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# Does the Future of Education Belong to Online Activities?

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**Abstract:** *Romanian higher education, which underwent a period of restrictions generated by the COVID-19 pandemic, has undergone significant transformations in the teaching-learning-assessment process and experiencing online practices. This way of conducting our academic operations, which is new to us, is widely used in many European countries and the United States (Gușu, 2020). The rise of the Internet and widespread access to new technologies have contributed to the application of online practices. They have allowed access to quality education anytime and anywhere, the primary condition being access to the Internet. At least from a technological point of view, we are talking about a real revolution in education - the process of online education (Education.com 2022 available at <https://www.educations.com/articles-and-advice/5-reasons-online-learning-is-future-of-education-17146>).*

*The period since the beginning of the pandemic has tested the flexibility and adaptability of the education system, bringing to the attention of the parties involved the option of distance learning (online), which, at first sight, contradicts the traditional learning system that involves physical presence in the classroom. In this context, the question we are waiting for an answer to concerns the future of education: face-to-face (in the school) or online?*

**Keywords:** *online, classroom education, students, teachers.*

## The Recent Situation

Higher education statistics show a growing worldwide interest in students or graduates in online training programs. As an immediate consequence, universities are increasingly offering distance learning courses.

In the run-up to the Covid 19 pandemic in the United States, the percentage of students taking one or more online undergraduate courses increased from 15.6% in 2004 to 43.1% in 2016 (Snyder et al., 2018). Also, the percentage of students

pursuing full-time undergraduate programs online rose from 3.8% in 2008 to 10.8% in 2016. According to the same source (Snyder et al., 2018), the percentage of graduate students pursuing full-time graduate programs online increased from 6.1% in 2008 to 27.3% in 2016, and the rate of graduates taking one or more online courses also increased from 16.5% in 2008 to 45.6% in 2016.

Beyond the fact that the online format of the courses offers a different experience from traditional schooling in the classroom, it is an option that continues to gain ground, especially among non-traditional adult learners and young people who carry out a form of activity (a job). Based on this finding, universities are developing online programs that address graduate students studying for a master's or doctoral degree. In a survey made by Learning House, Inc. and Aslanian Market Research (2018), it was found that out of 1,500 online graduate students, 86% rated the value of online educational services as meeting or even exceeding their expectations (Learning House, Inc. & Aslanian Market Research 2018, available at <https://www.learninghouse.com/knowledge-center/research-reports/ocs2018>).

At the EU level, the number of citizens and residents taking online courses in 2021 has increased by four percentage points compared to previous years, according to data published by the EU's statistical office (Eurostat), based on the annual survey on the use of ICT in households and by individuals (Schengennisainfo 2022 available at <https://www.schengennisainfo.com/news/number-of-people-doing-online-courses-in-eu-countries-increases-ireland-tops-the-table/>)

According to Eurostat, in 2021, the EU Member States Ireland, Finland, Sweden and the Netherlands are at the top of the ranking of online learning, with a share of 46 - 44% of people between the ages of 16 and 74 years taking an online course or using online learning materials (Schengennisainfo 2022 available at <https://www.schengennisainfo.com/news/number-of-people-doing-online-courses-in-eu-countries-increases-ireland-tops-the-table>).

Croatia, Bulgaria and Romania are at the bottom of the rankings, with only 10% participating in online learning of the total active population. Also, the only Member State in which there was a decrease in the field was Romania, where the number of those who took online courses or used online educational materials decreased by four percentage points (Schengennisainfo 2022, available at <https://www.schengennisainfo.com/news/number-of-people-doing-online-courses-in-eu-countries-increases-ireland-tops-the-table/>).

These values must not deceive us. As can be seen, most of the statistics refer to completing at least one training course online. We deduce from this that the studies also included massive open online courses (MOOC). MOOC is a form of preparation through which a community of receptors can come into contact with complex information that someone wants to pass on. MOOC offers those who wish to access the most varied and best-documented online materials. Thus, prestigious universities, institutions dedicated to education, companies that have transformed the industry, and experts from various fields have the opportunity, through the

MOOC, to offer their knowledge to those interested through courses open to all. In a digital world of low speed and time, this form of training provides a solution to "shorten" the learning process (Massive Open Online Courses Romania, available at <https://mooc.ro/> ).

I made the above remarks to distinguish between traditional online courses and MOOCs. Although they may seem similar, these ways of learning online are different not only in terms of development but also in terms of certifications obtained.

