

Nursing Student Self-Assessment in Emergency Remote Teaching of the subject of Emergency Situations



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Abstract: This study aims to analyze the self-assessment of nursing students in a curricular component taught in an Emergency Remote Learning format. Qualitative, exploratory, and descriptive research was used, based on the virtual environment scenario, during the period from August 2020 to September 2021. Participants were selected based on convenience and theoretical saturation criteria,



limiting the sample to 42 students. The data were collected from the undergraduate course database. Content analysis, as proposed by Yin (2016), was used to operationalize the presentation of the results. The students' self-assessment showed that the teaching strategies and approaches limited to the virtual environment provided a creative scenario, adding the use of digital information and communication technologies, which provided as many interactive moments as possible in the construction of knowledge, which is necessary for critical and reflective thinking and a purposeful action to transform the health reality. However, there was a need for practical classes to ensure the acquisition of ingenuity and practical skills in conjunction with theoretical knowledge.

Keywords: Education, Nursing; Emergency remote teaching; Self-Assessment; COVID-19

Autoavaliação de acadêmicos do curso de Enfermagem no Ensino Remoto Emergencial da disciplina de situações de urgência

Resumo: Este estudo visa analisar a autoavaliação de acadêmicos de enfermagem em um componente curricular ministrado em formato de Ensino Remoto Emergencial. Foram utilizadas as pesquisas qualitativa, exploratória e descritiva, construídas a partir do cenário do ambiente virtual, durante o período de agosto de 2020 a setembro de 2021. Os participantes foram selecionados por conveniência e critério de saturação teórica, delimitando-se a amostra de 42 estudantes. Os dados foram coletados no banco de dados do curso de graduação. Para operacionalizar a apresentação dos resultados, utilizou-se a análise de conteúdo proposta por Yin (2016). A autoavaliação dos acadêmicos revelou que as estratégias e as abordagens de ensino restritas ao ambiente virtual propiciaram um cenário criativo, ao agregar a utilização de Tecnologias Digitais da Informação e da Comunicação, que oportunizaram o máximo possível de momentos interativos na construção do conhecimento, necessário para um pensar crítico e reflexivo e um agir propositivo à transformação da realidade em saúde. Entretanto, foi evidenciada a necessidade de aulas práticas presenciais a fim de assegurar a aquisição de desenvoltura e habilidades práticas em articulação aos conhecimentos teóricos.

Palavras-chave: Educação em Enfermagem; Ensino Remoto Emergencial; Autoavaliação; COVID-19.

Autoevaluación de los estudiantes de Enfermería en Urgencias Enseñanza a distancia de la materia de situaciones de emergencia





Resumen: Este estudio tiene como objetivo analizar la autoevaluación de los estudiantes de enfermería en un componente curricular impartido en un formato de Aprendizaje a Distancia de Emergencia. Se trata de un estudio cualitativo, exploratorio y descriptivo, construido a partir del escenario del ambiente virtual, durante el período de agosto de 2020 a septiembre de 2021. Los participantes fueron seleccionados por criterios de conveniencia y saturación teórica, delimitando la muestra a 42 estudiantes. Los datos fueron recolectados de la base de datos del curso de pregrado, y se utilizó el análisis de contenido propuesto por Yin (2016) para operacionalizar la presentación de los resultados. La autoevaluación de los estudiantes reveló que las estrategias y el abordaje didáctico, restringidos al ambiente virtual, proporcionaron un escenario creativo al agregar el uso de las Tecnologías Digitales de Información y Comunicación, lo que proporcionó el máximo posible de momentos interactivos en la construcción del conocimiento, necesario para el pensamiento crítico y reflexivo y para un abordaje proactivo en la transformación de la realidad sanitaria. Sin embargo, se evidenció la necesidad de clases prácticas presenciales, para garantizar la adquisición de ingenio y habilidades prácticas en conjunto con los conocimientos teóricos.

Palabras clave: Educación en Enfermería; Enseñanza remota de emergencia; Autoevaluación; COVID-19.

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1 INTRODUCTION

The situation caused by the SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2 - COVID-19) pandemic, declared in March 2020, has led to changes in the world scenario, causing functional reorganizations in different sectors, including education (LIRA *et al.*, 2020). In Brazil, the Ministry of Education (MEC) suspended classes and presential activities at all levels of education, leading the school community to reorganize work processes for Emergency Remote Education (ERE), as an adaptation of presential activities to the virtual environment, using Digital Information and Communication Technologies (ICT), with the aim of continuing education and maintaining the link between students, teachers and their respective institutions (COQUEIRO; SOUSA, 2021).

Remote Learning uses tools that are not exclusively designed for this purpose and, during the COVID-19 pandemic, it was necessary to implement them urgently to meet the needs of completing courses and implementing subject curricula temporarily. This situation, taking into account the context imposed by the epidemiological emergency, was called Emergency Remote Education (ERE) (OLIVEIRA *et al.*, 2020).

