



## Pedagogical Practices

### Integrated Educational Platforms in Modern Higher Education

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**Abstract:** The article addresses a current issue focused on the influence of new information technologies on the didactic process in modern higher education. The content of the article includes interpretations of the concepts such as constructivist learning, digital competence, informational society, information and communication technologies, etc., being additionally highlighted some fundamental characteristics of these concepts. The advantages and disadvantages of the use of information technologies by trainees and trainers are presented. A series of integrated educational platforms and software are proposed for the teaching-learning-assessment process of students.

**Keywords:** constructivist learning; digital competence; communication; information society; information technologies; communication technologies; integrated educational platforms

#### 1. Introduction

The modern society is witnessing a rapid pace of transformations that induce change and progressive evolution, thereby demanding continuous personal and professional development from social agents. The ongoing development of information technologies, the progression towards a transformation of information

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and knowledge, and the alteration of the learning paradigm have propelled changes that undeniably manifest across all domains of social life, implicitly within the educational sphere.

The recent decades have demonstrated that we live in a world of constant and ultra-fast change. The confluence of education and technology has led to a series of evident mutations and has highlighted various roles of technology. Thus, technology can be perceived as an environment in which the educational act can unfold, as well as a resource for education (Ceobanu, et al., 2020); it can also serve as a facilitator in delivering learning content. However, the academic realm sometimes hesitates to embrace technological changes, more often emphasizing the risks it brings compared to its benefits. Nevertheless, the challenges we have faced over time have managed to counter many of the negative perceptions, as the advent of information technologies has rendered their use inevitable in both daily life and the learning process.

Current studies outline numerous advantages, thus, as information technologies have advanced, gradual integration of educational platforms and software into higher education has been emphasized.

Platforms represent a group of technologies that serve as a foundation upon which other applications, processes, or technologies are developed, or it pertains to the basic hardware (computer) and software (operating system) on which software applications can run. When referring to the significance of educational platforms, they are considered digital environments or specialized software that facilitate the process of learning and teaching. These platforms are designed to provide courses, educational materials, and interactions between instructors and learners in an online environment. They can be used in distance learning, hybrid learning (combining online and in-class components), or can serve as supplementary resources in a natural learning environment. They represent a modern and flexible way to access held knowledge and to develop competencies in various fields.

The increased utilization of educational platforms has experienced an exponential growth in recent times, providing diverse opportunities for advancing learning activities. The key characteristics of educational platforms encompass:

- *Courses and educational content:* These platforms offer lessons, modules, or comprehensive courses spanning a wide array of subjects. The content may encompass videos, texts, presentations, tests, and homework assignments.
- *Interaction:* Educational platforms facilitate interaction between learners and

instructors. This may encompass online discussions, discussion forums, real-time chat sessions, or direct feedback on assignments.

- *Progress monitoring*: Learners can track their own progress within courses, while instructors can monitor students' development and provide personalized assistance based on individual needs.
- *Assessment and testing*: Platforms allow instructors to create online tests, quizzes, or exams and assess students' performance in digital formats.
- *Flexibility and accessibility*: Learners can access content and courses based on their own schedules, thereby offering enhanced flexibility in the learning process.
- *Supplementary resources*: In addition to the core course content, many educational platforms provide supplementary resources such as articles, e-books, or videos to support the learning process.

The impact of information and communication technologies (ICT) on student learning progress heavily relies on the manner in which these technologies are integrated within lessons to facilitate the teaching-learning-assessment process. Hence, the integration of educational platforms in modern higher education becomes an essential component of the academic learning process. The possession of digital competence by both educators and learners significantly affects this endeavor.

Digital competence is one of the eight key competences for lifelong learning formulated by the European Commission in a framework of recommendations for all European Union countries (Recommendation of the European Parliament). This form of competence entails confident and critical use of all information and communication technologies for information gathering, communication, and problem-solving across all aspects of life, including work, leisure, and communication.

Digital competence encompasses an individual's use of digital technologies, communication tools, and/or networks to access information, create, manage, integrate, and evaluate it for the purpose of functioning in modern society (Botnari V. & Repeşco G., 2020).

In light of these considerations, it is crucial to comprehend how and to what extent the Technology of the Information Society can create relevant contexts for the exercise of creativity, independence, and innovation among learners, enabling them

to become more aware of issues related to the validity and reliability of available information, as well as the legal/ethical principles involved in the interactive use of these technologies. It is evident that future education must keep pace with emerging technologies which, in addition to easing professional tasks and enhancing productivity, facilitate a range of processes that notably influence the learning activity.

Romanian researcher Ceobanu C. asserts that in the present times, learning unquestionably no longer entails memorizing considerable volumes of information; learning involves identifying necessary information, possessing the skills to locate it within the infosphere, critically analyzing it, and situating it within appropriate contexts (Ceobanu, C. et al., 2020). In these circumstances, several pertinent forms of learning exist, such as constructivist learning, transformative learning, experiential learning, and independent learning. The constructivist perspective pertains to the manner in which human beings learn, assuming that individuals construct their own understanding and knowledge based on their personal experiences and reflections upon those experiences.