Traditional online courses are generally courses that follow a standard curriculum. However, they are facilitated and delivered online, not in a classroom. These are often provided by universities and are facilitated by a tutor or titular professor. The traditional online courses usually follow traditional peer courses and guidelines, including the program of activities and their deadlines (Research.com 2022 available at <https://research.com/education/online-education-statistics>, Sarmah 2019).

MOOCs, on the other hand, are often short, independent courses; lectures are pre-recorded and accessible all-time (24/7). It should be noted that there is no deadline for completing a MOOC, and the course provider does not have to come from a university (Sarmah, 2019).

Because in this paper we will refer exclusively to aspects of traditional online education, we consider it worthwhile to present the coordinates in which an educational program of this type is carried out, as it happens in countries with a tradition in this field. The traditional online courses have the following content characteristics (Research.com 2022 available at <https://research.com/education/online-education-statistics>):

- course topic content is available once a week;
- the content of the courses is accessible only at the level of the group of students, not outside;
- students have access to learning resources within the online platform or in the institution's library;
- the course modules take between 45 and 60 minutes;
- the course content is constantly updated.

In terms of how they are conducted, the traditional online courses have the following characteristics (Research.com 2022 available at <https://research.com/education/online-education-statistics>):

- takes place, for the most part, according to a preset program in live mode;
- students' access is allowed only to the current topic. The next theme is unlocked after the present article is completed;
- the group of students must follow a unique rhythm of preparation;
- the tutor/teacher provides feedback;
- the course ends at a predetermined deadline.

From here, we notice a great closeness to the traditional teaching-learning system, in the classroom, in terms of scheduling activities and obligations of the actors involved in specific processes. The differences are mainly in how students interact

with the tutor/teacher and the form of access to learning resources.

In addition to asynchronous, personalised online learning – of the MOOC type – the academic practice has developed the form of synchronous, group online learning. Synchronous learning is a general term used to describe forms of education, training and learning that occur simultaneously but not in the same place. This form of learning benefits from digitisation – similar to MOOC – but simultaneously provides an online environment where students learn from teachers, tutors or classmates in real-time, but not in person (The Glossary of Education Reform 2022 available at <https://www.edglossary.org/synchronous-learning/>).

Carrying out teaching activities in an online format in the academic environment presupposes the synchronisation of the participants in the educational activity.

### **Is Online Education Better than Face-to-face Education?**

Let us ask this question in the context of a crisis, such as the Covid 19 pandemic. The answer will be yes, with digital education providing relevant solutions and ensuring the continuity of educational activities of all forms, including higher education. The arguments in support of online education are among the most diverse, with the vast majority having a foundation in the area of new information technologies. In the age of the Internet, when a relationship is based on WhatsApp, FaceTime or Zoom connections - these offer the possibility of contact with colleagues or family without time and space restrictions - education has followed the example, and educators and students around the world have had to adapt (Education first 2022, available at <https://www.ef.com/wwen/blog/language/online-learning-vs-in-person/>).

However, we believe that a comparison between the two forms of education - online and face-to-face teaching, or in the traditional classroom - should not be made in a specific context because we risk getting fake answers (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>).

It is very accurate that the pandemic period has brought digital education to the forefront, and this may be the starting point for rethinking and reforming the education system, which is likely to benefit much more in the future from the online component (Education for all 2020, available at <https://medium.com/@eduforall.us/online-learning-8a2e914c2637>).

Beyond the technology and modern teaching-learning techniques used as arguments for promoting online education, we have at our disposal the results of the experience of some of the most valuable schools in the world that can guide us in choosing an effective solution for providing education.

An objective review published by the American Association for Educational Research (How Does Distance Education Compare with Classroom Instruction? A Meta-Analysis of the Empirical Literature) examined the literature in education between 1985 and 2002 (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>).

The authors analysed 232 studies made at all academic levels, examining three critical components of the educational process: learning outcomes (based on responses from a group of 57,019 students), attitudes toward study (based on responses from a group of 35,365 students), and knowledge accumulation (based on responses) a group of 3,744,869 students). The analysis results certainly did not provide consistent arguments exclusively in favour of one or another of the methods of education - online or traditional in the classroom (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>). Each of the methods has proven its advantages but also its weaknesses.

In 2010, an analysis published by the US Department of Education for the Evaluation of Evidence-Based Practices in Online Learning showed that students who practised e-learning had results similar to those in traditional face-to-face education (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>).

