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"Digitalization and Coaching for the Pre-University Education"

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Abstract. *Education in pre-university education, once with the COVID-19 pandemic, can no longer be done only in the classic system, because the impact that digitization had during the pandemic on the didactic process was a major one, there was practically a reset of the way of teaching- learning-evaluation. The current work addresses a highly relevant and important topic: digitization in pre-university education, more specifically in pre-university education in Bucharest, emphasizing coaching for teachers to acquire digital skills. The research carried out consists in the application of a questionnaire, on a representative sample made up of the directors of pre-university education units in Bucharest regarding how important, timely and necessary this process of digitization is, how digital skills can be acquired by teachers, and what are the methods, its resources and limits, how necessary is a digitalization strategy at each decision-making level of pre-university education. The application of the questionnaire validates the research hypothesis, namely that the teachers consider digitization a tool that improves the didactic process, indicates coaching as a tool for acquiring digital skills and the fact that there is a need for a strategy regarding digitization at all levels of pre-university education, from the national level to the level of each unit separate schooling. The conclusion is that digitization is used much more after the post-pandemic period as a main teaching-learning-evaluation tool in the pre-university environment, because teachers are constantly preparing, using coaching, for the acquisition of new digital skills, and the pre-university education system, as a whole, it needs a more accurate planning of how digitization can influence the educational process. The contribution of this research consists in creating a strategy model regarding digitization at the level of a school unit.*

Keywords: Pre-university education, Coaching, Digitalization, Teachers, Strategy, Implementation

Introduction

The crisis generated by the COVID-19 pandemic represented a moment of resetting of education and teacher training and demonstrated unequivocally that it is essential to have an education and training system ready for the digital age.

In pre-university education, digitization offers an effective method of overcoming the geographical and temporal barriers that limit access to learning and education for many students. Computer programs allow students to learn at their own pace and in their own environment, allowing them to get educational support when they need it (Leedham, M., & Parsloe, E., 2022).

Coaching can be of major importance in developing the quality of education in pre-university educational institutions by developing leadership, communication, management and developing the digital skills of teachers and school principals. Digital skills coaching for pre-university teachers and principals can help create a culture of continuous learning in pre-university education institutions. Through coaching, teachers and principals can develop digital skills that help them perform consistently.

This paper aims to study how digitization is used as a method in the didactic process in the post-pandemic period, if coaching regarding the acquisition of digital skills is or can become a tool for increasing the performance of the didactic process both for directors and for teachers in pre-

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university education and this study we can find out how decision-makers at each level of pre-university education can influence the digitization process of the entire system**.**

The objective of this work is to establish to what extent a strategy regarding the digitization of each level of organization of pre-university education and in particular of each unit of pre-university education can lead to obtaining and increasing didactic performance.

The main research hypotheses were that digitization represents a method of teaching-learning-evaluation that is increasingly used in the post-pandemic period in the pre-university environment; coaching on the acquisition of digital skills for teachers is necessary and is a tool; that both the pre-university education system and each individual educational unit need a digitalization strategy.

This study can reveal to what extent digitalization and digitalization coaching represent ways in which educational institutions can be effectively managed to achieve their goal, which is that students acquire the skills and competencies specific to each level of education, in a way as close as possible to their concerns.

In this sense, the idea of creating a digitization strategy was outlined, which would include the purpose, objectives and action plan of each pre-university education institution regarding digitization. .

According to this action plan, digitization is used permanently in the teaching process, and not only in cases such as a pandemic, or in cases where students or teachers for extreme reasons cannot be in the classroom.

Literature review

The literature on the educational system is extremely rich, but with regard to the digitalization of the pre-university education system in Romania, the methods, resources, strategy, or the connection between coaching and digitalization, there are not many studies, instead there are articles and works that refer to these aspects.