In contrast to Distance Education (EaD), Remote Learning is characterized by the transition from the presential to the virtual environment, without the need for a specific platform. It is worth noting that the models differ in terms of the structure developed since EaD has an articulated network made up of platforms, applications, and tools created exclusively for the system permanently, as well as multi-professional teams trained to support the needs of teachers and students, characterizing it as a complex system that has gone through several development processes until its implementation (LAGO *et al.*, 2021).

The transition in teaching imposed by the COVID-19 pandemic required adaptation with institutional investments from teachers and students to acquire resourcefulness in the use of ICTs, as well as equipment compatible with the platforms to be used (NOGUEIRA; BATISTA, 2020).

In nursing education, the National Curriculum Guidelines recommend that the training process includes the development of care and management skills to ensure qualified care (BRASIL, 2018). Therefore, it is necessary to guarantee the training of professionals with behaviors that meet the requirements of a new view of the conceptions and meanings that guide nursing care in the context of health practices, involving the development of macro-competencies to implement care beyond theory (GONÇALVES *et al.*, 2022).

Thus, the possibilities in the care practice of the profession, the performance of nurses in the care of individuals in urgent and emergencies require

leadership positions for the realization of humanized attention and qualified care, through case management, ensuring the ordering, management, direction and integration of the various services that make up the care network (SOUSA *et al.*, 2019).

In this way, the construction of the knowledge of how to care in an educational context in emergency situations requires the incorporation of care as an intrinsic element of the human personality and the professional, capable of adding value to practice, as well as the understanding of the premises under which the practice of nursing must be carried out (GONÇALVES *et al.*, 2022). From this perspective, the teaching-learning process requires the responsibility and commitment of the teaching team to ensure summative and procedural qualifications, which are not limited to the evaluation of the student's performance and which are based on the students' self-assessment of the experience during the development of teaching in the remote modality (FONSECA, 2021).

Self-assessment allows students to develop an intentional critical reflection on what they are studying and how they are studying, contributing to a constructivist, autonomous, and responsible participation in the learning process, based on the interpretation of intellectual performance. In this context, teachers must guide and encourage student participation during the teaching and learning process (CZESZAK; MATTAR, 2020).

Considering the problem addressed, this study was structured based on the researchers' concern about the performance of students in the curricular component "Nursing in Emergency Situations in the Community", taught in the context of ERE, and it is appropriate to explore the students' perspective regarding the self-assessment of their performance in the discipline so that the impact on the construction of knowledge and self-regulation of learning can be analyzed, during the COVID-19 pandemic. The evaluation phase, carried out consistently, makes it possible to resume and modify the teaching plan, to extend successful processes in the provision of quality teaching.

The research question is: "What are the aspects highlighted in nursing students' self-assessment of the Emergency Remote Teaching of Nursing in Emergency Situations in the Community curricular component?" This study aims to analyze nursing undergraduates' self-assessment of the Remote Teaching of this curricular component.

1.1 NURSING EDUCATION AND THE SELF-ASSESSMENT PROCESS OF EMERGENCY REMOTE EDUCATION ACCORDING TO PAULO FREIRE'S PRESUPPOSITIONS

The professional nurse, in the practice of assisting individuals in urgent and emergencies, plays a leading role in the implementation of humanized, qualified and resolute care through case

management, ensuring the ordering, management, direction and integration of the various services that make up the health care network (SOUSA *et al.*, 2019).

The possibilities of this qualified care are guaranteed by the Urgent and Emergency Care Network (RUE), which was created to expand the entry points, providing humanized multi-professional care, and ensuring the safe transfer and evacuation of patients, among other tasks, concerning the needs of the territory. When a health service is unable to solve a particular problem, first aid must be guaranteed and then the user must be referred and transferred to the appropriate unit (BRASIL, 2011).

The provision of health care with a focus on urgencies and emergencies requires a network of activities that ensure health promotion, prevention and surveillance, with Primary Health Care (PHC) services as the gateway, as well as Emergency Ambulance Services (SAMU), Emergency Care Units (UPA 24h) and Home Care (OLIVEIRA; ARAÚJO; GARCIA, 2018).

In this perspective, the curricular component "Nursing in Emergency Situations in the Community", offered in the second period of the nursing course at a public university in Recife, Pernambuco, promotes the teaching-learning process of students in the practices necessary for a resolute assistance in the care of individuals in emergencies, through active methodologies with the help of monitors (UFPE, 2013).

The topics included in the curricula include those recommended in the RUE for nurses, such as home care, stages of pre-hospital care, causes of accidents such as trauma, chemical, physical, and biological, as well as ways to avoid the occurrence of these events. Monitors help with the practical exercises to clarify questions and support the learning process during the school term (UFPE, 2013).

