Artificial Intelligence in Education and Digital Albania

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Abstract
Artificial intelligence will have to support a part of the learning but what should be kept in mind is the fact that the essence of a teacher is the brain, the heart and the human being. Nowadays, we often hear war, virtual world, artificial intelligence as the most frequently used words. These seem at first glance to be unrelated, but what we as citizens perceive is the word uncertainty. Just as a possible war which once seemed distant but today is taking place very close to us, it is also happening with technological development and especially with artificial intelligence.
The method used in this study is qualitative. We have chosen the qualitative method as it is a research strategy that usually places emphasis and importance on words and not on numbers. As a research strategy, it has inductive, constructive and interpretive approaches.
One of the challenges was the certification of 10,000 coders by 2025, a figure that seems impossible to achieve by 2025 since until March 2024 there is no data on how this number has gone and how it is being managed the process.
Today in Albania, within the framework of continuing education, a high number of trainings are offered for teachers in the system by various training agencies, the Faculty of Education Sciences is the largest training agency in the country, and according to the data, no ongoing trainings are offered for teachers. which should continuously accompany the process of changing the curriculum in pre-university education. In relation to artificial intelligence, there are sporadic efforts under different projects, but this is not enough.

Keywords: Artificial Intelligence, Education, Digitalization

Introduction

Nowadays, we often hear war, virtual world, artificial intelligence as the most frequently used words. These seem at first glance to be unrelated, but what we as citizens perceive is the word uncertainty. Just as a possible war which once seemed distant but today is taking place very close to us, it is also happening with technological development and especially with artificial intelligence.
If you are a person of a certain age, for example born in the 80s, you can remember the animated films Rosey the Robot or The Jetsons or the film A space Odyssey of 2001 (AI for educators, March 2023, Mat Miller) which showed that artificial intelligence it was something of the future. But in 2022 this would be the new reality we would face.
Chat GPT was no longer something that only belonged to those who had known it for a long time but was being embraced with rapid steps, this was seen in 2022 when it managed to have 1 million users within 5 days. (Brockman 2022) and in 2 months 100 million users (Hu, 2023). This is a very high figure considering that Instagram took 2 months to reach 1 million users (Miller, 2023).
An expert on artificial intelligence, Kai Fu Lee says that: Artificial intelligence may be the most transformative technology in human life and we may be underestimating what will happen in the next 5 years. So we have to prepare young people for this new world and this means that we have to change.

Teachers should be the first to be prepared for this change as they will have to transmit the change to the generations to come. Not everything will change, but many things will change, and of course in education. In kindergartens, educators will help children dress, feed, walk, talk, students will have to talk about the future and teachers will have to guide them, interaction in the classroom should not be lost on the contrary. Artificial intelligence will have to support a part of the learning but what should be kept in mind is the fact that the essence of a teacher is the brain, the heart and the human being. (Miller 2023).
Therefore, what will be a challenge in these moments is precisely the adaptation of this innovation to classical methods in schools and universities. Is our society ready to embrace this change, which in other places is being embraced rapidly? Do we have the right capacities to adapt these innovative methods and are we able to use artificial intelligence to improve the quality of the programs we offer without losing the essence of what the school or university does?
These are some of the questions that are asked today in the university auditoriums and then in the entire educational system in Albania.
Artificial intelligence is for everyone (Emmanuel K. Okunda, 2023). The history of AI would begin in the 1960s-1970s when the LOgic Theorist program was created which was capable of proving mathematical theorems. This was considered a success even though the pace slowed in the 1980s and 1990s. In the year

2000 there would be new qaas related to AI and it would go to another level in that of creating machines that would do programming that until then had been done by humans. Today, AI is used in many applications and has advanced a lot, although there are still people who think that this development and AI is not for everyone and that it will take away the work of many people (Emmanuel K. Okunda, 2023). At the conclusion of his book. Emanuel Okunda, "Artificial intelligence for everyone" he concludes in the concluding chapter that. The era of artificial intelligence is the era we are living in and it is rapidly changing the world around us and the cooperation with each other. The possibilities are endless but so are the risks and changes.