In conclusion, we believe that a correct assessment of the two forms of education should not be based on the question "Is online education better than face-to-face education or not?" but on the question "How can online education be effective?".

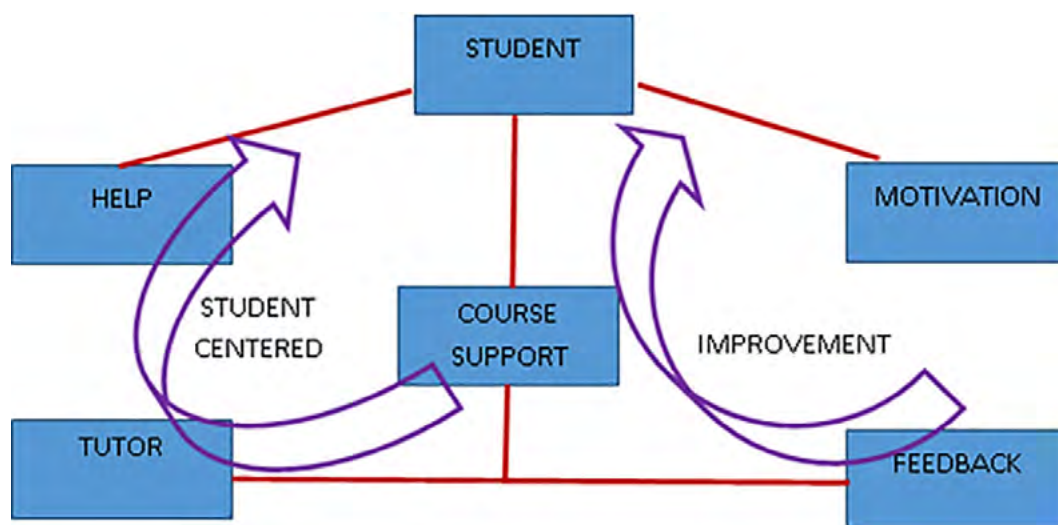
Why such a question? Because traditional education has a long history, with multiple school models, reforms and innovations whose results have been verified over time. Beyond running out of resources, formal teaching is at the point where it must accept the possibility of an alternative – online education – to support it – if it proves effective – and reform itself by taking on innovative elements promoted by digital education.

### **Why Online Education, and under What Conditions?**

The first answer to this question is that significant aspects of everyday life are subordinated to innovative modern technologies to a greater or lesser extent. For example, given that interpersonal communication and interactions with the home and the workplace benefit from the support of information technology, the education methods inevitably show a tendency to migrate from the classroom to an electronic interface available to each participant in the teaching act.

At first, as can be seen from most published studies (Education.com 2022 available at <https://www.educations.com/articles-and-advice/5-reasons-online-learning-is-future-of-education-17146>, education for all 2020, available at <https://medium.com/@eduforall.us/online-learning-8a2e914c2637>, Education first 2022, available at <https://www.ef.com/wwen/blog/language/online-learning-vs-in-person/>, The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>, UTEP CONNECT 2018 available at <https://www.utep.edu/extendeduniversity/utepconnect/blog/november-2018/is-online-education-as-effective-as-traditional-on-campus-schooling.html>), it seems that online education abounds with advantages, such as:

- independence in the location and time chosen for participation in the training process;
- adopting a learning rhythm specific to each student;
- students can advance in training according to their own pace of preparation;
- the tutor/teacher can give more time to guide students with special learning needs (figure 1);
- it is a suitable learning system for busy students (they can participate in some form of education while working);
- saves time, money and energy (essentially eliminates travel and accommodation away from home);
- offers additional comfort (participating in the office or home).



*Figure 1. Online education – a form of personalised activity*

It should be noted, however, that many of these arguments support MOOC-specific forms of training rather than traditional online education methods. The differences are significant, as shown in the first part of this paper.

At the same time, to ensure quality online education, certain conditions must be met, among which we mention:

- technical equipment specific to the activities of teaching - learning - online examination;
- solid knowledge - especially at the level of teachers - in the field of ICT;
- making each participant in the online activity, teachers and students responsible;
- the development of a culture of self-learning and self-control, which implies changes in mentality, and perception regarding the education of children and young people in the family and at school.