From the perspective of ERE in this subject, educational development requires responsibility for the methodology used to assess the performance of students, given the commitment of the teaching team to ensure summative and procedural techniques during the stages that make up teaching and learning. It is also important to consider the students' self-assessment of their experience during the course in this modality, which is considered challenging (FONSECA, 2021).

For Freire (1982, p. 94), the evaluation process must be conceived in terms of an essential relationship between teaching practice and evaluation, so that the act of teaching requires a systematic evaluation of the teaching-learning process. Evaluating practice means making a critical assessment of what is being done, and comparing the results obtained with the educational objectives previously set. In this way, evaluation makes it possible to identify successes, errors and limitations to improve and increase the effectiveness of the teaching proposal (FREIRE, 1992).

The assessment stage of the curricular component in Remote Education aims to train professionals with integrity, prudence, and awareness, capable of making decisions and developing clinical reasoning when faced with emergencies in the community. Therefore, to think about and carry out the assessment, it is necessary to know the objectives of the practice, in congruence with an educational proposal based on the humanization of the subject, so that the assessment grasps the meaning and shows indications to improve the teaching-learning process (SAUL, 2015).

In the context of assessment, it is also worth highlighting the process of self-assessment, which consists of looking at oneself, in which the student must be able to make a critical-reflective analysis of their performance, in addition to observing their actions, mistakes and successes throughout the process of building knowledge. In other words, self-assessment gives students the environment to create their strategies to improve their learning, contributing to their professional development (CAPELLATO *et al.*, 2020).

2 METHODOLOGICAL PATH

This is an exploratory, interpretative study with a qualitative approach. It was built from the scenario of the virtual teaching environment in the emergency modality of the discipline of Nursing in Emergency Situations in the Community of the Nursing Course at the Federal University of Pernambuco (UFPE), during the period from August 2020 to September 2021, regulated by Ordinance no. 343, of March 17, 2020 (BRASIL, 2020).

The population consisted of 63 students who took the course in 2020.1, 2020.2, and 2020.3, corresponding to 30, 23, and 10 enrolled students, respectively, who met all eligibility requirements.

The selection was done by convenience, which consists of selecting participants according to their availability (YIN, 2016). Thus, the sample consisted of second-year undergraduate nursing students who agreed to participate in the research by signing the Free and Informed Consent Form (TCLE) and who met the inclusion criterion of being regularly enrolled in the discipline during the academic periods selected for the research.

The compilation of the results over the three semesters came from the course evaluation database, which was answered by the students at the end of the course. The data were recorded in the nursing course coordinator's archives using a document generated by Google Forms. The form was initially designed by one of the teachers responsible for the curricular component and submitted to the appreciation of the other teachers and monitors, who competed for its final

presentation.

The self-assessment form consisted of the following questions: 1) How do you rate the content taught in the course? 2) How do you rate the materials made available for reading? 3. How do you rate your participation in the discussions? 4) How do you rate the interaction with the teachers? 5. How would you rate the interaction with the monitors? 6) How do you rate the interaction in Remote Learning? 7) How do you rate the assessment methods? 8) What suggestions do you have for improving this training experience?

In the process of categorizing the results, a specificity was observed in the reports, and the criterion of theoretical saturation was verified, starting with the 39th participant, and three more were added to prove saturation, giving a sample of 42 students. Thus, saturation is a requirement for exclusion from the study. When the researcher identifies the thematic responses and notes the repetitions and no new information or themes are recorded, this corresponds to the saturation point (NASCIMENTO *et al.*, 2018). Content analysis will be used to explore the data according to the stages proposed by Yin (2016): database composition, decomposition, recomposition, interpretation, and conclusion.

The study was conducted following Resolution 466/2012 and its amendments, which deal with research involving human subjects, and Circular Letter 2 of 2021, which refers to research with stages in virtual environments. It has been approved by the Research Ethics Committee of the Federal University of Pernambuco (UFPE), with opinion no. 5.539.683 and CAAE no. 60234122.4.0000.5208. In addition, the secrecy and confidentiality of the participants were respected, since anonymity was guaranteed by omitting their respective names, which were replaced by the code name of the student, followed by the corresponding number of participants in the research.

3 RESULTS AND DISCUSSION

Based on the data obtained from the students' speeches, it was possible to analyze the self-assessments and categorize the discursive elements into six themes: Teaching methodology, content, and bibliographic material; Interaction with teachers and tutors; Students' feelings about participation; Challenges and opportunities of teaching in the remote modality; Suggestions for changes to improve the course.