Albania and the access to the virtual world

Today, Albania ranks first in the Western Balkan region in terms of what is considered digital governance. According to an OECD report published on July 8, 2020 "Report on the governance of the Western Balkans", it is ranked first in the region by completing 7 of the 7 measuring indicators of this report, leaving behind Serbia and so on the other countries. 95% of services in Albania are offered online, thus eliminating counters and contact with employees who provide these services through the E-Albania platform. Since 2020, a new process for public services has begun, that of providing applications for public services to citizens and online only businesses. Citizens and businesses apply only through the e-albania platform and it is the employees of the public administration who collect all the state service documents.

The e-Albania government portal is connected to the Government Interaction Platform, which is the basic architecture on which interaction with the electronic systems of public institutions is enabled, enabling communication between state databases, in order to provide electronic services.

The digital revolution of services and public administration in Albania, since 2014, has changed the perception of citizens regarding electronic communication with state institutions. Today, over 1,200 public services are offered online, or about 95% of all public services, compared to 14 in 2014 or 1% of online services at that time. This translates into a reduction in the costs of receiving services, easing bureaucratic procedures, reducing the time to receive services, but also improving the transparency and quality of their provision, it is stated in the Digital Albania Agenda 2022-2026.

On the other hand, the Digital Albania Agenda 2022-2026 also talks about the challenges of the future which is artificial intelligence and how Albania will embrace this technological change by putting it at the service of different sectors.

Citizen readiness for tomorrow's challenges Digital technology must act as a social balance, allowing citizens to engage and contribute to society, regardless of age, gender, education, economic income, sexual orientation or ethnicity, the Agenda states.

The government intends that through digital technology and increasing the role of AI, it can increase the quality of life in the country, starting with transparency, administration, environmental protection, medicine and others.. (Digital Albania Agenda 2022-2026)

But for this to happen, it will definitely be necessary to work in two sectors in human capacities and in infrastructure.

And the aim of the government's policies is to have an increased focus on the education of the generations with this change starting from:

- Increasing the integration of innovative technologies in the learning processes of primary and secondary education.
- Institutionalization of weekly information technology (IT) classes in all secondary education classes.
- Creation of digital skills subjects in all curricula of higher education institutions.
- Delivering training programs for all ages, social and professional groups from a variety of sectors through a lifelong learning approach.

The expected results for this goal are:

1. Integration of artificial intelligence and big data analysis in the e-albania platform and electronic government systems within 2026.
2. At least 80% manage to receive electronic services within the year 2025.
3. Piloting smart solutions in 3 cities of national strategic importance within 2025

4: Digital education and digital skills: transforming learning and teaching

Let also focus on education as a key point of tomorrow's development.

The main objective is to develop digital skills throughout the educational ecosystem, which means creating a digital culture of learning. At the same time, it focuses on retraining and/or advancing teaching staff with new skills so they can use these new technologies in the classroom. The most important points of digital transformation in education are as follows:

-Teaching and learning

- Learning management

– enabling anytime, anywhere learning on secure, easy-to-access platforms and providing more personalized learning experiences.
- Cooperative learning
– fostering group learning.
- Learning spaces
-Secure and Internet-connected buildings
-Scientific research in higher education institutions
- Enabling scientific research
– empowering research groups by providing the right cloud-based environments that support university policies, security and governance models.
- High performance computing centers & IA
- enabling high-performance computing, machine learning and artificial intelligence.
Etc…..
Digital learning (e-learning).
Effective digital learning techniques can help students build deeper learning skills that will transform their perspective. The digital vision for e-learning will be supported by:
Student experiences
Empowerment of teachers.
Institutional processes –
Transforming teaching – delivering personalized curricula based on each student's talents and interests.
Extending computer science teaching to children and young people The government's aim is to provide access to coding learning modules for children and young people starting in the first grade of school and to promote the growth of general digital skills in all ages. In addition to the development of the curriculum, special importance will be given by the government to the training of teachers and the development of technological teaching laboratories in order to create the necessary conditions for a successful implementation. The training of teachers and educators will start with workshops to introduce them to the basics of computer science and will continue with more structured training throughout the year.
Expected results for the objective: Digital education and digital skills:
1. Through training centers and coding courses, it is aimed to have 10,000 coders certified by 2025.
2. Creation of 10 youth technology centers at the national level within the year 2024.
3. Integrating the subject of information and communication technology and coding knowledge as part of the curriculum starting from the first grade of basic education by 2022.
4. Creation of smart laboratories in all pre-university education institutions in the country by 2023.

