The 3<sup>rd</sup> International Conference on Economics and Social Sciences Innovative models to revive the global economy October 15-16, 2020 Bucharest University of Economic Studies, Romania

# **Educational Assessment Typologies** within the Technological Context: 2020 Challenges

# Dominic NEGRICI<sup>1</sup>

#### DOI: 10.2478/9788395815072-049

# Abstract

The paper focuses on the current obstacles facing education nowadays, especially given the atypical circumstances with which academia must come to terms in 2020. A long-time avoided element of the didactic process, every so often even feared by a significant portion of foreign language teaching practitioners, assessment should – as shown in this study – enjoy centre-stage status, as the effective and transformative learning tool that it is. By providing a much-needed review and categorization of existing and possible assessment approaches, with an emphasis on the teaching of foreign languages for business communication, the current paper strives to highlight the potential of the various assessment techniques and their digital applicability, especially in the current context of the challenges posed by distance and blended learning. The long-term effects towards personal change and a better understanding of one's individual skills and capabilities among students that assessment (when applied right in the classroom) can provide are vital and might result in the training of more capable businesspeople and entrepreneurs for the challenges that tomorrow's global market will generate.

Keywords: Assessment, education, technology, challenges, teaching practices.

JEL Classification: A12, I2, I20, I21, I23, Z13

# 1. Introduction: Assessment as a tool for the future

# 1.1 The importance of assessment

Assessment is one of the most critical elements of the curriculum since it gives quality to the whole teaching-learning process. The assessment of academic learning refers to the systematic and continuous process by which the extent to which learning objectives are being achieved is determined. This process has a primary function in the teaching-learning process because it is what gives the process its feedback. Assessment affects not only the students' learning process but also the teaching process and academic institution's curricular projects.

<sup>&</sup>lt;sup>1</sup> Bucharest University of Economic Studies, Bucharest, Romania, eugen.negrici@rei.ase.ro.

If, as a result of the assessment, we discover that the objectives are being achieved to a much lesser extent than expected or not being achieved at all, what must be done is a review of the plans and activities that are being carried out, as well as the attitude of both teacher and students, together with the suitability of the objectives set. All this will result in a readjustment that will strengthen the teaching-learning process; it is how assessment performs its feedback function (Heywood, 2000).

# 1.2 Functions and types of classical assessment

Assessment clearly serves two functions, as follows: on the one hand, it has to adjust the pedagogical support to the students' individual needs through progressive approaches, which would imply carrying out initial and formative assessments; on the other hand, the assessment must determine the extent to which the intentions of the project have been achieved, which implies carrying out a summative or final assessment.

Given the distinctions above, we can differentiate between three types of assessment: initial or diagnostic assessment, formative assessment, and summative or final assessment.

#### Initial or diagnostic assessment is a process that aims to determine:

- a. If students meet the requirements necessary to start studying a unit or course.
- b. To what extent the students have already achieved the objectives proposed in that unit or course (knowledge, skills, etc.).
- c. Each student's individual situation: the physical, emotional, and familial state in which students find themselves at the beginning of the course or at a particular stage.

If we analyse the aspects that are meant to become known through the diagnostic assessment, we will realize that, due to its fundamental background nature that the teacher needs to take into account before performing any activity, the diagnostic assessment should be carried out at the beginning of the course and also at the beginning of each unit, if considered convenient.

Something of great importance will be found in the data that can be gathered through the diagnostic assessment about our students' family, physical, and emotional situation; thanks to this knowledge, we might be able to take action and respond to each of their unique circumstances.

#### Formative assessment is a process that aims to:

- a. Inform both student and teacher about the progress made by the former.
- b. Locate the deficiencies observed during a teaching-learning topic or unit.
- c. Assess intermediate student behaviours to discover how the objectives set are being partially achieved.

Due to its characteristics, formative assessment will take place at the end of a topic, a unit, or at the end of a series of activities on whose success the success of subsequent activities depends.