3.1 Teaching methodology, content and bibliographic material

Regarding the teaching methodology used to approach the topics, the students considered it interactive and well-understood, since as an adaptation to the ERE, active methodologies were used



with video production, gamification, brainstorming, and the students were encouraged to turn on the camera to demonstrate the first aid movements taught in class and reinforced on the monitors, despite the pandemic context experienced:

“The subject was approached in a very light and interactive way. The quizzes before and after the material covered on the day are a great way to get a grasp of the subject matter”. (Student 3, translated by us)

“Very good! For me, all the content was very relevant and interesting. Most of it was very easy to understand since there was a theoretical and "practical" presentation”. (Student 9, translated by us)

“Although it's a subject that requires a practical part, the remote format managed to be interactive and constructive.” (Student 28, translated by us)

Considering that the work of the professional nurse is characterized by decision-making situations, students must play a leading role in the construction of their knowledge. To this end, the use of active methodologies in undergraduate courses encourages students to act based on critical-reflective thinking, to know how to communicate, to be resourceful and proactive, to learn in a way that takes into account their individuality, and to bring their unique life experiences (MORAIS FILHO *et al.*, 2018).

Despite the adversities and circumstances surrounding the implementation of Remote Learning, it was possible to observe that the use of communication technologies promotes the use of dynamic and encouraging methodologies, culminating in the stimulation of students' curiosity, promoting new experiences and, therefore, contributing to teaching. These results are similar to those of a study carried out at a university in Goiás, whose target group consisted of 16 business students, who reported discovering new ways of learning despite the context of Remote Learning (DEL FIACO *et al.*, 2022).

In the evaluation of the content developed during the semester, it was observed that the students highlighted it as essential for both health professionals and citizens in emergencies that may occur in the community.

““It's very important right at the beginning of the nursing course to take the urgent and emergency care course in the community, because we already have an idea and know strategies on how to help someone if necessary.” (Student 36, translated by us)

“I really enjoyed everything that was taught, my favorite subject of the term. The subjects covered were very relevant and important for everyone to know.” (Student 5, translated by us)





"Very important and interesting for building a future nurse, as well as giving us knowledge that we can use on a daily basis." (Student 38, translated by us)

"Excellent and complete content (despite being in an atypical situation), I managed to learn everything that was taught." (Student 41, translated by us)

From this point of view, pre-hospital care must be correctly carried out by the population, from the recognition of an emergency to the communication with the care services to the correct execution of maneuvers that intervene in the prognosis of the victims (SILVA; PEIXOTO; MOREIRA, 2022).

In line with the results of this study, in a survey of 7 nurses from the SAMU in the city of Ouro Fino, Minas Gerais, it was stated that nurses working in the pre-hospital environment have specific training to perform the different functions that exist in this area. Despite having postgraduate degrees, the authors emphasized the importance of continuous education for professionals through permanent training, with the aim of refining, updating, and developing techniques to ensure agile and quality care for the population (ANDRADE; SILVA, 2019).

However, although it was possible to identify in the students' responses a recognition of the relevance of the content, given the specificities of Remote Learning, some difficulties were reported related to the teaching material and the syllabus of the subject, as well as the desire to have practical classes in person.

"There are too many subjects and too little time. Simpler or shorter texts would be better suited to our reality and would be more useful." (Student 6, translated by us)

"Given the limitations of Remote Learning, the way in which the content was studied was good." (Student 11, translated by us)

"The content covered was a very important subject that unfortunately had to be taught online." (Student 13, translated by us)

"Very relevant content was covered, but in a very rushed manner. Some could have been taught in separate classes." (Student 33, translated by us)

The study by Silva, Goulart and Cabral (2021) highlighted the importance of the student's sense of responsibility in planning and controlling the time needed to coordinate the proposed and complementary activities to support learning. Without proper management, free time is not sufficiently used for resting and reading material, thus hindering the process of knowledge construction.



3.2 Interaction with teachers and tutors

This category refers to the evaluation of the interaction between students and teachers beyond the virtual classroom environment. Students noted the availability, attention, communication, and concern not only for learning but also for the people behind the screens. They emphasized that the teachers took care of the students in a holistic way, keeping in touch with them and not just considering them as a working tool.

"The teachers are very approachable, which makes it much easier for us to build knowledge, especially in this model which requires even more interaction." (Student 18, translated by us)

"The teachers were excellent, always willing to teach, concerned about learning and willing to answer any questions." (Student 21, translated by us)

"A wonderful interaction, especially with the teachers (she mentioned their names), who, above all, passed on their teachings, but emphasized their care and concern for us, which always left me calm and encouraged me to attend classes, even in the face of this difficult modality." (Student 13, translated by us)

In support of this, a qualitative study conducted with students and teachers in Brazil and Portugal showed that the relationship between teachers and students during the ERE modality had positive effects, as there was greater flexibility in establishing contact environments with the teacher in the media, as well as more time for the teacher to be available to the student. On the other hand, divergent aspects were presented, such as difficulties related to socialization, lack of eye contact, and lessons and activities directed toward closed cameras (OLIVEIRA *et al.*, 2021).