An article on digitization, very important, if we refer to the fact that it was written before the COVID-19 pandemic, namely on October 15, 2018, and appeared in the "Economistul magazine", which is called "Regarding the Digitization of Education" goes into review the challenges and opportunities of the digital transformation of education, action priorities, projects for the digitization of the education system. The author considers that the aspects presented in the paper can constitute the foundation for the development of a national strategy regarding the digitization of Romanian education. The rationale for such a strategy is that digital technologies enrich the learning process and open opportunities that must be accessible to all.

This strategy was carried out, quite succinctly, in the post-pandemic period, and it is still available for public consultation on the smart-edu platform, under the name "Strategy for the digitization of education in Romania 2021-2027", but it was not adopted by the Romanian governments. The strategy proposes a call to action for closer cooperation with all relevant actors, to generate a Modern, Accessible School, based on Digital Resources and Technologies - "SMART-Edu", contains the challenges faced by schools in Romania during the pandemic, and defines the priorities, directions of action, alignment with the European agenda regarding the digitization of education.

An extensive research with the objective of digitization in the pre-university environment, is represented by the work "Digitalization of pre-university education - from pandemic to a new law" carried out in November 2022 by Antonia-Laura Pup who is the advocacy coordinator at the

Romanian Academic Society and in the same time editor at the Romanian Academic Society. This work is made with the support of the editorial team of the Romanian Education Monitor formed by Ariana Dudună, Bianca Borcea, Ștefan-Busuioc Trandafir. The author calls this research a report and believes that it is meant to bring back to the public agenda the subject of digitization of education in view of legislative changes and the start of projects financed through the new operational programs but also in the context of the National Recovery and Resilience Plan.

We must also specify that there are a series of articles in which different projects are presented that aim at digitization for different levels of pre-university education, even for different classes, such as the "Digital Future" pilot project that aims to develop the digital skills of classroom teachers preparatory to create a dynamic learning environment by including digital resources.

The theory of computer-assisted instruction or digitalization in pre-university education refers to the use of information technology and communication, (i.e. digitalization) to enhance learning and instructional processes. It encompasses any activity in which information technology and communication can be used to enhance the didactic process, including presentation activities, feedback, teaching, long-term education, and more broadly, the training of the learning process (Grief, S., 2017).

Digitalization empowers teachers to provide students with unique and diverse learning experiences, improving their understanding of concepts and enabling different approaches to subjects.

Digitalization also promotes collaborative learning, as students can collaborate with their peers, teachers or individuals e outside the educational system, learning from each other and benefiting from effective and cooperative support (MacKie, D., 2016). Furthermore, digitalization supports machine learning and its evaluation, as well as learning through algorithms and programming. This helps students improve their computer skills and adapt better to the technological changes and challenges of today (Leedham & Parsloe, 2022).

Methodology

The type of research I carried out is an applied research, it was carried out on a sample format of 184 principals, including here also the deputy principals, whom I will call principals in the following, of secondary schools and state high schools in Bucharest. . The sample n, on which the research was carried out, was calculated using the formula:

n = N * Z2 *p *(1-p)/e2/(N-1+ Z2 *p *(1-p)/e2),

where N = population size, represents the number of principals of state secondary schools and high schools in Bucharest, namely 632, Z = Z score is 1.645 at the 90% confidence level, p = standard deviation is 0.5, e = margin of error, is 5%, obtaining a sample of n = 184 respondents.

The sampling method is probabilistic, cluster type, the principals were divided into groups of schools: theoretical, technological high schools, general schools "sought", less “sought", not at all "sought", for each group the corresponding sample was calculated .

The "sought after" general schools are the schools that are usually located in the center of the city, or in neighborhoods where the population has a high or very high standard of living compared to the average and which are accessed by parents with a good or very good financial situation and who make claims, which may or may not be justified, regarding the education of their children; these schools have a percentage of over 90% passing the National assessment exam.

The schools that are not "sought after", are the neighborhood schools, which are accessed by parents who do not necessarily make demands regarding their children's education, have a good

or modest financial situation, and these schools have a passing percentage of the National Evaluation exam of over 60 %.