Formative assessment also has an especially important role in the teachinglearning process, since it is responsible for guiding the activity through its reports on how the objectives are achieved. If the formative assessment indicates that the objectives are being met, the teacher and students will have a sufficient stimulus to move forward. If the formative assessment shows deficiencies or gaps in terms of the objectives set to be achieved, it will be time to make corrections and necessary adjustments to the plan, further motivate the students, and examine whether the objectives set are the most appropriate for that precise stage in the teachinglearning process (Heywood, 2000).

#### Final or summative assessment is a process that aims to:

- a. Assess the final behaviour or behaviours observed in the student at the end of the process.
- b. Certify that the objectives set have been achieved.
- c. Make a recap or integration of the learning content developed throughout the course.
- d. Integrate the various value judgments that have been issued on a specific individual throughout the course into a single one.

Given its characteristics, the appropriate time to carry it out will be at the end of a unit or entire school year. It is all about corroborating what has been achieved, which will not be new for teachers and students since, by the time the summative assessment is due, they will already have sufficient data gathered from formative assessments. If at the time of the summative assessment, the results are unexpected, it might be necessary to distrust the validity of the formative assessments and make the necessary readjustments (Heywood, 2000).

#### 2. Problem statement: The opportunity of alternative assessment

Classical forms of assessment have (this year more than anytime) shown their limitations. Educators have been compelled to devise or adopt new forms of assessment in order to adapt to new, quarantine-moulded, online circumstances. We felt the need to empirically filter these alternative forms with respect to their usefulness in the given 2020 context.

New developments in assessment have brought to the education field what is known as an *alternative assessment*, which refers to the new procedures and techniques that can be used within the context of teaching and incorporated into daily classroom activities.

#### Unlike traditional assessment, alternative assessment allows for the following:

- Focusing on documenting the evolution of the individual over time, rather than comparing students to each other.
- Emphasizing the strength of the students instead of their weaknesses.
- Considering learning styles, language skills, cultural and educational experiences, and levels of study.

Critics argue that traditional fixed-response exams do not give a clear and truthful view of what students can bring in via their knowledge, but only allow for memorization and evaluate the understanding or interpretation of knowledge but do not demonstrate the ability to use said knowledge. Besides, it is argued that standardized fixed-response exams ignore the importance of holistic knowledge and knowledge integration and do not allow for the assessment of the student's competence in high-level thinking educational objectives or what society expects. In addition, the result of the assessments is often used solely to grade the participants and remains otherwise isolated from the teaching and learning strategies (Shewbridge, 2014).

# 2.1 Mind maps

Maps are mental representations; they are the image that the person builds on the meaning of knowledge. The same information can be represented in many ways since it reflects the individual or group's cognitive organization depending on the way in which the concepts or knowledge were captured, which makes its assessment a bit difficult, especially if comparisons between individuals or groups are to be made.

The mind map consists of a diagrammatic representation that organizes a certain amount of information. It is part of a central word or concept (in a box, circle, or oval), around which 5 or 10 ideas or words related to that concept are organized. Each of these 5 or 10 words can become a central concept and continue adding

ideas or concepts associated with it (Tahlil, 2020).

# 2.2 Problem-solving

It is a fact that confronting the reality of everyday life challenges us to focus on problems and conflicts to which acceptable solutions must be found in a given context. The problem-solving process involves a series of skills that must be developed and assessed in academic preparation.

Problem-solving is a cognitive activity that consists in providing a productresponse starting from an object or situation in which one of the following conditions exists:

• The object or situation, and the class to which they belong, have not previously been in a learning situation.

- Obtaining the product requires the application of a combination not yet learned of rules or principles, previously learned or not.
- The product and the class to which it belongs have not been encountered before.

#### 2.3 The case method

Another method that has been associated with and that offers support to the use of the problem-solving technique is the *case method*. In the case of this method, assessment is done by recounting a situation that was carried out in reality, in a context similar to the one in which our students are or will be immersed and in which decisions will have to be made.

The story must contain sufficient information related to facts, places, dates, names, characters, and situations.

#### 2.4 Projects

The project consists in the making of a product over a long period of time. Apart from demonstrating their knowledge of specific subjects, the students' ability to assume responsibilities, make decisions and satisfy individual interests can be assessed.