The participants' statements also indicated that during the course, an environment was created that was conducive to discussing the content being worked on, which brought a sense of comfort to the synchronous virtual classroom, where students felt comfortable expressing their doubts and opinions.

Regarding the interaction with the monitors, the students mentioned the flexibility of the extra hours, the mastery of the content, the availability to answer questions, the sharing of experiences, and the support beyond the curricular component.

"The tutors supported us at all times and were very available, even outside of tutoring hours, to answer questions and send us extra materials that would help us." (Student 32, translated by us)



"The girls were great, always available to answer our questions, always very creative. I loved the activities and videos, they did their best. The tutors are some of the most present I've ever had and very familiar with all things emergency and teaching." (Student 26, translated by us)

"The tutors were excellent, always willing to help, answer questions, and give guidance on how to intervene with the students. The girls are great and always concerned not only with discipline but also with mental health, sharing experiences and saying that we're not alone, we're in this together." (Student 36, translated by us)

There was evidence that the interaction between students and tutors went beyond the intrinsic functions of assisting in the teaching-learning process, revealing concern for the mental health of the students participating in the subject. The duties of tutors are diverse and include responsibilities such as having knowledge of the curricular component, helping with exercises that contribute to memorization, clarifying students' questions, providing teaching and support materials, and acting as a communication channel between students and teachers. Tutors are essential in nursing education as they are responsible for bringing students closer to the practice that will be carried out daily (OLIVEIRA *et al.*, 2022).

3.3 Students' feelings about participation

Regarding participation in the curricular component in general, the students' responses show that some of them felt comfortable contributing to the moments of interaction in the synchronous classes, and even when they didn't contribute, there was a sense of comfort because the teachers provided a dialogical space.

"I took part whenever I thought it was relevant, the teachers always made room for debate, I think it was a good experience." (Student 15, translated by us)

"I didn't interact much in class, but I always felt like if I had any questions I could ask, and I felt comfortable with that feeling of not being afraid to ask questions if I needed to." (Student 6, translated by us)

In contrast to the previous topic, some of the students said that the feeling of shyness was responsible for preventing them from participating more in the activities.

"I took part in the classes and tutorials, answered questions and absorbed knowledge, but I wasn't as participative as I should have been due to my shyness." (Student 22, translated by us)



"Due to this modality, it was a bit difficult (to be participative) because of my shame, but the teachers were always present and helped in this sense too." (Student 7, translated by us)

However, there were still students who said they felt more comfortable taking part in monitoring sessions with smaller groups of around 5 people, under the guidance of 2 tutors.

"During the tutorials, I think I was able to participate a lot, there were times when I turned on the camera so I could ask questions and go deeper into everything that was said in class. So I think my performance was relatively good." (Student 4, translated by us)

"I felt more comfortable participating in the discussions during the practical moments of the course with the monitors." (Student 16, translated by us)

Student evaluations showed that an environment conducive to discussion was created, which brought a sense of comfort to the synchronous virtual classroom, where students felt comfortable expressing their doubts and opinions. According to Bastos *et al.* (2020), the pandemic has provided a space for teachers to expand their knowledge and qualifications in the use of teaching tools to diversify the content of subjects to meet the demands of the pandemic context. Creating an environment that encourages active student participation has been a major challenge for teachers; they have had to innovate to seek interaction, produce dynamic content, use different technological resources, and adapt to the internal routine of students' homes.

Researchers point out that shyness was a feeling that was evident during the live Remote Learning classes since students generally feel embarrassed when they are shown simultaneously with numerous colleagues who, even when the cameras are turned off, when there is some kind of interaction, only those who speak are highlighted on the platforms used (PEREIRA; FRAGA; GOUVEIA, 2021). The same observation could be made by the students who participated in the research, since they reported being shy and, for this reason, unable to participate more actively in the moments of interaction in the synchronous classes.

Some of the students felt more comfortable participating when they were divided into smaller groups, guided by monitors. This was also demonstrated in the study by Conceição and Moraes (2018), conducted in a college in the city of Marília - São Paulo, where participants reported greater learning when there were fewer people. This type of division contributes to the development of dialogue, as it is easier to resolve questions with the help of active methods. In addition, the components of the groups actively participate in the process of building each other's knowledge, creating an environment





of cooperation and solidarity, which has also been identified in experiences with Emergency Remote Learning (DUTRA; GUIMARÃES; MORAES, 2021).

3.4 Challenges and possibilities of remote teaching

In this category, the nursing students' statements showed that the remote modality presented numerous challenges, including problems with the internet connection.