The schools that are not at all "sought after" are schools on the outskirts of the city, attended by children who belong to the majority of the Roma population, or have parents with poor material situations, in these schools the percentage of passing the National Evaluation exam is approximately 20%.

The same questionnaire was used for the entire sample of executives, a questionnaire made with Google Forms, which is a survey management software included as part of the free Google Docs editor suite provided by Google.

The questionnaire was structured, it had a set of 20 questions, 4 of which had closed answers and the rest with multiple choices, and 2 of the questions concerned the profile of the person completing it: age, how he was appointed to the position (competition, detachment, the length of time in the leadership position, what type of school he leads: theoretical, technological, vocational high schools, general schools, how is he related to the school he leads as a "top" high school, a "sought-after" general school, less " sought", not at all "sought").

The questionnaire contained an introductory-explanatory part, presenting the purpose of the research, that of finding out to what extent digitization is used even after the post-pandemic period as a teaching-learning-evaluation tool, how much and in which learning contexts, if coaching for the acquisition of digital skills is a tool used by the respective educational unit and to what extent it aims to improve the teaching-learning-evaluation process and if there is a need for a national strategy and at each level of decision regarding digitization, what would be the objectives of this assumed strategy for each individual school unit, what are the resources available to each school and which they would need so that digitization is not just a wish. In the introductory-explanatory part, the way to complete the questionnaire was also presented, how long it takes to complete it and where exactly I will use the collected data.

The questionnaire was tested, before application, on 2 directors from each sample, other than those to whom the questionnaire was applied. The questionnaire was created in the period of September 2023 and applied in the period of October-November 2023. Even if the questions were addressed to the principals, they primarily concerned the activity of the teaching staff.

Results and discussions

In pre-university education, there are several representative theories of coaching. These are associated with different perspectives on student learning, guidance and training. These theories include motivational theory, skill acquisition theory, relationship-based theory, energy stimulation theory, and computer-assisted instruction or digitization theory

According to the responses received, namely 95% of the directors who completed the questionnaire considered that the COVID-19 pandemic represented a moment of resetting education and training, proving unequivocally that it is essential to have an education and training system ready for the digital age.

In proportion to 75% of the directors considered that due to the pandemic, the school spaces are currently equipped with laptops, tablets and internet connections that did not exist before the pandemic, that the licenses have been activated and remain valid for the entire duration of the institutions' operation. The principals consider that 75% of students received electronic devices with Internet access, offered free of charge by the authority or NGOs, and that only 30% of teachers received these free devices from NGOs.

Directors, in a proportion of 96%, consider that in the current post-pandemic period, it is important that all the digital tools that facilitate teaching-learning-evaluation, acquired during the pandemic, should continue to be used, new ones should be permanently acquired, and coaching on the acquisition of digital skills to be used constantly because it improves the functioning of pre-university education.

According to the answers received after completing the questionnaires by the directors, they considered that the factors that are involved in the use of digitization in pre-university education are in proportion to 100%, teachers who must be permanently trained to acquire and strengthen digital skills, parents in proportion to 63 % who must be guided to understand that the use of digitization can bring great benefits in the learning process of their children, but also the local authorities who must ensure the digital infrastructure of schools and high schools in proportion to 100%, as well as the national ones, in proportion of 81% who must think of a digitalization strategy in the short, medium and long term so that teachers are materially supported to have the most efficient devices, but also to acquire digital skills through coaching.

Even before the time of the COVID-19 pandemic, a new learning concept had begun to be imposed, that of blended learning, flexible, assuming mixed, combined learning, using teaching in a combined face-to-face format, but also in the online environment, concept that includes both classroom/group sessions, when working with the whole class or in teams and interacting directly with peers and the teacher, as well as distance learning sessions, mediated by digital resources, which allow students to self-instruct using interactive multimedia materials that they can go through online at their own pace.