We note that online education - viewed as a form of independent, personalised education- involves costs, which are not negligible, for the implementation, support

and improvement of the material base, learning resources and working methods. Synchronous online education eliminates the advantage of choosing the moment of participation in teaching activities, assuming the obligation to be present in a group, similar to the traditional face-to-face option. The simultaneous involvement of all students in the activities stimulates the dialogue and the exchange of ideas and experiences between the group members. The adoption of the synchronous online teaching method supposes, at the same time, the existence of synchronous means of visual communication at the course coordinator's (teacher's) headquarters and, of course, the existence of a virtual workspace that contains all the documents representing learning resources as well as links to other additional resources.

### **Face-to-face or Traditional Online Education?**

The following arguments for and against will be presented concerning the two forms - let us admit that they are extreme - of learning: asynchronous, personalised online learning, traditional classroom, and group learning.

Traditional education is the tried and tested recipe for education worldwide. Face-to-face education is 100% human, with teacher-student interaction taking place in an environment where understanding and experience can be gained intrinsically (Education for all 2020, available at <https://medium.com/@eduforall.us/online-learning-8a2e914c2637>).

The emergence of online learning has "disrupted" the education system. Many consider traditional classroom education in person as restrictive regarding access if we refer to the location or program specific to each student. However, the virtual classroom is available wherever there is an internet connection.

Online education is considered more flexible - especially as it offers asynchronous lectures - allowing much more effective planning of personal activities about the curriculum. As a result, using an online educational platform provides a better work-study balance.

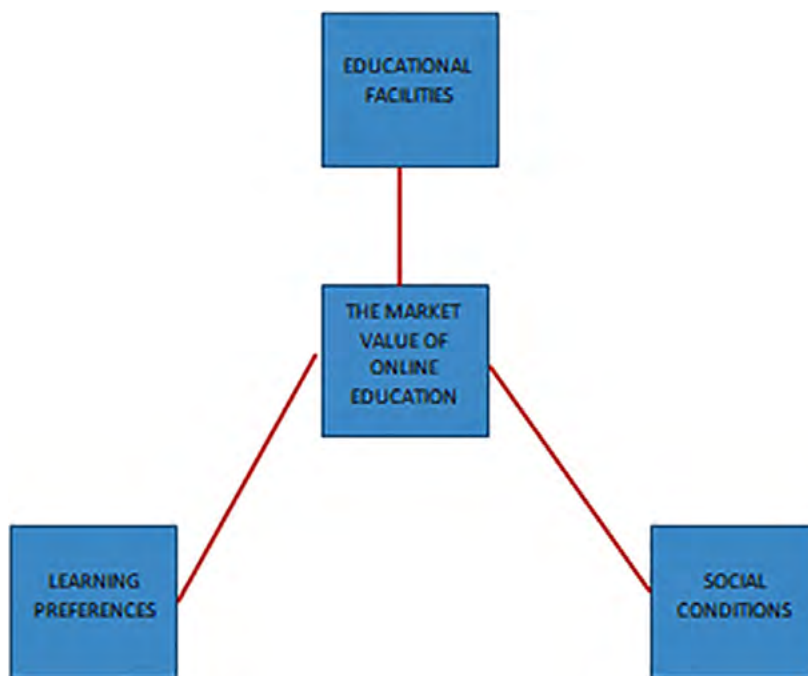
Online learning offers a much greater openness to education if we assume that all the participants have easy access to the technique and technologies specific to this system.

In the same context, online education comes with the argument of sustainability, given the lower environmental impact compared to classroom education.

Online education allows students to set their own pace of learning, and there is additional flexibility to select a program that fits their agenda. Moreover, the online study develops students' vital time management skills in increased autonomy (Education.com 2022 available at <https://www.educations.com/articles-and-advice/5-reasons-online-learning-is-future-of-education-17146>).

Online education has a significant commercial value that the current education market has given it (figure 2). Bernstein highlighted the role of the perception of images and educational facilities in choosing the form of online education (Alshamrani, 2019; King, 1976).





*Figure 2. The market value of online education (Alshamrani, 2019)*

Let us remember, however, that the online learning technique requires a high level of maturity and is based on self-education and self-responsibility.

The autonomy offered by online learning comes with new responsibilities. The teacher is responsible for constantly updating the course content, and the student is responsible for documentation and education. The teacher's interaction with the students – whether in small groups or series – is based on mutual trust and starts from the premise of mastering a common language.