*"I've always been interested and even with the fluctuation of the internet, I've tried to be present."
(Student 18, translated by us)*

"I could have taken part more, but I had a lot of problems with the internet being unstable and shame also counts for a bit." (Student 20, translated by us)

In addition, the Emergency Nursing component of the community curriculum is mostly hands-on, and students cite its absence as a disadvantage in the remote learning process.

"Very good and necessary content, but it requires a lot of real and physical practice, which Remote Learning doesn't offer and unfortunately can't happen." (Student 35, translated by us)

"Everything was necessary and relevant, but this subject deserves more time with practical classes, which are essential." (Student 11, translated by us)

*"I imagined that this subject would be one of my favorites since it would be one of the first contacts with nursing itself, we would have practical classes. The remote mode discourages me a little."
(Student 39, translated by us)*

"I don't think this subject should be offered remotely, because it requires a lot of practice that is necessary for the daily work of the profession." (Student 24, translated by us)

In addition, academics rated Remote Learning as more tiring than Presential Education.

"I took the Remote Learning course even though I prefer face-to-face. I found the Emergency Chair very creative and it exceeded my expectations, but I find Remote Learning more tiring, unfortunately that's what we have for all chairs now. I hope everything goes well and returns to normal so we can get back to our practices in the department. (Student 34, translated by us)

"At the beginning of the semester we didn't have much motivation because it's a very practical subject, so it made us a bit insecure, some subjects required a longer lesson and it became a bit tiring and consequently tutoring also became tiring." (Student 42, translated by us)



"Remote Learning is very tiring, taking into account many factors, but the technologies used were interesting." (Student 29, translated by us)

"Nothing replaces the face-to-face experience, but I think the way it happened was as close to face-to-face as possible." (Student 27, translated by us)

The difficulty of connecting to the Internet was pointed out, and in line with this reality, according to the Brazilian Institute of Geography and Statistics - IBGE (2020), 75% of the Brazilian population has access to the Internet, while 25% do not. In a descriptive empirical study carried out during the adaptation period of Remote Learning in a college in Recife, Pernambuco, it was pointed out that some students and teachers, despite having access to the Internet, had difficulties with the connection, causing synchronous meetings to change (MACIEL *et al.*, 2020).

According to the students' evaluations, there is a desire for practical classes to develop the techniques demonstrated in the curricular component in question. In this context, evidence-based practice in the teaching of urgent and emergency care is essential to bring students as close to the professional reality as possible (COSTA *et al.*, 2020). In line with this, a survey of students in Saudi Arabia revealed that e-learning is not considered sufficient for the health sector and that face-to-face practical teaching is necessary (AL-ZAHRANI *et al.*, 2021).

3.5 Suggestions for changes to improve the course

On this topic, the students were encouraged to analyze their difficulties and make suggestions to alleviate or even overcome them. They mentioned fatigue related to the exhibition of canvases, as well as the overload of subjects in the semester's curriculum.

"The remote form itself is already a bit more tiring because of the excess of screens, so some classes could be more compact to make it less tiring and so that students don't lose focus." (Student 17, translated by us)

"The hours of synchronous classes and tutoring should be reduced, i.e. synchronous classes should be on Thursdays and tutoring on another day of the week because two classes at the same time get tiring." (Student 8, translated by us)

"The classes could be more synthesized and the monitoring time could be much shorter, because spending hours in front of a screen is tiring and demotivating, especially for students who have to deal with 9 subjects in the second semester. But overall, the course was very useful, the teachers were incredible and always supportive. (Student 12, translated by us)



Compared to presential teaching, academics have considered Remote Learning to be more tiring due to prolonged exposure to screens, since even with the use of active methodologies and the integration of mechanisms to make classes more interactive, based on personal analysis of the subjects, being in front of bright monitors makes learning more exhausting and less profitable (COSTA *et al.*, 2021). However, ERE is proposed as an educational strategy that requires continuous improvement and the development of pedagogical tools to make it more dynamic, a fact that may partly explain the gaps in student engagement and the consequent dissatisfaction with the teaching model (GRANJEIRO *et al.*, 2022).

4 CONSIDERATIONS

Nursing students' self-assessment of the Emergency Remote Teaching of the curricular component "Nursing in Emergency Situations in the Community" at a public university in the State of Pernambuco made it possible to see, in the students' speeches, the need for practical classes or face-to-face workshops to improve and gain confidence in the execution of technical skills to help victims in emergencies in a pre-hospital environment. However, it was emphasized that the teaching strategies and approaches, even if limited to the virtual environment, provided a creative and interactive scenario, capable of promoting co-responsibility between teachers, supervisors, and students in the construction of scientific knowledge with social responsibility.