From the application of the questionnaires of the principals of the theoretical high schools, it was found that in the post-pandemic period the teachers know and use the blended learning method in proportion to 38% in the teaching process, while this is almost unknown to the majority of teaching staff before the COVID-19 pandemic, when they encountered this method only in training courses.

In the case of technological high schools, the blended learning method is known and used by approximately 15% of the teachers in these high schools. The teachers from the "highly sought after" general schools use the blended learning method in proportion to 30%, those from the less "sought after" general schools in proportion of 10%, and the others from general schools "not at all sought after" do not use it at all. The principals of all types of general schools in a proportion of 73% consider that the method is not desirable to be used, except in extreme situations for children aged between 6 and 12 years, while for students over 12 years old, 56% of directors consider it useful.

Another concept that has been imposed in the post-pandemic period is asynchronous communication, now possible thanks to the appearance and development of more and more asynchronous communication tools that can be: emails, forums, blogs, WhatsApp discussion groups, RSS, spaces storage for images, texts and video (Slideshare, Google albums, YouTube, etc.) and many other applications. These tools are used to a large extent, by all teachers, from all types of schools included in the research.

The directors believe that innovative educational digital content is largely necessary so that digitization is imposed in the didactic process: electronic textbooks, virtual simulators for vocational schools, electronic laboratory works, intelligent laboratories, etc., the field being an extremely attractive one. Also here must be included the concept of New Media, which means any digital media product that is interactive and distributed through computer networks or all texts, sounds, images and graphics processed on a computer and

collected in databases. (Guțu. D, 2007). The emergence of New Media is related to the development of information and communication technology, the expansion of the Internet and the emergence of Web 2.0 applications., digital television, digital cinema, the personal computer, (PC); DVD (digital video
versatile digital disc or discs); CD (compact disc); media player (MP3), mobile phones, video games, reality (VR) and virtual intelligence (AI).

In the pre-university education system, coaching is the process by which schools collaborate with educational partners to stimulate creativity and innovation, adapting the learning process to individual capabilities and motivations. Coaching emphasizes capitalizing on strengths and creating conditions for addressing weaknesses as opportunities for knowledge development.

In proportion to 91% of the principals who completed the questionnaire, they considered coaching a managerial tool, which can provide teachers with additional tools to play an active role in the learning process.

Directors of technological high schools in proportion to 82% believe that they must adapt their strategies in response to the evolution of the educational and labor markets, aligning themselves with the economic markets of goods by assuming some standards in the field of education, related to the initial professional training process of students , and the adaptation of the school curriculum in accordance with the requirements in the field of employment, while 62% of theoretical high school principals answered that their strategy is to train teachers so that they can be facilitators of personalized learning for students theoretical high schools whose main objective is the continuation of studies in higher education.

The vast majority of directors, 94%, that a national strategy regarding the digitization of pre-university education is necessary, 68% of them say that a digitalization strategy is even necessary for each pre-university education institution.

Like any strategy, it must include the mission, objectives, resources and activities necessary to implement the strategy, preceded of course by a needs analysis.

The strategy is a specific and superior form of pedagogical normativity, which ensures the instructional-educational activity internal coherence, compatibility with the objectives and complementarity of effects. The strategy is a unitary structure of effective pedagogical operation. It involves an articulated set of decisions aimed at the adequacy of methods, means and forms of organization of learning in a concrete educational situation. (Potolea D, et al 2008).

