Readiness of Albanian Students to engage in Digital Learning: Perceptions, Challenges and Opportunities

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Abstract

Digital technologies play a crucial role in transforming today's learning landscape. The integration of online platforms, digital learning materials, and collaborative tools has become commonplace in many countries, offering students access to various resources and opportunities for engagement both inside and outside the classroom. This shift towards digital learning fosters a more dynamic and motivating learning environment and equips students with employability skills, enhancing their prospects in today's labour market. Recognizing the significance of digitalization in education, Albania has prioritized this initiative as part of its efforts to align with EU standards. Despite ongoing projects and investments aimed at promoting digitalization of teaching and learning, the pace of adopting innovative approaches remains sluggish, largely due to the complex interplay of factors and the readiness of key stakeholders such as teachers, school leaders, and students. To explore the challenges and identify potential solutions, a research study was conducted among students at the University of Tirana. By combining survey data with in-depth interviews, the research aims to uncover students' perceptions toward digital learning. The research shows that Albanian students are aware on the importance of digital learning, but are still facing psychological and infrastructural challenges that hinder their perceived readiness and willingness.

Introduction

The education is constantly evolving, and technology is a major contributor in this transformation (Raja et al., 2018; Facer, 2011; Glenn, 2008; Burbules et al., 2020). Technology is reshaping the way we access and deliver education, providing teachers and students with a highly engaging learning experience. Thanks to integration of technology in education, digital learning, a term often used interchangeably with e-learning, has now become a worldwide trend, as it is proven to increase the effectiveness of teaching and learning (Barolli et al., 2009). Several studies have emphasized the positive impact of digital learning on shifting from an educator-centred to a learner-centred learning (Rasouli et al., 2016), boosting students' participation in the learning process (Kashada, 2020), and increasing flexibility in terms of time and space (Miyoshi et al., 2012; Lapitan, 2021). Today, students can use various digital tools and resources, engage in online collaboration, and complete assignments in virtual environments. Teachers, on the other hand, can create and share digital materials with their students, track their progress, assess them through online tools, and provide meaningful feedback. Going digital in education has now become a must. It naturally corresponds to the way today's youngsters (the digital natives, as firstly referred to by Prensky, 2001) find and absorb information, while stimulating their learning motivation and engagement.

The context of the study

Digital learning orientation is particularly important in universities. Just a few steps away from the labour market, digital learning contributes to students' skills development, such as digital competences and other employability skills (Singh et al., 2017). Therefore, universities are implementing various strategies to accommodate active learning in the physical classroom (Becker et al., 2018), by adapting them to support engaging and interactive learning.

In Albania, universities continue to rely mostly on traditional approaches. Meaningful integration of digital technologies is still deficient, being limited mainly to the equipment with basic infrastructure (internet connection, ICT labs), although even this infrastructure remains incomplete. The teaching process depends heavily on the infrastructural conditions and the willingness of teaching staff, while the concept of integrating technology in teaching is often reduced to the use of a projector. The students remain mostly passive, waiting for the knowledge to be transmitted, without benefiting from the use of digital tools, resources, and interactions.

The low exposure to digital learning became evident during online learning amid the COVID-19 pandemic. While the virtual environment was mainly used for facilitating communication, the utilization of digital tools for fostering engagement and interaction remained limited. However, the experience during the pandemic highlighted several benefits of digital teaching and learning approaches. This raised awareness among education stakeholders and catalysed digitalization initiatives.

Especially over the last decade, educational authorities have made efforts to integrate digital technologies into various process related to this area. An essential instrument currently stimulating the digital orientation of teaching and learning process is Albania's Digital Agenda 2022-2026 (Decision No. 370, date June 1, 2022), where one of its four objectives is "Digital education and digital competences: transformation of learning and teaching" (p. 9). According to this agenda, the digitalization of education should be extended in communication, documentation and administration, but also in the teaching and learning process. Within this vision, the agenda aims to create a digital learning culture by promoting effective use of synchronous and asynchronous tools and platforms to support learning, equipping

education institutions with the necessary infrastructure, and the improving the educators' skills to engage in digital teaching. Digital inclination of teaching and learning is also a fundamental aspect of National Education Strategy 2021-2026 (2021). Referring to Specific Objective C7 (Digital services), one of the expected outcomes is "Encouragement of higher education institutions to conduct distance and blended learning" (p. 102). Certainly, the inclusion of digital solutions in teaching and learning, during lectures and as part of students' self-directed learning, represents a challenging process, which requires additional efforts, skills, and motivation. In the still embryonic integration of digital learning into universities in Albania, it is essential to understand how ready institutions and actors are to embrace these new approaches to learning, with the aim of aligning them with the context and current situation. Particular attention should be given to students in order to estimate their readiness to utilize digital technologies in their daily learning process.