It is believed that by analyzing the self-assessment of students who were involuntarily subjected to Remote Learning (with a methodology of synchronous and asynchronous classes in a virtual environment) and who were used to face-to-face classes in the pre-pandemic period, it was possible to obtain data on the transition process and their experiences during the adaptation to this "new" routine. In addition, it can be concluded that some subjects, which are mostly practical, performed poorly as a result of the transition to the emergency remote model, so it is up to universities and educational institutions to reinforce the content taught virtually to guarantee students practical experiences that enhance the teaching-learning process. The process of reviewing and modifying the curriculum based on student evaluations is a strategy for promoting dialogic and creative teaching and learning processes.

It should be noted that this study, like any other, has methodological limitations. The use of data from an existing database is noteworthy, and it was not possible to go deeper into the themes mentioned and the aspects highlighted by the students. Furthermore, it is suggested that research be carried out that directly addresses the weaknesses and potentialities experienced in Emergency



Remote Teaching from the perspective of students and teachers, as well as the practice of pedagogical strategies to reduce the gaps in the teaching-learning process, especially in subjects that require theoretical-practical activities.

5 REFERENCES

AL ZAHRANI, E. M. *et al.* E-Learning experience of the medical profession's college students during COVID-19 pandemic in Saudi Arabia. **BMC medical education**, v. 21, p. 1-11, 2021. Available at: <https://doi.org/10.1186/s12909-021-02860-z>. Accessed on: Oct. 07, 2022.

ANDRADE, T. F.; SILVA, M. M. J. Características dos enfermeiros no atendimento pré-hospitalar: concepções sobre a formação e exercício profissional. **Enfermagem em Foco**, v. 10, n. 1, 2019. Available at: <http://revista.cofen.gov.br/index.php/enfermagem/article/view/1444/500>. Accessed on: Oct. 07, 2022.

BASTOS, M. C. *et al.* Ensino remoto emergencial na graduação em enfermagem: relato de experiência na covid-19. **REME - Rev Min Enferm**, v. 24, p. e1335, 2020. Available at: <http://www.revenf.bvs.br/pdf/reme/v24/1415-2762-reme-24-e1335.pdf>. Accessed on: Oct. 05, 2022.

BRASIL. Ministério da Educação. **Portaria n° 343 de 17 de março de 2020**. Dispõe sobre a substituição das aulas presenciais por aulas em meios digitais enquanto durar a situação do Novo Coronavírus - COVID - 19. Available at: https://www.planalto.gov.br/ccivil_03/portaria/prt/portaria%20n%C2%BA%20343-20-mec.htm. Accessed on: Aug. 05, 2022.

BRASIL. Ministério da Saúde. **Resolução n. 573, de 31 de janeiro de 2018**. Aprovar o Parecer Técnico n. 28/2018 contendo recomendações do Conselho Nacional de Saúde (CNS) à proposta de Diretrizes Curriculares Nacionais (DCN) para o curso de graduação Bacharelado em Enfermagem. Available at: <https://conselho.saude.gov.br/resolucoes/2018/Reso573.pdf>. Accessed on: Nov. 30, 2023.

BRASIL. Ministério da Saúde. **Portaria n° 1600, de 7 de julho de 2011**. Reformula a Política Nacional de Atenção às Urgências e institui a Rede de Atenção às Urgências no Sistema Único de Saúde (SUS). Available at: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1600_07_07_2011.html. Accessed on: Jan. 02, 2022.

CAPELLATO, P. *et al.* Método de ensino ativo utilizando avaliação por pares e autoavaliação. **Research, Society and Development**, v. 9, n. 7, p. e21973495, 2020. Available at: <https://rsdjournal.org/index.php/rsd/article/view/3495>. Accessed on: May 28, 2022.

CZESZAK, W.; MATTAR, J. Autoavaliação e colaboração na formação online: revisão de literatura e estudo de caso. **Revista Paidéi@-Revista Científica de Educação a Distância**, v. 12, n. 22, p. 1-29, 2020. Available at: <https://doi.org/10.29327/3860.12.22-1>. Accessed on: Sept. 12, 2023.





CONCEIÇÃO, C. V. D.; MORAES, M. A. A. D. Aprendizagem cooperativa e a formação do médico inserido em metodologias ativas: um olhar de estudantes e docentes. **Revista Brasileira de Educação Médica**, v. 42, p. 115-122, 2018. Available at: <https://doi.org/10.1590/1981-52712015v42n4RB20180013>. Accessed on: Sept. 30, 2022.

COQUEIRO, N. P. S.; SOUSA, E. C. A educação a distância (EAD) e o Ensino Remoto Emergencial (ERE) em tempos de Pandemia da Covid 19. **Brazilian Journal of Development**, v. 7, n. 7, p. p. 66061–66075, 2021. Available at: <https://ojs.brazilianjournals.com.br/ojs/index.php/BRJD/article/view/32355>. Accessed on: Feb. 17, 2022.