Consequently, the integration of informational technologies into the educational system contributes to facilitating these learning approaches, affording learners enhanced opportunities to cultivate their cognitive and critical abilities. This integration enables learners to think critically and independently, collaborate, and apply knowledge in relevant and interactive contexts.

## **2. Educational Platforms and Software Integrated into the Teaching-Learning-Evaluation Process for Students**

Next, we will present a few examples of relevant educational platforms and software within the framework of the teaching-learning-evaluation process for students:



**Figure 1. Educational Platforms and Software Integrated into the Teaching-Learning-Evaluation Process for Students**

These are merely a few examples of educational platforms and software, and their selection can hinge on the specific needs of the institution and courses. A thorough

evaluation of the features and functionalities of these tools is recommended to ensure a suitable alignment with learning objectives and beneficiary needs. For organizing webinars or instant real-time online meetings, here are several examples:



**Figure 2. Some Relevant Platforms for Organizing Webinars and Instant Online Meetings**

- *Zoom*: It is one of the most recognized platforms for video meetings, webinars, and online collaboration. It offers a wide range of functionalities, including screen sharing, chat sessions, polls, and various participant management options.
- *Microsoft Teams*: This is a collaboration and communication tool developed by Microsoft. In addition to chat and team collaboration, Teams also offers video meeting and webinar functionalities.
- *Cisco Webex*: This represents a communication and collaboration platform that enables video meetings, online seminars, and virtual events. It provides features like screen sharing, chat, and meeting management options.
- *GoToWebinar*: This is a platform specialized in organizing webinars. It offers functionalities such as automatic webinar recording, polls, participant management, and post-event analytics.

- *Adobe Connect*: It is a meeting and webinar platform that allows the organization of interactive sessions. It includes features like screen sharing, chat, polls, and the ability to create multimedia interactions.
- *BlueJeans*: It offers video conferencing, virtual meetings, and webinars. The platform is known for its video and audio quality and integration with other collaboration tools.
- *Google Meet*: This is Google's video conferencing service, part of G Suite (now known as Google Workspace). It allows for video meetings and webinars for users with Google accounts.
- *BigMarker*: It is a platform specialized in organizing virtual events, including webinars. It offers features like screen sharing, polls, chat, and integration with marketing tools.
- *WebinarJam*: It is a webinar platform that allows for the organization of live or automated events. It provides functionalities such as chat, polls, recordings, and participant management.

It is imperative to select tools that best align with your and your learners' needs, considering factors like the number of participants and required features.

### **3. Advantages and Disadvantages of Using Information Technologies by Learners and Instructors**

The utilization of information technologies in modern higher education encompasses numerous advantages, as well as drawbacks. Herein, we propose a series of advantages stemming from the employment of information technologies:

- *Enhanced flexibility and accessibility*: Students are afforded the opportunity to learn and access educational resources at any time and from anywhere, allowing them to better manage their time and tailor their learning process to their own pace.
- *Personalization of learning*: Educational platforms offer the possibility to tailor content and teaching methods according to each student's learning styles and specific interests, thereby promoting a more efficient and engaging learning process.

- *Interaction and collaboration:* Students can communicate more easily with one another and with instructors through platforms, facilitating collaboration and fostering social and teamwork skills.
- *Progress monitoring:* Instructors can more effectively track each student's academic progress and promptly intervene to provide supplementary support when necessary.
- *Access to varied educational resources:* Integrated educational platforms offer extended access to educational resources such as e-books, scholarly articles, multimedia materials, and other interactive tools, thereby solidifying knowledge and stimulating intellectual curiosity.
- *Administrative efficiency:* Integrating educational platforms can contribute to streamlining administrative processes, managing course materials, and evaluating academic activities.

Despite these advantages, it is important to acknowledge and address challenges associated with the use of educational platforms, such as data protection, ensuring accessibility for all students, and the necessity for adequate teacher training to fully exploit the potential of these technologies.

However, there also exist a series of disadvantages related to the utilization of information technologies:

- *Technology dependency:* Excessive technology use can lead to dependency and a reduction in the ability to concentrate and engage in direct human interaction. At times, students might be distracted by non-essential applications or platforms, thereby diverting from intended learning objectives.
- *Disparities in technology access:* Not all students or instructors have equal access to technology or the necessary resources to fully capitalize on its advantages. This can create educational inequalities and exclude certain students from the benefits offered by technology.
- *Quality of content:* While technology offers access to a vast amount of information, the quality and accuracy of this information can vary. Students and instructors must possess the ability to filter and critically evaluate information to avoid the dissemination of misinformation or inappropriate content.
- *Dependency on technical infrastructure:* The use of information technologies necessitates stable and efficient technical infrastructure, including internet



connections and suitable equipment. Technical issues or service disruptions can impact the learning process and create difficulties in utilizing technology.

It is paramount to consider these advantages and disadvantages when implementing information technologies in higher education and to strike a balance in order to reap the benefits while overcoming potential challenges.

#### 4. Conclusion

Educational platforms represent an innovative and essential solution for modern higher education, providing a flexible and interactive framework for the learning process. The integration of technology into education has brought about a significant transformation in how students and instructors' approach and conduct their academic activities.

Through the utilization of these platforms, access to diverse educational resources adapted to individual student needs is facilitated, and the development of essential digital competencies for contemporary society is promoted.

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