Literature review and conceptual framework

Several authors emphasize the importance of analysing students' readiness to apply digital learning, as an indispensable step before orienting towards teaching and learning strategies that heavily rely on digital technologies (see Gay, 2016). Some authors have attempted to measure what they refer to as Online Learning Readiness (Farid, 2014; Watkins et al., 2004), defining it as a crucial factor in the success of virtual learning (Rivera, 2018; Kerr et al., 2006). According to Luu (2022), the way students look at digital learning is also related to the cultural context, which shapes their system of needs, values, and beliefs. Moreover, attitudes toward technology indicate how individuals interact with or utilize technology (Sardone et al., 2010).

In Albania, research on the readiness to engage in digital teaching and learning is not abundant. A part of the existing studies aims to assess the readiness of the country and higher education to integrate digital learning by considering different literature-based criteria. An example of these studies is the one conducted by Barolli et al. (2009), which provides a snapshot of the situation in Albania regarding the orientation toward digital learning, based on four criteria: connectivity, capability, content, and culture. Most of the current studies have arisen from the need to acquire a deeper understanding of the online learning modality applied during the pandemic, focusing on issues as the effectiveness of online learning (Shoraj et al., 2022), students' perceptions and adaptations (Xhelili et al., 2021;), proficiency of students' digital skills (Gugu et al., 2023), and the experiences and difficulties encountered by educators under the unusual teaching circumstances (Hoti et al., 2022). In essence, these studies have focused on analysing the response to the emergent situation, addressing online teaching in the roles of a substitute for in-person teaching, rather than as a modality that complements and upgrades traditional teaching. Currently, amidst continuous encouragement towards digital teaching and learning (as outlined in the aforementioned strategies), the assessment of students' perceptions is crucial, since the implementation of digital learning is closely related to the way students react to this innovation. "In order to benefit from e-learning, higher education institutions in Albania should conduct considerable up-front analysis to assess their readiness." (Barolli et al., 2009, p. 5). This is where this research draws inspiration, based on the results from a survey and in-depth interviews with university students of Albania.

Methodology

Assessing the readiness of university students to participate in a highly digitalized learning process is a complex task that requires the consideration of various factors influencing students' attitudes toward the incorporation of technology and digital

solutions into their learning experience. To understand the readiness of Albanian students for integration of digital technologies, the study is based on gathering and analysing students' perceptions. For this purpose, surveys and in-depth interviews served as primary instruments for the study methodology, drawing upon examples of similar instruments provided in existing literature. In this context, Watkins et al. (2004) identifies technology access as an indicator related to students' readiness to engage in virtual-based learning. Other authors have highlighted the role of computer and internet skills (e.g. Kerr et al., 2006; Hung et al., 2010). Certainly, quality digital learning requires skills that enable profound learning, as well as awareness and intentionality in using digital resources and tools. The results of a study conducted by Lei (2009) on the skills, attitudes, and experiences of digital natives as preservice teachers, advise us to be cautious when reaching conclusions on the readiness of today's youth for digital learning. According to this study, although today's youngsters extensively and easily utilize digital technologies in their daily communication and interaction, the ability to use these skills in a learning context should not be taken for granted. Therefore, referring to this study, when measuring students' digital learning readiness, it is necessary to also consider more complex skills related to learning and collaborating in digital environments. McVay (2000) relates the digital readiness with how comfortable students feel when applying digital learning. The same study, as well as another one conducted by Bernard et al. (2004), emphasized the impact that the ability to learn in a self-directed mode has in successfully applying virtual learning. On the other hand, referring to technology adoption, although higher education institutions are increasingly supporting students to actively engage in learning and knowledge construction, there are several challenges impeding the paradigm shift, making teaching rely on traditional approaches (Becker et al., 2018). The identification of these challenges by the students would better address their needs in the implementation of digital learning and contribute to an easier and widely accepted digital transition in education. Based on these literature considerations, as well as on the current context of integrating digital technologies in higher education in Albania, the following research axes have been configured:

- Readiness of students regarding infrastructure
- Readiness of students regarding learning-related digital skills
- Current utilization of digital devices and tools for learning purposes
- Students' perceptions on benefits, limitations, and difficulties in engaging in digital learning
- Students' perceptions on the main challenges encountered by universities and suggestions related to the transition to digital teaching and learning

These research key points served as a basis for the elaboration of the instruments used for data collection. The survey was conducted during January 2024, based on a questionnaire comprising: 7 closed-ended questions, 15 statements rated on a 5-point Likert scale, and 1 open-ended question. The survey was conducted anonymously, with an average completion time of 8-10 minutes. The selection of respondents was based on purposive sampling, with the condition that respondents are currently students at universities in Albania. The determination of if the sample size relied on the widely used formula provided by Yamane in 1967:

$$n = N / 1 + N (e)^2$$

n - sample size; N - population of the study; e - margin error

In this study, N= 121,000 (number of students in Albanian universities during 2023-2024 academic year) and e= 0.05.

$$n = 121{,}000 \,/\, 1 + 121{,}000 \,(0.05)^2 = 399$$

A total of 411 students were included in the survey. Relevant information was also obtained from 24 in-depth interviews. A set of exploratory questions served as the basis for the interviews, supplemented with spontaneous questions during discussion. The answers were incorporated into the study's findings.

Results

The results of the survey and in-depth interviews have established a solid foundation of qualitative and quantitative data on how ready university students in Albania are to engage in digital learning, how beneficial they consider this transformation, as well as the perceived relevant challenges.

Social-demographic characteristics of the sample

The respondents represent a heterogeneous sample of students. 88.6% of the respondents are female, and 11.4% are male. The significant predominance of females, besides their overrepresentation at the population level (more than 2/3 of current students in Albania are female), can also be explained by the higher willingness of this category to engage in completing the questionnaire. The age range is between 18 to 53 years old[1], with an average age of 24. The survey included both Bachelor (54%) and Master students (46%) from different universities and fields of study.

What is the students' access to digital devices and the internet?

Access to digital devices is a key factor that determines students' readiness to engage in digital learning. As education increasingly relies on virtual tools and resources, students require access to digital devices beyond the classroom to continue their engagement in digital learning. At first glance, the survey results are promising, as all students possess at least one digital device. Smartphones are the most common device, owned by 88.2% of students, followed by laptops (65.2%), desktop computers (15.6%), and tablets (10.5%). However, despite each student having access to at least one digital device, 29.9% of them (1 out of 3 students) only own a smartphone. Although smartphones allow students to access the internet and use online resources, it is challenging to utilize these devices for more complex tasks (e.g. presentations, digital content creation, peer collaboration). Internet access appears at satisfactory levels, as 96.8% of students have access through the owned devices. However, the examination of the frequency of internet access reveals a more nuanced situation:

Table 1
Frequency of Internet Access among Students

Frequency of internet access	Students (%)
Throughout the day	66.1
During certain time slots	33.1
Rarely	0.8

Source: Survey results

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[1] Students of advanced age mainly pursue the Master studies, where a portion of students have returned to university after taking a break for a few years.

While the majority of students have continuous internet access, a significant portion manages to access it only during certain time slots or rarely (1 out of 3 students). The disadvantage of this category becomes even more pronounced when we examine the available devices: whereas 29.9% of all respondents own only a smartphone, this figure increases to 74.1% among those with limited internet access (100 students out of 135). The group with only a smartphone and limited internet access (24.3% of the total number of respondents) represents the most disadvantaged category, demanding greater attention in the framework of future digital transformation of the educational process

How do students perceive their digital skills?