The teacher can provide the student or team of students with some recommendations to ensure the proper implementation of the project, such as: define the purpose of the project and relate it to the instructional objectives, give them a written description of the materials they can use, the necessary resources, instructions, and assessment criteria. We can also promote creativity by giving them a little bit more freedom to decide and by offering them a little less direction.

In the case of research projects, the teacher usually offers the topic that needs investigating. The primary skill to be assessed with this technique is obtaining information and organizing it in such a way that it makes sense according to the objective set at the beginning of the project (Murchan, 2017).

# 2.5 The journal

The use of the journal focuses on techniques for observing and recording events; it is about capturing the personal experience of each student, during certain periods and/or activities.

The journal is a technique that is mainly used for self-assessment; however, it can be reviewed by the teacher if it is so stipulated from the beginning and the aspects to be assessed made clear. Students can use a given space to write down their doubts, name the parts that caused confusion, and make comments or give their opinions on what they learned, so the teacher will take time every day or week to address these doubts in class. It is recommended that a few minutes per day (at the end of each class) are dedicated to organizing the contents of the journal (Shewbridge, 2014).

#### 2.6 Debating

Debating is a technique that is often used to discuss a topic. There are different ways to implement the technique; one of them is grouping the students in pairs and assigning them a topic so that they first discuss it together. Subsequently, before the group as a whole, a student is asked to argue on the topic to be discussed; once the teacher grades the performance, their partner must continue. The rest of the students should listen carefully and take notes to discuss the content (Zechner, 2020).

Another way to work the debate in the classroom is to separate the group into two parts; randomly ask a team to look for arguments to defend the content of the topic and the other team to be against it. After a while, each team should try to convince the other of the value of their stance using objective arguments, examples, allowing others to speak, respecting opposing views, and keeping an open mind (OECD, 2011).

The teacher will guide the discussion and freely observe the behaviour of the students, grading the aspects that have caught their attention and allow for more focused observations later, as in the following cases: if a student does not participate, if a student gets angry and attacks others, if a student looks fearful, distressed, etc.

#### 2.7 The technique of the question

The technique of the contextualized question for assessment functions plays a vital role since, according to its design, students can obtain information on concepts, techniques, cognitive skills, feelings, experiences, etc. indicative of short- or long-term memory. Also, the content-related level of information processing that the students display might vary.

The questions used to assess metacognitive abilities must be asked in such a manner that they require the description of the processes used when thinking, the list of steps followed in the use of a strategy that allowed individual achievements, and the recognition of the aspects that were easy to solve and the problems that arose in the resolution of a problem or decision making.

# 2.8 The portfolio

The portfolio is an assessment method used to monitor the evolution of the learning process by the teacher and even the student so that changes can be introduced during said process.

It is a way to gather information that demonstrates the students' abilities and achievements, the manner in which they reason, ask questions, analyse, synthesize, produce or create, and interact (intellectually, emotionally, and socially) with others, allowing teachers to identify the students' learning of concepts, procedures, and attitudes. It can be used in the form of assessment, co-assessment, and selfassessment. The use of this resource allows the assessment of the learning process to be monitored so that changes can be made to it. Assessment means consolidating learning, as well as achieving the desired objectives in any field of study. Assessment makes it possible to identify which priority needs must be met and – from the educational perspective – is supposed to show congruence between knowledge and performance, which is the golden formula that might lead to the so-called high-quality education. That is why assessment should be considered an extension of the teaching and learning process and not just another step – that is, it should be viewed as an ongoing activity, an integrating process that generates training opportunities by reflecting experiences (Heywood, 2000).

One of the topics that needs reflecting on is the pedagogical strategy of teacher support and how it can contribute to achieving the objectives set. In this sense, new assessment approaches must discard traditional definitions; nowadays, assessment results should not have any punitive effect, but instead, they should be considered as inputs that allow for a redesigning of didactic strategies. To the extent that educational assessment self-regulates, the quality of the results will undoubtedly improve.

# **3.** Aims of the research: Theoretical knowledge as a solution to real-life situations. From practical tradition to utilitarian modernity

A useful technique to teach critical thinking is based on using real cases and solving them in groups through analysis, brainstorming, innovation, and creative ideas. Although the method itself is a structured one, in practice, it is quite disorganized since it deals with real problems about which, in most cases, there is not enough information, and the conclusion is that there often is no possible solution (Heywood, 2000).