The strategy is a "set of resources and methods planned and organized by the teacher to enable students to achieve the set objectives" or "a way of approaching learning and teaching, combining and optimally organizing available methods and means, as well as forms of grouping students, in order to achieve the set objectives". From this point of view, the strategy suggests how to approach an instructional situation, putting the student in contact with the new content being studied. (Cerghit I, 2004)

According to the answers received from the directors in the sample presented following the application of the questionnaire, 97% of them consider that the following strategic resources are necessary to achieve the strategic goal regarding digitization:

- Human resources, on the one hand, teaching staff who, through coaching, acquire and permanently improve digital skills, and on the other hand, students, parents, auxiliary staff, who are at least familiar with digitization for the beginning;
- Material resources: IT equipment, office equipment and supplies, G-Suite educational platform, ME platforms: www.manuale.edu.ro, SEI educational portal, AeL Educaţional

platform, www.didactic.ro, www.materialedidactice.ro which contain, educational software and open educational resources (ED) found on the ISJ/ISMb websites. These resources include reports, item models and assessment tests, calendar planning models, video lesson sequences, curriculum adaptation models for students with special education needs, didactic projects, methodological guides, educational software, course supports, experiments and demonstrations, CDS school programs, and CDL as well as subjects and scales for school competitions.

- Financial resources: budget allocations from central and local authorities, extrabudgetary funds, donations, sponsorships;
- Information resources: legislation in the field of education and copyright; websites like|: ME site, ARACIP site, ISMB site, EU official site, CCDB training offerings and other providers;
- Resources of experience and expertise: the management team, the IT specialist of the unit, IT teachers, and external experts, such as those from the edu Apps company, IT services maintenance companies;
- Time resources: allocated annually for initiating, monitoring, and evaluating projects aimed at sustainable school development and for evaluating the results established in the PAS;
- Authority and power resources: ISMB, ME, City Hall and Local Council.

From this point of view, the digitalization of the educational process can be seen as a coaching tool, as it is necessary to reconfigure the objectives/targets of the development plans of pre-university education units by introducing the strategic objective: The consistent use of digital technologies in the teaching-learning-assessment process whether in exclusively online or hybrid environments, as well as in traditional face-to-face settings.

This strategic objective should comprise at least three specific objectives: Training and enhancing the digital skills of teaching staff; Improving the quality of teaching-learning-assessment through the use of digital technologies in online, hybrid, or classic teaching systems; The development of a culture favorable to communication and collaboration through digital technology

In order to implement this strategic objective, the educational units in the pre-university system should develop an action plan. In Table 1, below, I present an example of an action plan that should be applied in a school year by pre-university educational institutions. It includes the activities, responsible persons, specific terms and ways of evaluating the effects obtained through the implemented changes.

Table 1. Action plan for implementing the digitization strategy of a pre-university education unit

The strategic objective: The permanent use of digital technologies in the teaching-learning-assesment process both in the exclusively online or hybrid environment, as well as in the face-to-face environment			
Specific objective O1 ***The training of skills and the development of the digital skills of teaching staff***			
Activities/Identification of solutions	**Responsible Individuals**	**Term**	**Ways to evaluate the effects achieved through the changes made**
O1.1 Identification of possible teaching staff who may have difficulties using digital technologies through the application of online questionnaires and organization of initiation and training sessions for them at the school level.	Deputy Director/ IT teachers	January	Observing the learning activity of these teachers on the G-Suite platform
O1.2 Organization of workshops on subjects and/or related subjects in order to familiarize teachers with the new options of the online platform.	Experts designated by online platforms	October	Using the indicators from the teacher evaluation sheet
O1.3 Presentation of the training offerings in the use of digital technologies of CCDB and other training providers, including universities.	Responsible for professional training	Whenever new informatio n becomes available	The participation of at least 50% of the teaching staff in at least one training course on the use of digital technology
O1.4 Participation of teaching staff in open classes/experience exchanges in training courses, mentoring activities in the field of digital technologies.	Responsible for professional training	Throughou t the school year	Evaluation of the projects presented by the didactic students, who have participated in the courses
O1.5 Promoting Erasmus+ mobilities and study programs that pursue the development of digital skills for the teaching career.	Advisor for projects and school programs	Througho ut the school year	Teaching staff participating in Erasmus activities and/or enrolled in study programs will organize information dissemination sessions
The specific objective O2 ***Improving the quality of teaching - learning - assessment through the use of digital technologies in online, hybrid or classic teaching systems***			
Activities/Identification of solutions	**Responsible**	**Term**	**Ways to evaluate the effects achieved through the changes made**
O2.1 Revision of regulation regarding the conduct of the online education process under conditions of security / protection of personal data and respect for copyright.	Responsive CEAC	Until January	Case study on the effects produced by the regulation revision.
O2.2 The use in the teaching-learning process of open educational resources (ORE), virtual experiments and materials on YouTube, while respecting copyright.	Teachers	Throughout the school year	Teaching staff will use these materials in class, both online and in the classical learning process, and students will record academic progress

