#### **Review Article**



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### **Digital Competencies in Nursing Career Teachers**

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#### Abstract

**Introduction:** during the COVID-19 pandemic, education in all its manifestations had to modify its styles. Educational procedures today tend to be increasingly virtual and interactive. In the current digital era, teachers are sometimes challenged by the role they must play within the learning process with the support of new technologies. Objective: analyze the benefits of virtualization in the nursing career.

**Development:** The continuous use of ICT in educational processes implies that the student must acquire skills and competencies for their professional development. Digital technologies have become a social necessity to guarantee education as a basic human right. When adequate digital competence is achieved, classroom learning becomes more collaborative. Every health professional must have knowledge about the use of new technologies to enhance their capabilities. The development of digital skills will have to be inextricably linked to technical skills. The ability to efficiently use digital tools contributes to better coordination of care.

**Conclusions:** the future of the profession will have to be modeled taking into account education, interpersonal relationships, leadership along with the incorporation of new computer technologies.

**Keywords:** digital competence; nursing; students; teaching

#### Introduction

During the COVID-19 pandemic, education in all its manifestations had to modify its styles in order to maintain them without endangering students and learners. The teaching demonstrated the great possibilities that virtuality has in the classrooms. Educational procedures today tend to be increasingly virtual and interactive. In order to put them into practice with all the effectiveness offered by the different possibilities of this form of learning, specific training is required on the part of teachers, which goes beyond using an electronic whiteboard or a computer. Teaching in the different training profiles in the health sector did not escape these necessary transformations to maintain the educational teaching process. The application of the different computer tools applied to teaching is present in all careers, nursing is one of them. When talking about the digital competencies of Nursing teachers, we are referring to the set of skills that allow the use of safely and critically in the educational teaching process [1]. Being able to say that There is competence in the management of digital technology in the classrooms, it is because it is possible to guide the student in the appropriate use of information. It is necessary to encourage schemes in them that lead to apalyzis and synthesis. Incorporate critical

computer technology, in its different manifestations,

to analysis and synthesis. Incorporate critical evaluative aspects to know how to properly use the universe of images that come to you from the screen. In the current educational conception, the digital competence of students constitutes an essential support point to achieve success in training according to social principles [2]. Digital competencies are important because they allow teachers to prepare their students for the challenges of the digital society [3]. But what do these skills include? It is necessary to take into account a series of aspects that must not be missing in order to achieve adequate digital competence. Some of these are: [4]

- Know how to use digital tools to communicate and interact with students. Information, information literacy and data processing.
- Know how to publish and disseminate valuable digital content, in this case in health. Communication and collaboration.
- Know how to use the network to share information. The creation of digital content.
- Be able to process information online. Problem solving.
- Know the principles of computer security.
- Be able to create multimedia content.
- Be constantly updated.

In the current digital era, teachers are sometimes challenged by the role they must play within the learning process with the support of new technologies and the generational gap that exists with students who have grown up with social digitalization. Another challenge is that to include computer tools in the teaching process, it is necessary to innovate to achieve said integration, so that it does not become the repetition of content with innovative technologies traditional methodologies [4]. Although and weaknesses can still be identified in the use of information technology in higher education in health profiles, it is also pertinent to point out that strengths can be identified in its use. The creation of educational multimedia, hypertexts, web pages, among other examples, have demonstrated the satisfaction of both teachers and students with the use of these technologies. There is evidence of the benefits of virtualization in the nursing career, which will be analyzed below.

#### Development

When searching for bibliography that deals with the topic of informational competencies and the use of computing to develop the teaching process, dissimilar articles are found that all have as a common denominator: the benefits of virtuality in teaching [5-7]. The application of information and computing techniques (ICT) is becoming widespread at a rapid pace, but it is very important that they are well applied. The continuous use of ICT in educational processes implies that the student must acquire the skills and competencies necessary for their professional development, where the role of the teacher implies having the function of training them for this. Educational institutions are responsible for continuously encouraging and training teachers in the appropriate use of ICT in order to achieve their use

in the teaching-learning process [8]. Digital technologies have become a social necessity to guarantee education as a basic human right. This needs to be taken into account especially in a world that must face increasingly frequent crises and conflicts. During the most recent pandemic, countries that did not have sufficient ICT infrastructure or adequate digital learning systems suffered the greatest educational disruptions and learning losses [9].