However, the case method prepares students for the real world and awakens their curiosity, analytical skills, and creativity, which is very useful when the goal is not only that of producing proficient language speakers but also training future entrepreneurs with a knack for solving complicated real-life business scenarios (OECD, 2011).

This technique can be easily paired with that of asking students to resort to social media, or instance checking the tweets of their favourite artists and correcting their grammatical errors in order to reinforce their language skills.

# 3.1 A perpetual teaching statement

Teaching is a complex activity that gets the teacher and the students involved in a dynamic sort of interaction, which is conditioned by the institutional, cultural, and family environment of both parties. It is and should be, a dynamic activity based on dialogue, mutual respect, and an underlying interest in both parties to teach and learn, respectively.

It is challenging to teach something. There are no universally applicable mechanisms or methods to do so. It all varies greatly and depends a lot on the subject, content, degree of abstraction, and complexity of the knowledge imparted

(Duffy, 2004). Consequently, from the point of view of the teacher, it is necessary to explore different possibilities and offer students multiple learning options. It is implicit that the latter must possess the will to explore the options provided, looking for those that are more advantageous in their situation. That is why it is of utmost importance to establish a dynamic of dialogue and tolerance between the parties involved in the teaching-learning process.

On the other hand, it is often easier to learn something than it is to teach it. Every day we learn new things, especially if we maintain an open, observant, critical attitude and pay attention to the world. How we learn and how well is, however, a more complicated question.

In short, the teacher hardly "teaches" the student as much as the latter learns something as a result of proper guidance and masterful technique. If the teacher, through their teaching activity, enhances and facilitates the learning of their students, then the process can be defined as successful. How successful? Well, the answer is again complicated and elusive, and long-term results should be weighed in. It would probably be more productive if students stayed away from this manner of defining the teaching-learning process as "the teacher teaching the subject." (Gardner, 2014) Ultimately, the final repository of knowledge and the one who must develop the cognitive skills and practical, real-life problem-solving competences is the student. The more significant part of the responsibility to learn falls on the students' shoulders.

We believe that teaching and learning are active processes of personal change, which is only possible through the effort and dedication of each person within a climate of trust that stimulates interaction and dialogue between students and teachers. This interaction is carried out through different teaching-learning methodologies that emphasize the involvement of students. We do not consider the students to be mere spectators to the teaching process, but the active constructors of their own training.

The discussion of practical problems, exercises, simulations, conferences, and research are the main pedagogical tools used, so that each student is their own actor, in the course of the learning cycle: experience, reflection, conceptualization, and application.

# 4. Research methods: Challenges and opportunities of teaching: 2020 edition

The pandemic generated by COVID-19 and its immediate consequences (i.e., the sudden cessation of all face-to-face teaching activities) have been a significant challenge for everyone, both teachers and students, on various levels and because of several factors.

The lack of any sort of warning or time to prepare was probably the worst aspect of this change. The fact that it all happened so suddenly tested everyone's adaptability and swiftness to react. One day we were each enjoying our peaceful educational comfort zone, in which everything flowed at the rhythmic pace of the academic year plan, and the next, the university was closing its doors, and we were expected to continue all our teaching online.

At the Bucharest University of Economic Studies, we were among the lucky ones, so to speak, because in recent years our institution had invested in technology and set up a blended learning platform, thus promoting and encouraging the use of ICT, mobile devices, as well as educational and recreational applications, launching communication channels through various official websites and accounts on several social media platforms. All this has allowed for the impact of the coronavirus-imposed cessation of all face-to-face teaching to be minimized. There is an enormous amount of resources that the teachers/professors/tutors can use thanks to the internet, which goes beyond our students' immediate academic interests, but which are an inherent part of lifelong learning and especially relevant, namely cultural resources. As a result of the pandemic, acts of transnational generosity and a renewed sense of community made it so that a wide array of online resources became available for free: it is now possible to access libraries, museums, film libraries, the work of public entities and audiovisual companies, writers, artists, musicians and sportspeople, associations of all kinds, individuals, etc. (Adeove, 2020). At this time of need, people are literally giving away their work in an invaluable act of altruism, for the advancement of knowledge.