O2.3 Designing, creating, developing and editing own materials with digital content necessary for teaching-learning-assesment.	Teachers	Throughout the school year	Monitoring the development of eaching staff's digital skills
O2.4 Use the web to both edit and create learning activities with the class of students, assigning them different user roles.	Teachers	Throughut the school year	Observing the progress made by both teachers and students
O2.5 The use of applications such as GoogleForms, Kami, in the student evaluation process.	Teachers	According to the evaluation chart	The use of GoogleForms centralizers in order to improve the evaluation process
O2.6 Monitoring the completion of classes, student attendance in online classes, assistants and inter-assistants in classes.	School Principal	Throughout e school year	Review of school progress achieved through the use of digital technologies
The specific objective O3 ***The development of a culture favorable to communication and collaboration through digital technology***			
Activities/Identification of solutions	**Responsible**	**Term**	**Ways to evaluate the effects achieved through the changes made**
O3.1 Realization of an internal procedure for online communication within and outside the institution.	Responsive CEAC	Until January	Data interpretation on how the procedure was followed
O3.2 Updating or creating "internal" communication networks, with limited access, for students and/or parents of each class using the WhatsApp application.	Class leaders	Until January	Collecting data on how the WhatsApp applications were updated
O3.3 Updating quick communication groups among teaching staff, auxiliary teaching staff/all staff/Parents Committee/Parents Association.	Computer scientist	Until January	Collecting data on how the WhatsApp applications were updated
O3.4 Updating the information contained on the institution's website.	Chief Secretary	Throughout th school year	Checking the information update
O3.5 Conducting professorial or administrative councils using GoogleMeet, Zoom.	School Principal	Throughout th school year	Collecting data on the effectiveness of communication
O3.6 Debate on the advantages and disadvantages of using technologies and online education.	Teachers and students	In January and May	Analysis of the results of the debates and their interpretation
O3.7 The use of digital technologies in the development of of partnerships for the institution.	School Principal	Throughout th school year	Collecting data on the effectiveness of communication

Following the implementation of the strategic objective "The permanent use of digital technologies in the teaching-learning-evaluation process both in the exclusively online or hybrid environment, as well as in the face-to-face environment, in pre-university education units, the expected results according to the questionnaires applied to the directors of sampled pre-university education units would be the following:

- The acquisition of digital skills by all teaching staff;
- Development of a mechanism for evaluating the digital needs and skills of teachers: self-evaluation, peer evaluation, princple's evaluation, and student evaluation;
- Integration of all options offered by online platforms into the teaching process;
- The use of digital technologies both in traditional and online education, by carrying out student-centered educational activities;
- Individualization of teaching-learning, an effect of the student-centered approach;
- The inventory of all good practice models related to educational software or methods that made educational resources available to students, to create a school-specific software bank.
- Creation and support of "learning communities", to facilitate exchange of experience, model of best practices, and digital pedagogy for teaching staff and auxiliary staff in educational units.
- Elaboration of a digital strategy for each educational unit.

Conclusion

Educational theory in pre-university education is multifaceted but holistic (Mercer & Fisher, 1993). It is based on the idea that students should be exposed to a combination of theoretical concepts, practical skills and social activities in a safe, supportive learning environment. The main purpose of pre-university education is to prepare students for success in future studies, work and life in general.