Methodology

The method used in this study is qualitative. We have chosen the qualitative method as it is a research strategy that usually places emphasis and importance on words and not on numbers. As a research strategy, it has inductive, constructive and interpretive approaches (Bryman, p. 374).
Since the 70s, Bryman and Burgess have emphasized the difficulty encountered in determining the right strategy in scientific research, emphasizing that this is not at all simple, but we have taken into account the 3 main reasons why we chose the qualitative method in our study :
First, qualitative research is sometimes taken to mean an approach to social research in which quantitative data cannot be collected, and this is the case of our study.
Secondly, in order to understand and interpret the dynamics in the target report, we will have an intervention of the separate analysis of each of the sectors, but also the interaction with others. The methods proposed in this study will aim to optimize and facilitate the analysis of the collected information. The instruments that will be used will aim to collect information, which will help us achieve the objectives of this study.
Thirdly, starting from the importance of the fact that social properties are the result of interaction between individuals, we have tried in our study to collect information from the confrontation of thoughts and ideas.

Phases of the study

Our study has gone through the first 3 stages of gathering information on how the digitalization situation in our country is presented based on official reports, government information documents and how the issue is raised based on the government's strategies regarding the digitalization of Albania in a world which is increasingly embracing technology, but on the other hand, it is also raising questions about its management.
The second phase of our study concerns the definition of the methodology, the target group for the study, the methodology, the selection of the sampling and the design of the instruments to answer the research questions raised in our study.
The third phase is that of the results and recommendations in the realization of the objectives set by the government until 2026.

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Results of the study

Today we are almost at the end of 2024 and in the event that they would do a general analysis of what is really happening, we would have to stop the deadlines.

The Albanian government has decided that in 2022 the subject of information technology and coding knowledge would be part of the curriculum starting from the first grade of basic education. And this has happened. What is unclear is how the curriculum was changed without first seeing if there was a possibility in its implementation. What actually happens with this curriculum is the fact that it is impossible to realize the goal and objectives as long as the schools continue to remain without laboratories. In a 9-year-old school in Elbasan, one of the largest and most important cities in the country, the school leaders admit that they don't have a tic lab and they should have 2 such, but only one smart lab which is used occasionally and for the subject of tic.

On the other hand, what is worrisome is the access that children from marginalized sections of society, such as Roma children, should have in education and therefore in technology. In a study done after the pandemic in the city of Elbasan "Access of Roma children to education during the COVID 19 pandemic" published by professors of Aleksandër Xhuvani University in important scientific journals, the fact that these children had no access to education at all came to the fore. as they did not possess appropriate tools such as computers, tablets or in some cases did not even know them. No measures were taken for this situation and the situation continues to remain disturbing.

The creation of smart laboratories in all institutions of pre-university education in the country within the year 2023 is not realized as a policy since the National Agency of Innovation Society admits that they are still equipping schools with smart laboratories, this declaration of 2024, laboratories that help children in coding. But, according to technology experts, even if these laboratories were already in all schools, they would not be able to help children and teachers in the subject of ICT.

One of the challenges was the certification of 10,000 coders by 2025, a figure that seems impossible to achieve by 2025 since until March 2024 there is no data on how this number has gone and how it is being managed the process.

A very important element is that of teacher training. Today in Albania, within the framework of continuing education, a high number of trainings are offered for teachers in the system by various training agencies, the Faculty of Education Sciences is the largest training agency in the country, and according to the data, no ongoing trainings are offered for teachers. which should continuously accompany the process of changing the curriculum in pre-university education. In relation to artificial intelligence, there are sporadic efforts under different projects, but this is not enough.

The universities that should be at the forefront of these technological changes have not yet started to talk about this new way of living and the implementation of these changes.

All this makes the situation and ambition of the government more unclear, which until 2026 will have to make an analysis of what has happened with development strategies in the field of technology and mainly with what is considered the future, artificial intelligence.

But who is the biggest problem that this situation presents? In my opinion, based on what we mentioned above, by not managing the technological change, we risk using these changes poorly, since by not orienting the generations, the situation can get out of our control, the fact is that young people have made and bwjnw their efforts to adopting these technological changes and sometimes not using them properly.

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