Many experts believe that in the traditional class, the discussion could be dominated by a subgroup of students while the rest of the course is passive. In online education, every student can have a voice and be heard. In addition, extending discussion time allows students to analyse and explore additional information, carefully consider their peers' opinions, and then take time to build their contribution, which can lead to better quality answers (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>). Through asynchronous discussion forums, quantitative and qualitative interaction with and between students can be increased. These class discussions are more comprehensive than a small window but can take place over a week or two. This environment allows all students to participate actively in the debate (The conversation 2015, available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>).

Online learning strengthens student self-motivation rather than teacher motivation. However, along with its benefits, online education can also face problems, mainly

due to the digital divide. In each group of students, there will be people with unequal access to essential digital resources for online learning. The digital divide is a real problem among students, the causes being multiple: geographical area, socio-economic status and/or political criteria (Education for all 2020, available at <https://medium.com/@eduforall.us/online-learning-8a2e914c2637>).

An increasing number of universities and higher education institutions offer online versions of their programs for different levels and disciplines. There are options for every type of student, from music composition to quantum physics. Studying your online program is also a great way to get an official certificate or diploma without putting your physical foot down on a university campus (Education.com 2022 available at <https://www.educations.com/articles-and-advice/5-reasons-online-learning-is-future-of-education-17146>).

At the same time, the Internet and learning platforms must partially replace traditional education methods. Here we refer to fields of study and specialisations that require acquiring practical skills, such as engineering sciences, medicine, singing, etc.

Online education is a good option for students with learning difficulties, as digital technology can help them process information more efficiently and operate in their comfort zone. Online learning offers more flexibility than traditional schooling methods. It can be observed a permanent increase in the enrollment rate of students with long-term disabilities in the form of distance learning, much higher than among students who do not report any disabilities (Education for all 2020, available at <https://medium.com/@eduforall.us/online-learning-8a2e914c2637>).

If we refer to the interaction capacity offered by the two forms of education, we must recognise that the balance favours traditional classroom education. Interactivity and effective communication are critical ingredients for learning success. Suppose online education offers multiple possibilities for transmitting information using digital platforms and products adaptable to any situation. In that case, the physical classroom has an advantage - the "spontaneity" of the discussion between teacher and student (The conversation 2015 available at <https://theconversation.com/is-online-education-good-or-bad-and-is-this-really-the-right-question-35949>). These opportunities can be great opportunities to learn.

Especially in online education, there is access to a wide variety of materials, such as videos, photos, and e-books, and tutors can integrate other formats, such as forums or discussions, to improve their lectures. Moreover, this additional content is available anytime from anywhere, giving a solid dynamic character to digital education.

Regardless of the way of learning, online or classroom, it must lead to a similar goal for all students. They will eventually acquire the same competencies proven by the same type of certification.

Online learning is less stressful than traditional learning because introverted students can easily manifest themselves in the virtual learning space, unlike formal classroom instruction, which can inhibit sensitive people (Guşu, 2020). However, the learning style of some students does not match that of an entire classroom.

For example, we observe that more and more students find speaking in front of their classmates intimidating, limiting their interaction and the opportunity to receive valuable feedback. These students may find it easier to participate in class discussions when the activities are digitally hosted (Education first 2022, available at <https://www.ef.com/wwen/blog/language/online-learning-vs-in-person/>).

However, doesn't online education eliminate the introverted student's chance of overcoming the discomfort of self-isolation and overcoming barriers to communicating with the group? The direct interaction of the pedagogue with the student offers the possibility of integration in work groups, the activity in the classroom being carried out in the spirit of group therapy.

In the classroom, the value of a teacher extends beyond the subject matter. The role of a teacher is also to motivate, encourage and supervise the student. In addition, the technology can be brought to the classroom as an effective supplement to in-person classes (Education first 2022, available at <https://www.ef.com/wwen/blog/language/online-learning-vs-in-person/>).

Unlike the traditional chronophagous evaluation, the digital technology-assisted review can be done automatically, with an apparent temporal gain that can be used for meaningful interactions between participants. Furthermore, the quantification and centralisation of the results thus obtained are done via email, and the student benefits from fast and permanent feedback (Guşu, 2020).

However, face-to-face evaluation gives the student a better chance of proving his knowledge, making the examination more flexible. Assisted assessment is often limited to strict responses that fall into specific patterns.