The digitalization of the learning process at universities requires students to possess adequate digital skills. In order to understand more about their readiness to engage in digital learning, students were asked to assess their individual digital competencies in terms of finding information on internet, acquiring knowledge, collaborating with peers, and conducting self-paced learning. The results were as follows:

Table 2
Students' estimations on their digital skills

Statement "I can easily and effectively...	Level of agreement among students (%)					MS[2]	SD[3]
	1 – strongly disagree	2 - disagree	3 – neutral	4 – agree	5 – strongly agree		
... operate digital devices for learning purposes	4.1	5.1	47.7	7.5	35.5	3.7	1.1
... navigate on the internet for learning purposes	0.7	7.5	46.5	3.2	42.1	3.8	1.1
... use digital tools for learning purposes	1.5	8.0	50.9	24.1	15.6	3.4	0.9
... collaborate in a digital environment	1.9	7.1	54.5	27.7	8.8	3.3	0.8
... learn in a self-paced mode in a digital environment	2.4	6.8	56.2	16.3	18.2	3.4	0.9

Source: Survey results

The mean score of each statement is above average, indicating that students' perception of their digital skills in the context of learning is relatively satisfactory. Nevertheless, the perceptions are nuanced. When examining statements regarding the level of digital skills in the context of learning, it is noted that higher ratings are given to skills that can be considered more basic or fundamental, such as operating digital devices (MS=3.7) and navigating the internet for learning purposes (MS=3.8). Meanwhile, a lower mean score is observed in digital skills related to more complex learning activities and actions, such as effectively utilizing digital tools for learning purposes (MS=3.4), engaging in digital learning in a self-paced mode, without the supervision and support of the pedagogical staff, and especially contributing in collaborative tasks (MS=3.3). These are digital skills for which students, as well as other stakeholders in the university system, should invest more to improve them, in order to be better prepared for the digitalization of learning. The standard deviation across

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[2] Mean Score
[3] Standard Deviation

statements shows a relatively consistent level of agreement among surveyed students regarding the way they perceive their learning-related digital skills.

How frequently students use digital technologies for learning purposes?

A digital teaching and learning process relies heavily on the use of online resources for information retrieval, utilization of tools and platforms for presentations and assignments, as well as interaction for group tasks. To ensure effective and efficient digital learning in terms of resource and time management, it is essential for students to be acquainted with these innovative aspects of learning. In this context, students were asked to estimate several statements concerning the utilization of digital technologies using a Likert scale based on frequency:

Table 3
Usage of Digital Technologies for Learning among Students

Statement	Estimations among students (%)					MS	SD
	1 – never	*2 – rarely*	*3 – sometimes*	*4 – often*	*5 – very often*		
I search on the internet to find new information	1.2	3.9	37.7	10.0	47.2	4.0	1.1
I consult digital resources	2.2	8.3	44.8	15.6	29.2	3.6	1.1
I use content creation tools for my assignments	2.4	10.5	60.8	17.8	8.5	3.2	0.8
I use virtual learning environments to collaborate with peers	5.1	12.9	50.6	19.0	12.4	3.2	1.0

Source: Survey results

The results converge with those related to the assessment of digital skills by students. As indicated by the frequency of their use, digital technologies are predominantly used for basic purposes that do not involve much complexity, such as information search (MS=4.0) and consultation of digital resources (MS=3.6), rather than for more demanding tasks such as digital content creation for assignment completion (MS=3.3) and participating in online collaborative tasks (MS=3.2). In general, the results indicate that students need to become more familiar with digital technologies, particularly concerning the utilization of more "sophisticated" digital functionalities, which represent the essence of profound learning. The less pronounced readiness related to these digital learning components was also confirmed by the students participating in in-depth interviews. As one of the students stated, "Today's students might be good at exploring the internet and finding the needed information, but learning goes way beyond that". The statistical analysis suggests an overall moderate convergence of students' statements on the frequency of using digital technologies in their learning process, especially regarding the use of digital content creation tools in assignments.

How students perceive the benefits of digital learning?

To gain more insight into students' readiness for enhanced digital learning, the survey included several statements about the benefits of using digital tools and learning materials, focused on three elements: facilitation of the learning process, productivity, and engagement. The estimations are presented in the table below:

Table 4
Students' Perceptions on Digital Learning Benefits

Statement "Using digital tools and making digital learning materials available would…	Level of agreement among students (%)					MS	SD
	1 – strongly disagree	*2 - disagree*	*3 – neutral*	*4 – agree*	*5 – strongly agree*		
… facilitate my learning process	2.2	7.8	50.4	6.8	32.8	3.6	1.1
… make me engage more in learning	2.2	10.2	62.0	8.3	17.3	3.3	0.9
… help me become more productive	1.0	5.6	59.1	8.3	26.0	3.5	1.0