According to the results and the discussions that we have presented, it is found that the study hypothesis is confirmed in the sense that a strategy regarding digitalization is needed at all levels of pre-university education.

The conclusions of my study is that digitization represents a method of teaching-learning-evaluation that is increasingly used in the post-pandemic period in the pre-university environment, a very large percentage of teachers have acquired digital skills, they use applications and other facilities of online environment in the teaching-learning-evaluation process, are open to this perspective, that the didactic process takes place both hybridly and exclusively online.

The school spaces are equipped with laptops, tablets and internet connections. The licenses were activated free of charge and remain valid for the entire duration of the institutions' operation. Many students and teachers have received electronic devices with Internet access, often provided free of charge by authorities or NGOs.

In the current post-pandemic period, it is important that all the digital tools that facilitate teaching-learning-assessment, acquired during the pandemic continue to be used, so that digitalization becomes a coaching tool, improving the functioning of the pre-university education system.

Coaching influences organizational development by creating strategic planning, implementing school improvement visions, and promoting curricular innovation and organizational change. Collaboration and trust in decision makers are essential. Decentralized leadership, within the context of a specific labor market, factor endowment and local context that

determines educational demand and supply, is essential, and coaching creates the framework for this to happen. When leaders trust their staff, there is a culture that expects staff to grow. When leaders convey the tacit understanding that they don't have all the answers and convey their confidence to staff, positive change happens.

Regarding coaching for the acquisition of digital skills, teachers are interested in any form of support, both intercollegiate and formal, through training courses organized by the Didactic House or other state or private entities. At the same time, teachers believe that digitization can also be seen as a coaching tool when they use their digital skills in interaction with students, in the didactic process of teaching-learning-evaluation.

The directors are also satisfied that many of the activities, such as the administrative councils, as well as the professorial ones, can take place online, and communication can be much faster using technology.

All of them, teachers and directors consider that a strategy is necessary at the level of the pre-university education system, as well as for each individual educational unit regarding digitization. As this strategy must not lose sight of the necessary resources, the types of activities, precise terms and people who will be responsible for the realization of the activities.

According to the Pre-university Education Law, 198/2023, in art. 123, it is provided that by a Government decision within 12 months from the date of entry into force of the law, i.e. until July 2025, the National Strategy for the digitization of education shall be adopted and the development of digital skills among the educational community.

Already, the evaluation of the written papers of the candidates for the National Baccalaureate Assessment and Titularization exams is digitized, starting with the August 2023 session of the baccalaureate exam, in the sense that the candidates' papers are scanned by the assistants in each exam hall, they are uploaded to a platform dedicated to each individual exam, and the evaluators receive the written papers for evaluation in a random manner. It is a big step for the digitization of Romanian pre-university education, to ensure the transparency of the evaluation activity and to respect the evaluation standards.

The overall goal is to equip students with the tools and skills they need to succeed both inside and outside classrooms, it is to equip the totality of the concepts, methods, ideas and theories taught with societal adaptation through to explore and discover, problematize, identify certain solutions, both the experiment and practical analyzes in a real environment. Thus, digitalization can become a coaching tool to improve teaching-learning-assesment.

The limits of this study are marked by the fact that the questionnaires were not applied at the level of the pre-university system, but only for a representative sample of school units in Bucharest. I believe, however, that the results cannot differ greatly, even if from the point of view of material resources, the capital of Romania is located far above the country's average. For the future, I would like to see through a larger study if this new research hypothesis is confirmed.

Essentially, pre-university education aims to promote the development of the student's intellectual capacities, social interaction, personal responsibility and emotional well-being. This means that teaching strategies are tailored to students individually, allowing them to explore ideas, take risks and develop their own creative solutions to existing problems. For example, students can be encouraged to work together, explore different perspectives, and come up with new ideas (Collins, et al., 1991).

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