# 5. Findings: Advantages and disadvantages of remote education, and a prescription

This process becomes more critical every day because to be active in the new social space, new knowledge and skills are required and will have to be learned as part of the educational process. In addition, the school and the university must take on both the training itself and the dynamics of the new social space, which requires creating educational strategies for distance learning, as well as designing new scenarios, instruments, and methods for educational practices.

The multimedia environment is not only a new medium of information and communication, but also a space for interaction, memorization, and education. This is precisely why it is a new educational space and not merely a means of information or communication. As such, in order for the teaching process to be successful, educators must design new educational scenarios and actions; that is, that they propose a specific educational policy for the cyber environment (Bearman, 2020).

The main **advantages** of distance education are the following:

- The possibility of tending to precise educational needs that were not met in ordinary circumstances within the conventional education system.
- It eliminates the difficulties posed by geographical distances, where the population can access this type of education, regardless of where it resides. This is alluded to by most people who use this method.

- It is especially useful for improving the academic and professional qualifications of the adult population, not just the young.
- The hourly flexibility of the system also facilitates the organization of students' time, respecting family life, and work obligations.

#### Some of the **disadvantages**:

The distrust generated among the students due to the lack of communication between them and the teacher, especially when it comes to the process of learning and academic assessment.

By eliminating face-to-face social interaction, it is possible that the students might become isolated, discouraged, alienated, or even severely depressed, so active steps in order to avoid this should be taken by the teacher.

Generally, changes made in the direction of embracing the distance learning system require that the students do most of the adapting: they must learn to use specific teaching materials and virtual classrooms to communicate with their teachers and other students through the new media. They must be able to organize their study time to balance their personal, professional, and academic life.

There are other specific disadvantages inherent to the nature of the different academic disciplines. That is the case of language teaching (the subject that I teach) – where despite all the e-learning tools that are supposed to guarantee that teaching is as effective and attractive for the student as possible –, which, done remotely, remains unable to convey all the nonverbal aspects of successful communication.

The information society requires a new type of literacy, the acquisition of new skills, and aptitudes allowing one to navigate the cyber space competently. The emergence of the virtual educational environment translates to an expansion of reality. Just as towns, cities, and states have created new forms of social reality, so too has this environment created new scenarios and possibilities that are real because of their impact on society and on people, even when they occur in a medium that is not physical and corporeal, but electronic and representational. As technology becomes ubiquitous in our lives, because of the Covid-19 crisis, we must learn to ride this wave (as the young like to put it) by embracing and eventually being able to master all the new avatars of teaching and the educational process in its entirety (Zaphiris, 2020).

As far as good distance-learning practices are concerned, things are a little more nuanced that one might initially believe. It is not enough that one has access to resources and imparts them to one's students; one must also know what to do with them (Elken, 2020). One can send a recording to one's students, provided you also send them an email with instructions, keep in touch with them, and remember to remain available. The personal touch is an essential element of online education; if teaching professionals ignore it, students end up feeling isolated, so teachers must find a way always to foster a sense of togetherness. If this approach is applied correctly, the physical distance between teachers and students should not be an obstacle, and, in some fortunate cases, the two parties (the educator and the educated) might even grow closer than ever before (Uskov, 2020). Well conducted, the experience does not have to detract from face-to-face training. The online platform, the interaction through a microphone and camera, and the student's responsibility to do autonomous work in a way that they are not used to are all profitable training opportunities for those who might choose to work from home in the future. In a way, it becomes a training practice for the teleworking system that is gaining more and more momentum in many professional sectors of the professional world.

The possibilities that open up with digital teaching are numerous: not only can you upload a document and work with students on a practical case study live, approaching the solution together, it also allows all synchronous (or live) sessions to be recorded and available to the student, for as long as they endure on the university's servers. Another of its advantages is the ability of these tools to integrate well with each other.