Source: Survey results

Students' estimations regarding the anticipated impact of increased use of digital tools and availability of digital learning materials are above average. The highest rating is given to the influence of these digital approaches on facilitating the learning process (MS=3.6), while the lowest corresponds to the role of integrating digital tools and learning materials in students' engagement (M=3.3). The standard deviation for each statement is approximately 1, which suggests a moderate alignment of students' answers on each component referring to the used scale. Although the estimations lean more toward agreement, they still suggest that students need to be more informed and aware of the benefits of digital learning before fully engaging in this new approach. This could be explained by the current predominance of traditional teaching, allowing students little opportunity to effectively apply digital learning and see its impact on enhancing learning efficiency and academic performance. The opinions shared during the in-depth interviews support the argument above (e.g. "Yes, I guess digital tools and materials would help me learn better, but I cannot give an exact answer because we (students) haven't experienced digital learning yet"). A higher exposure of students to digital learning tools and materials would raise their awareness on these benefits and potentially enhance their motivation for digital learning, thus better preparing them for a digitalized education.

How comfortable are students with the rapid advancement of technology?

Since four decades ago, Rosen *et al.* (1987) found out that students with negative attitudes towards technology and who experience anxiety from computer devices (referred to by the authors as "computerphobia") showed a lower level of computer skills, literacy, and interest in computer-related activities. Today, as studies indicate (e.g. Ulzheimer *et al.*, 2020), fear remains a significant accompanying component of digitizing learning, potentially creating barriers to innovative educational modalities. To understand the prevalence of these feelings, students were asked to express their opinion on the statement "I am afraid of the rapid progress of technology". The answers are synthetized in the table below:

Table 5
Students' Perceptions on the Rapid Advancement of Technology

Statement	Level of agreement among students (%)					MS	SD
	1 – strongly disagree	*2 - disagree*	*3 – neutral*	*4 – agree*	*5 – strongly agree*		
I am afraid of the rapid progress of technology	17.8	14.6	51.1	7.5	9.0	2.8	1.1

Source: Survey results

The mean score of 2.8 indicates that, despite the wide use of technology in their daily activities, when referred to a learning context, students are somewhat sceptical about their capability to adapt and adjust their learning to a continuously advancing technology. More insight is gained through in-depth interviews, which reveal two main factors related to this technological "intimidation": firstly, the increasing complexity of digital platforms and tools used for learning purposes; secondly, the additional time students will need to invest to familiarize themselves with new digital technologies.

What is the students' perception on the impact of digital learning in social equity?

While the benefits of digitalizing learning are widely recognized, it is essential to consider its potential undesirable impacts. Disparities in access to digital devices, internet connectivity, digital skills, and specific needs, all contribute to these concerns. Many researchers have drawn attention to what is known as the digital divide in studies on digital learning (see Kuhn et al., 2023). The surveyed students were asked to express their opinion on the potential accentuation of inequalities that digital learning might create. Their answers are provided in the table below:

Table 6
Students' Perceptions on the Impact of Digital Learning on Social Inequalities

Statement	Level of agreement among students (%)					MS	SD
	1 – strongly disagree	*2 - disagree*	*3 – neutral*	*4 – agree*	*5 – strongly agree*		
Digital learning will accentuate inequalities among students	12.4	16.3	56.4	5.6	9.2	2.8	1.0

Source: Survey results

Although the mean score of 2.8 leans (slightly) towards disagreement, it suggests a certain level of concern among students regarding the impact of digital learning in accentuating social inequalities. According to the input from in-depth interviews, these concerns are mostly related to the lack of access in digital devices and the internet. These perceptions can impact students' ability to adapt to the digital transformation of learning. Therefore, it is essential that, alongside the digitalization process, measures are taken to reduce potential disparities in infrastructure access and skills, as well as addressing special needs that students may have while working in virtual learning environments. Embedding accessibility and inclusion in digital learning will improve students' perceptions regarding digital teaching and learning, thereby increasing the chances for high engagement and satisfactory academic outcomes.

