

# Educational technologies in blended learning: personalization to the nursing student

**As tecnologias educacionais no ensino híbrido: personalização ao discente de enfermagem**  
**Tecnologías educativas en la enseñanza híbrida: personalización para el estudiante de enfermería**

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During the COVID-19 Pandemic, educational technologies became essential tools in academic teaching foster new communication, knowledge exchange, and learning. In this reality, teachers envisioned new teaching-learning forms, reflecting on strengthening teaching as a mediator of knowledge and student autonomy<sup>(1)</sup>.

Regarding student autonomy, it is necessary to understand that this is the center of the process, and it is crucial to change the punitive evaluative culture to that of a shared evaluation. This attitude provides the student's acceptance, gives learning centrality, and enhances knowledge.

Thus, according to its definition, *Blended Learning* uses the classroom teaching methodology, and online teaching, to develop the teaching and learning process with the help of virtual platforms. In this teaching modality, classes and content are participative and flexible, where the student is the protagonist of his learning, and it is the teacher's responsibility to motivate students for active learning in groups or individually<sup>(2)</sup>.

As in the traditional (classroom) class, blended teaching facilitates practicality in answering questions by encouraging students to participate in thematic discussions obtaining feedback during the classes.

Undoubtedly, with this brief characterization some reflections are required to think about the taught class beyond the transmission of content with the listening of the student, the teacher, and the educational institution. These actors involved in the process must actively participate in the curriculum organization, which blended teaching requires, an interdisciplinary articulation based on competencies capable of understanding the demands of the current world, considering the comprehensive formation of the student as the main protagonist.

Nursing teachers can question how to organize the institutional space or how blended teaching can help develop the teaching-learning process.

In this questioning, a relevant characteristic is a physical infrastructure that must manage the demands and needs of academic spaces that understand pedagogical changes from blended teaching in nursing, such as clinical skill laboratories and realistic simulation that help group teaching. In addition to movable furniture, living, study, and research spaces, available digital and technological equipment, and internet access. The teacher needs to establish characteristics of blended teaching in their planning, methodology, evaluation, and students need to understand their role in the learning process<sup>(3)</sup>.

With this understanding, the educational actors must carry out a plan in line with the syllabus of the discipline and the Political Pedagogical Project of the Nursing course. The planning of the didactic design of the discipline in the online format must have visibility and mirror what will be outlined in the classroom format, as blended teaching considers online teaching dynamic and personalized<sup>(3)</sup>.

Although digital technologies favor access to an infinitive amount of information, it is important that teachers must have fluency in the use of these technologies in order to play a decisive role in the context of education<sup>(4)</sup> and nursing education.

Moreover, it should be noted that technologies cannot be introduced without first thinking about the learning objectives and the benefits of their use. Planning is needed to use new technologies to improve student learning<sup>(4)</sup>.

Some tools are widely used and, therefore, it is worth mentioning them without exhaustion but providing the ideal moment for their use in blended teaching in nursing, making them more interactive and exciting, which leads to the study, reflection, and production of content with a view to student's autonomous teaching: *Jamboard* (interactive digital whiteboard); *Educational Blogs* (development of interactive and collaborative group activities to create an authorial text); *Educational Site* (virtual visits to historical museums of Nursing among other contents); *Podcasts* (aims to develop oral skills, research, and argumentation); *Padlet* (teachers and students post content for the production of knowledge); *Mentimeter* (creates interactive presentations where students can answer various types of questions); *Kahoot* (is a game-based learning platform with customizable quizzes and content).

The most important thing is to understand that the teacher, as a mediator of knowledge, needs to clarify that knowledge construction and digital technologies stimulate and facilitate the learning process in a critical and productive<sup>(4)</sup>.

As a mediator of knowledge using technologies, the teaching role in the educational process should include all students to meet the specific educational needs of each one and according to the pedagogical proposal of the discipline.

It is necessary to know digital technologies, understand how to make them available according to the reality of students, and can innovate and include pedagogical practices in blended teaching. In addition, it is necessary to understand that it requires the participation of all teachers with a view to the integrality of the content according to the blended teaching modality adopted.

The teaching team must be committed to developing activities with constant feedback from the students to maintain the integrity of the planned didactic design. The planned activities must be followed by the expertise of the teacher, who is the mediator of knowledge in all content, in the technologies used, and the virtual learning environment itself so that the outlined learning objectives are achieved.

A significant challenge in managing learning in the reality in which we live is to meet the everyday difficulties of students, whether they are social, economic, or otherwise.

Blended learning does not deconstruct relationships but allows collaborative learning in a constant analysis process to personalize the content into something more tangible to the student to discuss the classes taught, favoring the construction of knowledge, connecting teachers, students, and the content itself.

Naturally, there were transformations in which no political and philosophical model was based on standardized and homogeneous formation determined by Cartesian and traditional teaching. The perception of people with different cultures and backgrounds led to modifications to teaching aimed at individuals with current characteristics in which blended teaching technologies are an inevitable reality.

We receive many students who use the culture of technologies in virtual environments. It is necessary to think about their problematization in the various instances of teaching as in the clinical skill laboratories, realistic simulation, computer science, libraries, in the classroom itself also in practical teaching units. Such reflections enable us to think about the use of active methodologies through their political and pedagogical project of the course.

Strategic planning should be inserted in the teaching units bringing a transition plan in which learning spaces need to be rethought, and teacher education and the teaching method will be consolidated in learning relationships<sup>(4)</sup>.

In addition, teaching skills should focus on the teacher's ability to be a facilitator/mediator of health knowledge in promoting digital culture. Similarly, as a facilitator/mediator, the teacher should rethink planning, times, and spaces, analyze data, evolve results and have transdisciplinarity as an active search. Other characteristics, such as creativity, dynamism, communication, and dialogue, should prevail in

the teaching practice. These characteristics make student learning motivating and collaborative<sup>(5)</sup>. It is necessary to step outside the “boxes” of individualism for collective learning.

The Covid-19 pandemic led us to strengthen educational practices in nursing teaching by addressing the impact of technologies as a necessary reality for blended teaching in which it is necessary to understand how people interact, produce knowledge, learn and communicate. Hence, there is no going back to this reality because no teaching group will be the same. It is necessary to understand that at each academic period, the personalization of teaching will be a relevant need in blended teaching, developing skills and competencies that qualify the student for the complex society we live in.

## CONFLICT OF INTEREST

The author have declared that there is no conflict of interest.

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