have shifted from *emergency survival* to a more nuanced, strategic evaluation. A critical image of their current attitudes and perceptions involved the following ideas:

- the technology has been seen as an *obstacle* in 2020 - now, the technology is seen as a must in education, and an important means for continuous professional development;
- the technology has created a type of *relationship crisis* - a major concern among Romanian teachers remains the erosion of the *pedagogical relationship*. Even though there is technology in classrooms, there are a lot of proper options for developing didactic activities, but an important part of teachers consider the online environment as *impersonal*, compared to traditional face-to-face settings.

Moreover, many teachers feel they cannot accurately gauge student understanding or emotional well-being, leading to a sense of professional isolation.

- student development is balanced between *motivation* and *autonomy* - many teachers report a perceived drop in student motivation and attention spans, attributing this to the *digital fatigue* and the distractions of the home environment. On the other hand, in a positive note, teachers recognize that online/ hybrid systems have forced students to develop better self-regulation and digital literacy (skills that were previously lagging in the Romanian curriculum).
- the technology may produce *systemic frustration*, but it has to be taken into consideration for the *hybrid education future* - teachers felt a reactive transition starting with 2020, but nowadays, there is a strong demand for platforms and standardized methodological guidelines to replace the approaches used during the pandemic. However, despite the challenges, there is a growing acceptance of *hybrid educational models*. Teachers see value in using digital tools for flipped classrooms by example (learning at home, practicing in classrooms), but in general, strongly oppose a return to exclusive online education.

Considering the presented research, we appreciate its limitations, which are mainly related to the geographical nature, due to the fact that respondents do not cover the entire geographical area of the country (there are no respondents from all administrative-territorial units). In addition, no balance has been recorded concerning the representation of teachers from all the educational levels.

At the same time, from the methodological point of view, the research is limited by the predominant use of a questionnaire-based survey, administered online, and interviews to clarify the answers that could only be conducted with a small part of the respondents (about 10%).

However, we believe that the results of the research can be generalized, as there are studies on the same issue, carried out on the same categories of respondents, but in other countries with a similar socio-educational situation.

CONCLUSIONS AND RECOMMENDATIONS

In relation to the questions initially formulated, we consider that, following the abovementioned discussions, there is a need to answer the question: “*Is online education a quality education?*”. The answer may be positive, but it may be formulated on several conditional factors. Thus, we can argue that online school/ education is a different kind of school/ education because:

- it can be considered an open school, with educational practices more visible to parents, community, etc.;
- it involves an attractive, stimulating, motivating/ inactive, inappropriate, demotivating educational environment;
- it implies a virtual learning environment, often deprived of authentic social interaction;
- it represents an educational format in which the orientation is focused on technology (smart devices, e-learning platforms, digital apps, etc.) and digital skills;

- it becomes an ineffective school/ education in the absence of digital skills and information technology infrastructure;
- it is perceived (by several educational stakeholders) as an inappropriate, demotivating, inactive educational environment;
- it includes modern, interactive teaching strategies, involving the use of digital applications;
- it requires additional time and effort for teachers in both the design and implementation/ evaluation of the teaching approaches.

Based on the teachers' feedback, it can be concluded that online education can provide quality education, but this needs time, skills to be developed, especially in areas such as ICT, time and priority management, stress management, human resources (teachers in particular, but also students), as well as in terms of providing material resources, adequate facilities at school level. As regards the skills generated at the level of trainees, we note that digital skills, communication skills, evaluation skills, time management skills, application skills, linking theory to practice (this aspect we consider to be one that should be improved, regardless of the context of education - face-to-face or online) are in the first place.

Concerning the question "*What kind of effects will online education have on pedagogical relationships, on the personality of educators and learners?*", we consider that it is premature, at this moment, to formulate a comprehensive answer, but we consider as priority directions from the students' perspective a series of educational approaches aimed at: stimulating attention, feeding epistemic curiosity, increasing motivation for learning, developing critical thinking, reducing functional analphabetism, increasing self-confidence and self-esteem, increasing sociability, developing communication and relationship skills, and last but not least, developing creativity. In our opinion, at the teacher's level, initial and in-service training activities should be focused more on developing managerial skills (planning, organization, monitoring), methodological skills, communication skills, differentiated instruction, evaluation, and digital skills. The effects of online learning on the educational policies and practices must be analyzed on the level that leads to an immediate effect which is strongly related (first) to school equipment, and then to the training of teachers who became aware of the important and urgent need to develop digital skills, also necessary in face-to-face education, to design and develop training and evaluation strategies adapted to this moment of societal development. The future will probably bring changes in initial teacher training, rethinking school inspections with a view to obtaining teaching degrees, quality management in education, etc.

In this respect, an answer to the question: "*Are there any issues that need to be maintained in the training practices concerning online education?*", is offered by the current situation, that highlights the need for a reorganization or reconfiguration of education itself, to maintain and make permanent elements characteristic to the on-line system, based on its advantages, especially in relation to time management and priorities.

BIBLIOGRAPHY:

- [1]. Academia Română (2020). Punct de vedere privind educația on-line. Retrieved from https://acad.ro/mediaAR/pctVedereAR/2020/d0728-Punct_de_vedere_Educatia_on-line_si_educatia_in_clasa.pdf
- [2]. Benchea, C. (2021). *Educația digitală - o necesitate în sistemul de învățământ actual. Ghid metodologic*. București: Eduland
- [3]. Botnariuc, P., Cucos, C., Glava, C., Iancu, D., Ilie, M., Istrate, O., Labăr, A. V., Pânișoară, I. O., Ștefănescu, D., & Velea, S. (2020), *Școala online. Elemente pentru inovarea educației, Raport de cercetare evaluativă*. București: Editura Universității din București
- [4]. Encyclopedia.com (2019). Online Education. Retrieved from <https://www.encyclopedia.com/finance/finance-and-accounting-magazines/online-education>
- [5]. Gorghiu, G., Gorghiu, L.M., & Pascale, L. (2018). Enriching the ICT Competences of University Students - A Key Factor for their Success as Future Teachers. *Journal of Science and Arts*, 18(42), 183-190. Retrieved from https://www.josa.ro/docs/josa_2018_1/a_14_Gorghiu_183-190.pdf
- [6]. Picciano, A. G. (2017). *Online education policy and practice: The past, present, and future of the digital university*. New York: Routledge/ Taylor & Francis
- [7]. IGI Global (2014). What is online education? Retrieved from <https://www.igi-global.com/dictionary/emergence-successful-online-courses/20963>
- [8]. India Education (2022). What is online education? Retrieved from <https://indiaeducation.net/online-education/articles/what-is-online-education/>