Challenges confronting higher education in its transition to digital learning: insights from student perspectives

Transitioning from traditional to digital teaching and learning, while accompanied by benefits, also presents challenges that need to be identified and addressed beforehand to ensure a smooth and widely embraced transition. The students' perspective provides valuable information to highlight these challenges, which, if neglected, could compromise the effectiveness of digital teaching and learning. Responses from the survey have revealed the following key challenges encountered by students:

Table 7
Digital Learning Challenges from Students' Perspective

Challenges	Citation frequency (%)
Lack of digital learning materials	55.2
Insufficient internet access	46.0
Insufficient physical infrastructure	39.4
Predominance of traditional teaching and learning mind-set	36.5
Digital skills of students	33.3
Digital skills of teaching staff	24.3

Source: Survey results

The availability of digital learning materials, access to the internet, and adequate physical infrastructure are perceived as the most pressing challenges for transitioning to digital learning, followed by the persistence of traditional teaching mind-set, and the concerns regarding the digital skills of both students and pedagogical staff. These results are unsurprising, given the fundamental role that infrastructure and reliable learning resources play in the process of digitalizing teaching and learning. While all the listed challenges need to be tackled as the education system transitions towards digital learning, those considered more immediate to be addressed offer valuable insight for prioritizing future interventions. Subsequently, students would feel more ready and comfortable when projecting themselves in the future of higher education.

What do students suggest for the effective integration of digital learning in higher education?

In formulating and implementing strategies to embed digital learning into the daily teaching and learning process in universities, it is essential to acknowledge and take into consideration students' suggestions on what needs to be improved or provided in order to guarantee a more effective digital transformation. These suggestions constituted the last question of the survey. Although only 71.5% of students responded to the question[4], the results clearly reveal their perceptions and vision concerning the future of digital learning in Albanian universities. Given that open-ended questions were used, responses have been coded and grouped according to key elements of suggestion. The table below presents the most frequent suggestions provided by students:

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[4] 28.5% did not answer this question or responded in a manner that is either irrelevant or not meaningful (e.g. *"Technology in education is important"*)

Table 8
Students' Suggestions for an Effective Integration of Digital Learning in Universities

Suggestions categories	Citation frequency (%)
Improvement/completion of physical infrastructure in universities	34.3
Increase in internet access	16.5
Increase in the utilization of digital platforms and tools during lectures	9.7
Provision of digital learning materials	9.2
Training of students and pedagogical staff	9.0
Raise of awareness on the importance of digital teaching and learning	2.2
Establishing a balanced, well-planned and rational blend of digital and traditional learning	1.9

Source: Survey results

As indicated by the table, the emphasis is placed on *completing the physical infrastructure* with the necessary equipment to support effective digital learning development in classrooms. Students suggest ensuring that every student has access to a suitable digital device, preferably a tablet, as a practical tool for interactive learning during and after lectures, as well as the installation of a smartboard in each classroom. In the second place on the list of suggestions, *ensuring full access to the internet in university* settings is highlighted, emphasizing the current limitations of internet connection. Another suggestion is the *increased use of digital tools during lectures*. Based on the students' input, the more frequent use of platforms, applications, and various digital tools will contribute to further familiarizing students and the teaching staff with these innovative elements of learning, as well as to the development of more interesting and engaging classes. According to students, the digital transformation of teaching and learning should also consider the *provision of digital learning materials* as a crucial component that enables students to consolidate their knowledge and self-assess their learning progress. To ensure that digital learning initiatives are well received by students and effectively enhance their learning experiences, it's necessary to not only provide digital physical resources but also strengthen human resources. A significant portion of students underline the importance of *training both teaching staff and students* in digital skills and the proficient utilization of digital solutions within the teaching process. Students also suggest maintaining *a balance between traditional and digital approaches* in teaching and learning, emphasizing the need for rationale use of technology. One of the interviewed students stated: "Digitalization should not be an end in itself. Not every teaching activity needs to rely on technology. A discussion, for example, it is better to be conducted in a traditional manner, with direct communication between the professor and the students." This demonstrates that the concept of the ideal learning process according to students does not lie in the forced integration of technology, but in the establishment of a balanced and well-thought-out integration of traditional and digital learning methods and activities. Other suggestions deserving consideration, although articulated by fewer students, are: *enabling of online learning options to compensate the lack of physical presence; ensuring online safety; creation of a unique online platform for digital learning; integration of more advanced digital technologies; offering of offline options when using digital platforms/tools*. The lower frequency of citation of these aspects should not be attributed to their perceived

lesser importance for students, but mainly to the limited information students possess regarding the necessary interventions and adaptations that the educational system needs to undertake to successfully implement digital teaching and learning.