Last but not least, online education is more affordable. The savings come from reduced commuting or rent expenses. To the same extent, however, measures can be implemented to minimise scholarships or other forms of support for students, leading to the partial elimination of savings.

It is also of interest the point of view of those directly involved in the educational process (at the university level) - students and teachers. In this sense, we bring to the reader's attention a synthesis of the answers obtained following an opinion poll based on a questionnaire conducted by Assoc. Bogdan NADOLU, the detailed opinions of the respondents being given in (Nadolu, 2021). The answers support the ideas promoted above, as can be seen below:

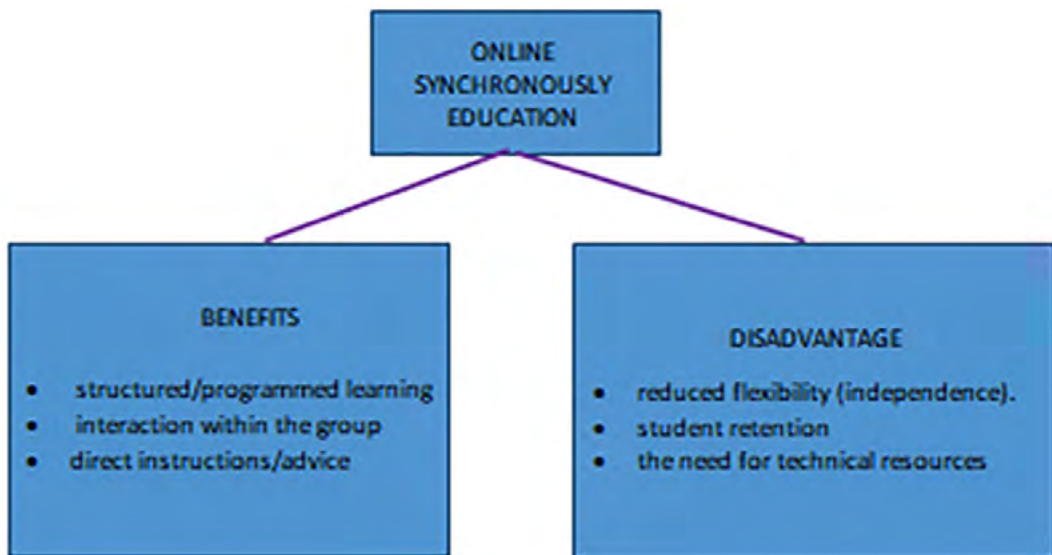
- online education facilitates performance (higher grades), providing more time for individual study in a familiar environment;
- better results have involved obtaining or maintaining scholarships.

Several respondents felt different satisfaction with their successes in education. At the same time, we must take into account the possibility that, in the context of online education, the number of scholarships may decrease;

- online education develops new skills specific to information technologies;
- online education gives rise to the obligation to expand the information area. But beware, it is essential to know how to select the information;

- online education shortens distances and provides accessibility to busy people;
- the virtual course encourages introverted students;
- online education induces a sense of failure in connection with student life - "incomplete student life";
- the lack of direct contact with colleagues - in the online education system - deprives students of an experience of collective life and sentimental belonging to the group;
- inability to self-manage time during online study programs can lead to capping and missing job/business opportunities;
- online education contributes to the manifestation of selfish attitudes, to alienation from colleagues and society, to the induction of a feeling of frustration;
- online activity can lead to time contracting if it is not properly managed;
- online education can generate changes in value appreciation, establish ideals, setting the path in life.

The two forms of education – asynchronous online and traditional, respectively – have advantages and disadvantages. In this context, we can say that synchronous online education offers a variant that combines the edges of the two technologies mentioned above (figure 3). Synchronous online education benefits from the advantages of modern technologies, digitisation and distance communication while facilitating, at the same time, access to group activities and dialogue among group members. The main disadvantage - as it emerges from most specialist studies (ViewSonic 2022 available online at <https://www.viewsonic.com/library/education/the-pros-and-cons-of-synchronous-distance-learning/>) - is considered to be the reluctance of students (especially those with disabilities) to participate in class discussions.



