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Creation of audiovisual resources for Nursing students as an Innovation Project in Teaching

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Abstract

Currently, audiovisual technological resources have been incorporated as a teaching tool to improve the quality of content delivery. With the aim of promoting significant learning, remembering that there are different learning styles in higher education students, whose purpose was to support self-learning in nursing students who were taking the Intra-hospital Internship subject, we worked on an Innovation in Teaching project on year 2023, which consisted of the production of videos and capsules, which were also inserted in a digital manual of Pediatric Nursing Procedures, whose themes were related to: child health control, evaluation of psychomotor development, administration of intravenous medications and other procedures commonly used in the children's area, both in primary and in-hospital care. These resources were made available to the students for free use and to promote the associated learning results in the children's area prior to the start of the clinical simulation. The use of resources was provided with feedback through a brief survey, which was voluntary and anonymous in order to know the perception regarding the satisfaction generated by this type of strategy and to consider improvements and new contributions in the future.

Keywords: Teaching, Video, Capsules, Nursing, Simulation

Introduction

Currently, audiovisual technological resources have been incorporated as one of the teaching strategies to improve the quality of content delivery, in order to promote significant learning. The incorporation of ICT into education has become a process, whose implication goes far beyond the technological tools that make up the educational environment and speaks of a didactic construction and the way in which meaningful learning can be built and consolidated in based on technology, in strict pedagogical terms we talk about the use of technology in education (Hernández, 2017). It is important to highlight that there are different ways of acquiring learning as well as "learning styles", with audiovisual technological resources being the most suitable for those students with the ability to incorporate the contents from a visual as well as an auditory way, so Audiovisual resources are facilitators of the student's cognitive process, allowing global learning and reaffirming practical knowledge, as well as retrieving information; which results in ideal learning in the health area, allows the development of other factors that participate in the contextualization of learning and even in clinical practice, such as the use of body language, collaborative work and the communication process (Vitón et.al , 2019).

Theoretical Framework

In the discipline of Nursing, students constantly seek audiovisual support to be able to understand that reality that often cannot be understood when they have not had experiential learning in certain clinical contexts, to facilitate the development of skills necessary in their professional training. This can be achieved today through free and unrestricted access to the Internet, where information can be found that can to a certain extent support the knowledge of students, the main search site being YouTube, which offers endless resources of this type. audiovisual, including video and capsules.

The use of videos and capsules or also known as learning capsules, according to González, defines them as "educational capsules" pedagogical innovation that integrates the use of information and communications technologies (ICT) in the generation of digital resources or content. educational, with the purpose of disseminating short thematic content that facilitates the teaching-learning process (Freijoó , 2022). For the development and correct use of an educational video, it is necessary that its design be based on previously established objectives and that the information be clear, precise and attractive at the time of being presented (García et.al , 2021) .

Due to the aforementioned, this is what generated the initiative to work on an innovation project in teaching in conjunction with the Digital Animation and Simulation Unit career, which in this first stage had the purpose of designing and generating a repository of videos and capsules, gathered in a digital manual of Pediatric Nursing Procedures, so that the student can access reliable sources of the content and ensure that the information was in accordance with current ministerial protocols and regulations, to which the institutional seal was also added.

Methodology

In this proposed strategy, the topics addressed were in relation to nursing procedures in the care of child users, in order to support the development of simulation activities and the learning results associated with the Internship subject.

With the final purpose of facilitating the student's autonomous learning, with the use of videos and capsules that allow a transfer of knowledge to the procedural when facing simulated activities, promoting safety, better analysis and reflection of procedural skills and acquired relational skills and subsequently put them into execution at the level of clinical experience.

For the construction of the videos, capsules and digital manual, different procedures commonly used in the children's area were chosen (Table No. 1), all the topics that are worked on through clinical simulation scenarios in low and medium fidelity modality, such as also with standardized patients, considering these resources as important support in supporting the student's self-learning, allowing him to articulate theory and practice.

For the preparation of the 5 videos on topics in the primary care area, we had the support of the clinical simulation unit, teachers and an audiovisual team for high-quality recording of them, highlighting the institutional seal. In the creation of capsules, we worked together with a teacher from the Digital Animation career, who designed the step-by-step clinical procedures in a simple and understandable way, using a unique format. These capsules were encoded in QR code, which allowed articulate with a digital manual created in order to highlight important information and enhance visual memory along with the content described within the manual.

Table 1. Prepared Audiovisual Resources.

Digital Resource	Theme	Responsible
Videos	Infant Child Health Control Cold Chain Psychomotor Development Evaluation: EDDP and TEPSI	Simulation Unit
Capsules	Cleanliness and Comfort Oxygen therapy Urinesample collection Venous blood sample collection Installation of peripheral venous line Nasogastric tube feeding Gastrostomy feeding Preparation of intravenous medications and vasoactive drugs	Digital Animation

Results

What stands out as the results of this innovative activity with the use of recently created audio-visual material, could be obtained through a brief survey of 12 closed questions, 14 students 64 who participated in the Internship subject agreed to answer. The students report: 85% agree that it is a strategy that facilitates their learning of content studies, that the methodological proposal is in accordance with the level and reason for their study, 85.7% agree that this methodology It is applicable for different learning styles, 71.4% agree that it was easy to access, 92.8% agree that it is a resource that allows clinical simulation scenarios to be prepared in advance, 78.5% agree that The duration of each video and/or capsule was adequate, 73.5% agreed that the design was visually enjoyable and finally 92.9% recommended this resource to continue using it and the evaluation of the strategy was as follows .(Fig.1)

In their assessments, the students support continuing with this type of strategies and incorporating other procedural content from the primary care context, mainly referring to: Preparation of dairy formulas, application of M-Chat guidelines and administration of vaccines.

Fig. 1: Satisfaction Survey Source

Conclusions

The permanent willingness to constantly seek to improve teaching and how students can develop or encourage their self-study, based on the different ways of integrating learning, is what motivates teachers to create new forms or strategies that allow achievement of learning outcomes. In health sciences careers, as in the case of the Nursing discipline, with the introduction of clinical simulation as a learning strategy, it is necessary and highly valued by students to have a methodological bridge. that encourages the preparation of content autonomously and asynchronously through digital access from any type of device, accessing resources from reliable sources with an institutional seal.

Limitations and Challenges

Limitations can be identified in this project, which was initially oriented for students at the 4th year curricular level, specifically in the subject of Care Management in boys and girls, but due to a time lag in the construction. of the audiovisual products, was redesigned to be socialized to 5th year students of the Boarding School subject whose professional practice was later assigned to the children's area.

It is also considered a limitation to have achieved a small sample of students to answer the survey, which is not considered statistically significant, but it does give us an orientation to the possible results.

Regarding the challenges, this resource is being used in the subject Care Management for Boys and Girls taught during the 1st semester of this year in the 4 locations, for which we hope to be able to have an evaluation of the students this year 2024 statistically significant with a larger sample number for subsequent analysis.

Financing

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