Discussion

As initially stated, the study aimed at assessing the readiness of university students in Albania to engage in digital teaching and learning in the near future. Based on student's opinions and evaluations related to their current learning habits, skills, preferences and perceived challenges in the context of digital transition in education, the study led to several findings, which, in a general standpoint, reveal a moderate level of students' readiness to engage in digital teaching and learning. Regarding the existing infrastructure and internet access, while all the surveyed students do own a digital device and the vast majority have access to the internet, there is a significant part of the students (1 out of 3) relying only on smartphones and having limited internet access. Concerning their digital skills in the learning context, while students evaluate them as generally satisfactory (above average), there is an obvious difference between basic digital skills (e.g. navigating the internet) and more complex competences for learning purposes (proficient use of digital tools, virtual collaboration and self-paced learning). A similar differentiation regarding the complexity of digital skills for learning is observed in the current use of digital technologies by students: students' experience, and therefore digital readiness, is lower when it comes to integrate in their learning more advanced functions of digital technologies. These findings align with what was claimed by Lei (2009), according to whom, while youngsters use intensively digital technologies in their daily activities, it should not be taken for granted that their digital skills are sufficient to support the use of these technologies for learning purposes. In addition, when asked about their relationship with a constantly advancing technology, students appear to be somewhat intimidated, which reveals their moderate ability to adapt quickly and effectively to a dynamic digital learning. The moderate level of digital readiness of students is evident also in their estimation of the benefits of digital learning. While the impact of digital learning on facilitation of learning process, engagement and productivity is rated above average, it still falls below the levels that would provide students with the necessary motivation to fully and effectively engage in digital learning. The main challenges identified by students regarding the transition to digital learning underscore the insufficient physical and digital infrastructure, confirming therefore the need of the educational system to get more ready to effectively implement digital teaching and learning in universities. Students' suggestions strengthen the findings related to the infrastructural insufficiency. While the issues related to the infrastructure seem to hinder students' perceived readiness for digital learning, the considerably frequent suggestion to increase the utilization of digital platforms and tools during lectures offers a more promising. Certainly, as suggested also by students, the transition would require capacity building of the pedagogical staff and students regarding digital skills, a raise of the awareness on the role of digital inclination in education, as well as the establishment of a balance between digital and traditional approaches. In fact, as Lin et *al*. (2017) states, the effect of digital learning reaches its peak when it is wisely blended with traditional teaching and learning approaches. This status quo of skills, experience, psychological barriers, challenges and needs of university students in Albania regarding digital learning, alongside with similar researches, must be considered and embedded in the future interventions as the education system transitions towards a highly digitalized teaching and learning process. As their needs and suggestions are better listened at and represented, students would eventually

feel more ready and more comfortable when projecting themselves in the digital future of higher education. Additionally, universities should engage in offering tailored capacity building opportunities to students, which could be achieved through frequent examination of their experience and ability to adapt to digital learning (Kim et al., 2019).

Despite its findings, the research has its own limitations: firstly, readiness to transition towards digital solutions in teaching and learning is solely based on students' perspectives; secondly, students' opinions and attitudes towards digital learning are not grounded in their current experiences but rather in their projected future in digital teaching and learning. Nonetheless, the study provides valuable findings that are important to consider in the implementation of strategies for digitalizing teaching and learning nationwide. It would be of interest for similar works to also extend to other stakeholders, particularly educators, as well as pre-university educational institutions. Given that "e-learning readiness is an initial part of e-learning development" (Barolli et al., 2009, p. 5), these studies would draw attention to the needs for strengthening physical and human resources for digital education, as well as for the necessary psychological and cultural preparedness of stakeholders, as key elements that could facilitate an effective digital transformation in teaching and learning.

Conclusion

At the initial steps of digital transformation of teaching and learning, universities in Albania need to gain more insight from different stakeholders to comprehend their readiness to engage in a new educational ecosystem. The study demonstrated a moderate level of readiness among Albanian university students for digital teaching and learning. While most students have access to digital devices and the internet, there are limitations in their skills and experience with advanced digital tools that support learning. Challenges such as insufficient physical and digital infrastructure, were identified, highlighting the need for improvements in universities. Students' suggestions, such as increased use of digital platforms in lectures, offer promising steps forward. Further research involving other education stakeholders would contribute to deepen the understanding of the topic and eventually increase the effectiveness of digital transition in education.

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