This situation left up to a third of students around the world without access to learning during school closures for more than a year. The disruptions to education due to the COVID-19 pandemic clearly revealed the urgent need to align technologies and human resources to transform school models and build inclusive, open and resilient learning systems [9]. UNESCO supports the use of digital innovation to expand access to educational opportunities and advance inclusion, improve the relevance and quality of learning, create lifelong learning pathways enhanced by ICT, strengthen education and learning management systems, and monitor learning processes. To achieve these goals, UNESCO works to develop digital literacy and digital skills, focusing on teachers and learners [10]. When adequate digital competence is achieved, learning in the classroom becomes more collaborative thanks to virtual or digital tools as they provide didactic resources for teaching. The use of simulators, 3D videos, applications that can be installed on cell phones and other media, among others, are an example of the application of ICT in higher education, specifically in the nursing career.

Within the current world of computing, the application of artificial intelligence (AI) is gaining more space every day. The use of it demonstrates its potential to address many of the great challenges in education. The innovative contribution to teaching and learning practices is unquestionable, but at the same time, its application must be guided by teachers trained in its use. It is not possible to deny that there are health sciences professionals, who urgently need to acquire informational skills. There is generally a lack of information along with the presence of technological and pedagogical difficulties; sometimes the refusal to change the traditional system can also be seen without seeing that what is sought is an interrelation of both [11]. Every health professional must have knowledge about the use of new technologies to enhance their capabilities, improve health services, human health and the well-being of the population in the healthcare area. In the case of those professionals who also teach, they will have to incorporate these technologies to be able to provide comprehensive university education in the face of the digital challenge that the professional world demands through the development of digital skills [12].

According to the author's experience, coinciding with other research, [13] there is a difference between nursing professionals who are linked to care with respect to those who assume teaching, taking into account the interest in searching for updated information, teachers They generally assume this as something necessary while in assistance it is considered of little interest. A similar situation is observed when investigating the use of digital technology because although they are used, preferably social networks, they do not always seek exchange between professionals in the field, also evidenced in research consulted [14,15]. Age greatly influences these forms of interaction. Younger professionals generally have a greater inclination towards new technologies and therefore greater ease in achieving better digital competence, which is not only inherent to Cuba [16]. Among young people, a high level of satisfaction can be found with the inclusion of ICT in academic training, despite the occurrence of problems linked to poor Internet connection and lack of knowledge of some tools such as institutional platforms (virtual classroom), software for evaluation and the lack of adequate connection devices. Similar factors were also found in reviewed studies [17-19].

Although new professionals are more integrated into computing, the training of educators in these tools enhances the organization and development of classes in virtual environments, associating this training with greater use of these tools, which can lead to academic performance. outstanding in students [20]. It is also necessary to include this technology in the daily work of nursing staff to be able to respond to that patient who seeks information about their health-disease status and who actively participates in the taking. of decisions that affect this process [21]. The development of digital skills will have to be linked to technical skills in an inextricable and necessary way for a computerized future. The trend toward digitalization of health records and interaction in the field of nursing requires that professionals have skills in the use of health software and applications. The ability to efficiently use digital tools contributes to better care coordination, effective communication between healthcare staff members, and efficient information management. The current challenge that the nursing faculty faces to achieve the best integration of digitalization in health will result in the training of a professional committed to their work.

#### Conclusions

Technological advances in nursing are redefining the way nursing professionals approach their practice. The future of the profession will have to be modeled taking into account education, interpersonal relationships, leadership along with the incorporation of new computer technologies. A focus on comprehensive training and the use of technological and theoretical tools is necessary so that nursing professionals are better prepared to provide quality care in a constantly evolving world.

#### **Conflicts of interest**

The authors declare that they have no conflicts of interest.

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