*Figure 3. The advantages and disadvantages of synchronous online education*

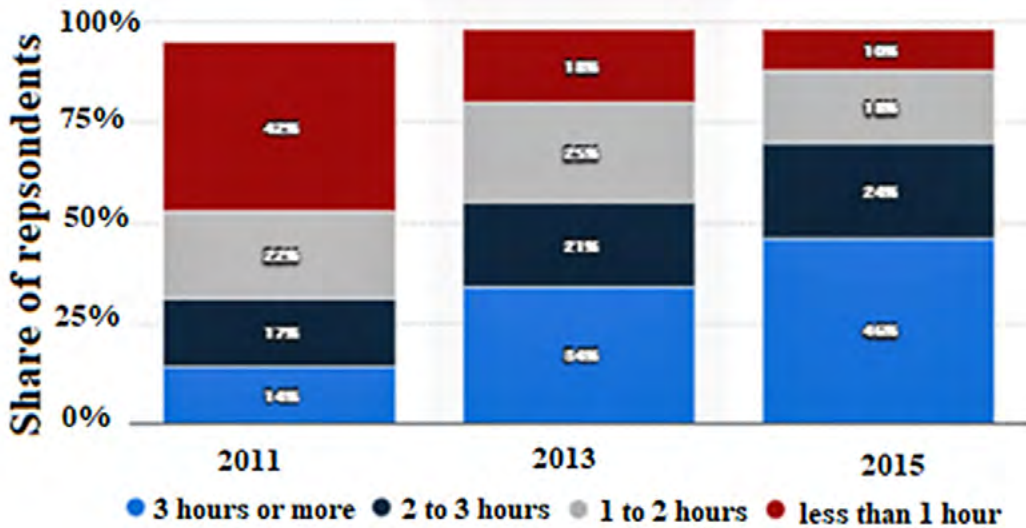
## Evaluation of the Online Education System

We intend to provide something other than a guide that guarantees an objective evaluation of an online education system. However, if accepted and implemented in the university, such a system will have to benefit from standards, indicators and assessment criteria to certify processes' quality and results by correspondence with the traditional face-to-face education system. Adopting an online education organisation system, as stated by the Minister of Education, Sorin Cîmpeanu, requires "thinking about how accreditation is performed. But this will certainly involve assessments of human resources, physical infrastructure and IT, procedures" (Edupedu 2022 available at <https://www.edupedu.ro/breaking-sorin-cimpeanu-de-maine-se-anuleaza-atat-toate-restrictiile-cat-si-toate-facilitatile-din-scoli-si-universitati-odata-cu-incetarea-starii-de-alerta-dispare-obligativitatea-mastii-pentru/>).

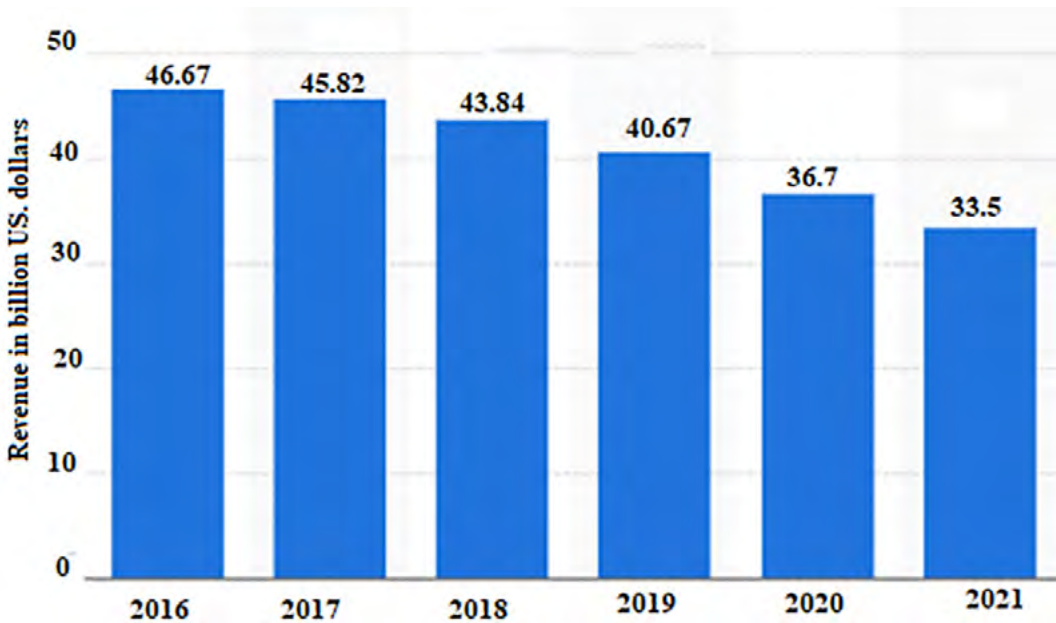
If we are to refer strictly to the didactic act, the quality assessment must address at least aspects such as:

- the quality of teaching in the virtual classroom: the attitude of the teacher; skills of the teacher specific to digital education; the usefulness, quantity and quality (relevance and timeliness) of the information provided to the students; communication of the teacher with the class (group or series);
- availability of resources needed for learning: the existence and accessibility of virtual libraries; availability of the holder's course support in an updated online format;
- availability of laboratory/seminar support in an online format; the availability of virtual examples in support of the course/laboratory/seminar topic;
- the conditions of the "virtual" environment: the quality and quantity of the equipment specific to the online activities; availability of digital teaching and study platforms; reliability of computer connections; equipping teaching centres with equipment specific to online education;
- the quality of student-teacher interaction: interactive teaching methods; time available for students to ask questions in teaching activities; time available to students outside the curriculum;
- the quality of student training: the usefulness, timeliness and relevance of the knowledge acquired by students about the requirements of employers; identification of skills acquired by students by the study program attended; quantitative performance of students; the degree of employability of the graduates in the studied field.

The statistical studies highlight, on the one hand, the interest shown by students for online activities (figure 4) and the acceptance by employers of graduates of this form of studies, but, on the other hand, they note a decrease in income from online educational activities, which may be a consequence of a trend of decreasing the interest in such activities (figure 5).



*Figure 4. The volume of hours allocated to online education in New Zealand (Alshamrani, 2019) (Statista 2022 available online at <https://www.statista.com/statistics/697792/new-zealand-online-hours-at-home/>)*



*Figure 5. The level of incomes from online educational activities worldwide, in billions of USD (Statista 2022 available online at <https://www.statista.com/statistics/684343/global-self-paced-e-learning-industry-revenue/>)*

In both cases presented, the results should be attributed to the learners and the employers regarding the graduates of the online learning forms show attitude. Online learning facilitates the development of digital skills, while traditional education ensures the development of interpersonal skills.

## **Conclusions**

The arguments favouring one or the other way of learning - online or traditional face-to-face - are numerous and cannot lead to a unanimously accepted conclusion. Both forms of knowledge are equally criticised.

With error, both the quality and the efficiency of learning are independent of the form of online or traditional face-to-face training. So it is a big lie to say that turning a traditional course into an online system improves it. There are undoubtedly good and less good traditional courses and good and less good online courses.

We must take what is suitable for each method, accept the favourable aspects of each form of education and exploit each participant's experience in the educational activity.

The significant changes we need to focus on are more than replacing one way of learning with another. Instead, we must focus on adapting to new situations to develop self-control, time management and information selection.

Regarding the answer to the question "Does the future of education belongs to online techniques?" we believe that there is only one answer: the future of education belongs to the "mixed" or "hybrid" way of learning. The universities will know how to embrace the benefits of each learning technique. This will undoubtedly be achieved by adopting the form of synchronous online education as the most suitable for education in general and higher education in particular. Moreover, not all teaching activities lend themselves to the online form. There are activities of a practical nature - experimental laboratory activities, design activities - which necessarily require the student's presence in an organised setting, in the physical, academic space. In addition, there are fields of study - such as engineering and medicine - for which an exclusively online education system cannot ensure the development of specific student skills and competencies. In these areas, face-to-face education must prevail, encompassing all the achievements of online technologies. The conflicting trends in the acceptance of online training are blamed on both students and employers. Generally, students who already have a job prefer online training. The same goes for employers who emphasise online skills in running their own business as well as in the organisational training of their employees.

Alternatively, employers who emphasise interpersonal skills will value the graduates of face-to-face education systems more. Even though most technical skills – with restrictions regarding the field of study – can be acquired through online learning, interpersonal skills cannot be achieved through this learning technique. In this situation, the graduates of online studies will have to develop their interpersonal skills in other training programs.

Beyond adapting to the trends shown by the market from which they recruit their students, universities will need to understand employers' expectations regarding the graduates. Consequently, the university will need to adopt training techniques that respond to the demands of all stakeholders.

The education policies will also need to address the issue of training teachers and students to use digital technology. The academic environment must avoid the temptations of any learning modalities. However, it will have to allocate space to each technique - face-to-face learning and online learning - depending on the specifics of the field and the curriculum.

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