Throughout this whole process of digital transition, as well as in the mediumand long-term future, the biggest obstacle (but also the most exceptional opportunity) remains the human factor. There will be those who, throughout this period of crisis, make the least amount of effort, but there will also be those who soak it all up and really take advantage of the opportunity – both teachers and students. We are convinced that this is a turning point for education: there will be a before and an after; from this point forward, the use of technology to learn and teach remotely will undoubtedly be incorporated into our lives, and things will never just 'go back to the way they used to.' Now is undoubtedly the ideal time even for those who have never dared to teach in any other way – who have never experimented with methodologies such as the flipped classroom or tried any of the many educational apps that exist – to get out of their comfort zone and become better teaching professionals.

#### 6. Conclusions

There are no exclusive methods to teach. It depends on the subject, the content, the degree of abstraction sought, and the level of complexity of the subject that is being analysed. Hence, it is necessary to explore different possibilities and options. As it is expected that the result of this interaction will be students willing to explore the options looking for those that are more favourable, the dialogue between the student and the teacher is a fully established link. The act of teaching must highlight the essential aspects, which promote the transformation and improvement of the environment in which we develop as individuals and adapt to a specific type of society.

For us, a teacher must be concerned with the degree of learning that the students can reach, making sure that the techniques used are the most appropriate for one particular group or group member, and ensuring that the student can express their concerns regarding their expectations from or requirements of the course. As such, the student will cooperate in the creation of a better course to the benefit of the entire group. Our teaching philosophy seeks to remedy the problem that we commonly encounter, that of the gap between the knowledge imparted and the students' ability to remember it and render it useful in day-to-day situations. The knowledge is significant when it says something to the student, providing the possibility of solving a problem or understanding a problem and being able to devise a solution to it. In conclusion, our teaching philosophy translates into putting as much emphasis as possible on the learning progress of each of our students in order to help each and every one of them better themselves and each other.

#### **References**:

- [1] Adeoye, B. F., & Arome, G. (2020). *The roles of technology and globalization in educational transformation*.
- [2] Assessment in education: principles, policy & practice. (2000). S.I.: Routledge.
- [3] Bearman, M., Dawson, P., Ajjawi, R., Tai, J., & Boud, D. (2020). *Re-imagining university assessment in a digital world*.
- [4] Duffy, T. M., & Kirkley, J. R. (2004). *Learner-centered theory and practice in distance education: Cases from higher education*. Mahwah, N.J: Lawrence Erlbaum Associates.
- [5] Elken, M. (2020). *Quality work in higher education: Organisational and pedagogical dimensions*. Cham: Springer.
- [6] Gardner, J. (2014). Assessment in education: 2. Los Angeles: Sage Reference.
- [7] Heywood, J. (2000). *Assessment in higher education*. Philadelphia, Pa: Jessica Kingsley Publishers.
- [8] Murchan, D., & Shiel, G. (2017). Understanding and applying assessment in education.
- [9] Organisation for Economic Co-operation and Development. (2011). *OECD reviews of evaluation and assessment in education: Sweden 2011*. Paris: OECD Pub.
- [10] Shewbridge, C., Bruggen, J. C., Nusche, D., Wright, P., & Organisation for Economic Co-operation and Development. (2014). *OECD reviews of evaluation and assessment in education*.
- [11] Tahlil, T., In Kamil, H., In Asniar, & In Marthoenis, (2020). Aceh International Nursing Conference, Challenges in nursing education and research: Proceeding of the Second Aceh International Nursing Conference 2019 (2<sup>nd</sup> AINC 2019), August 21.22.2019, Banda Aceh, Indonesia.
- [12] Uskov, V. L., Howlett, R. J., & Jain, L. C. (2020). Smart Education and e-Learning 2020.
- [13] Zaphiris, P., Ioannou, A. (2020). LCT (Conference) & International Conference on Human-Computer Interaction. Learning and collaboration technologies: Human and technology ecosystems: 7<sup>th</sup> International Conference, LCT 2020, held as part of the 22<sup>nd</sup> HCI International Conference, HCII 2020, Copenhagen, Denmark, July 19.24.2020, Proceedings. Cham: Springer.
- [14] Zechner, K., & Evanini, K. (2020). Automated Speaking Assessment: Using Language Technologies to Score Spontaneous Speech.