COSTA, E. F. *et al.* Aulas práticas em urgência e emergência na formação do acadêmico de enfermagem-relato de experiência. **Research, Society and Development**, v. 9, n. 12, p. e24891210411, 2020. Available at: <https://doi.org/10.33448/rsd-v9i12.10411>. Accessed on: Oct. 05, 2022.

COSTA, J. A. *et al.* Dificuldades enfrentadas durante o ensino remoto. **Rebena - Revista brasileira de ensino e aprendizagem**, v.1, p. 80-95, 2021. Available at: <https://rebena.emnuvens.com.br/revista/article/view/9>. Accessed on: Oct. 20, 2022.

DEL FIACO, J. L. M. *et al.* Experiências docentes do curso de administração no processo de ensino-aprendizagem-avaliação durante a pandemia. **Anais do Seminário de Atualização de Práticas Docentes**. v. 2, n. 2, 2022. Available at: <http://anais.unievangelica.edu.br/index.php/praticasdocentes/article/view/5762>. Accessed on: Sept. 09, 2022.

DUTRA, J.; GUIMARÃES, M. G. V.; MORAES, A. F. M. Ensino Remoto e a pandemia da Covid-19: experiências e aprendizados. **EmRede - Revista de Educação a Distância**, v. 8, n. 1, 2021. Available at: <https://doi.org/10.53628/emrede.v8i1.729>. Accessed on: Sept. 18, 2023.

FONSECA, B. I. Ensino superior: reflexões sobre a avaliação no Ensino Remoto. **Educação e Ensino Superior Online**, v. 1, n. 1, p. 23-31, 2021. Available at: <https://doi.org/10.24115/2763-762X20211131p.23-31>. Accessed on: May 02, 2022.

FREIRE, P. **Pedagogia da Esperança: Um reencontro com a Pedagogia do Oprimido**. Rio de Janeiro: Paz e Terra, 1992.

FREIRE, P. Educação: o sonho possível. *In*: BRANDÃO, C. R. **O educador: vida e morte – escritos sobre uma espécie em perigo**. Rio de Janeiro: Graal, 1982. p. 91-101.

GONÇALVES, L. B. B. *et al.* Formação do enfermeiro para a gestão do cuidado: revisão integrativa da literatura. **Revista Brasileira de Enfermagem**. v. 75, n. 3, 2022. Available at: <https://doi.org/10.1590/0034-7167-2020-1186>. Accessed on: May 16, 2022.

GRANGEIRO, A. C. M. M. *et al.* O engajamento nos estudos e o Ensino Remoto de emergência: uma pesquisa com estudantes universitários. **EmRede - Revista de Educação a Distância**, v. 9, n. 2, 2022.

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<https://www.aunirede.org.br/revista/index.php/emrede/article/view/883>. Accessed on: June 05, 2023.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Pesquisa Nacional por Amostra de Domicílios Contínua - PNAD Contínua [Internet]**. Rio de Janeiro: IBGE, 2020. Available at: <https://www.ibge.gov.br/estatisticas/sociais/populacao/17270-pnad->. Accessed on: Oct. 10, 2022.

LAGO, N. C. et al. Ensino remoto emergencial: investigação dos fatores de aprendizado na educação superior. **Revista Ibero-Americana de Estudos em Educação**. Araraquara, v. 16, n. 2, p. 391 - 406, Abr-Jun 2021. Available at: <https://periodicos.fclar.unesp.br/iberoamericana/article/view/14439>. Accessed on: Aug. 19, 2022.

LIRA, A. L. B. C. *et al.* Educação em enfermagem: desafios e perspectivas em tempos da pandemia COVID-19. **Revista Brasileira de Enfermagem**, n. 73 (suppl 2), 2020. Available at: <https://doi.org/10.1590/0034-7167-2020-0683>. Accessed on: Jan. 02, 2022.

MACIEL, M. A. C. *et al.* Os desafios do uso de metodologias ativas no ensino remoto durante a pandemia do Covid-19 em um curso superior de enfermagem: um relato de experiência. **Brazilian Journal of Development**, v. 6, n. 12, p. 98489–98504, 2020. Available at: <https://doi.org/10.34117/bjdv6n12-367>. Accessed on: Oct. 10, 2022.

MORAIS FILHO, L. A. *et al.* Estratégias utilizadas para o ensino de urgência/emergência em um curso de Graduação em Enfermagem. **Texto & Contexto Enfermagem**, v. 27, n. 4, 2018. Available at: <http://dx.doi.org/10.1590/0104-07072018003210016>. Accessed on: Sept. 18, 2022.

NASCIMENTO, L. C. N. *et al.* Saturação teórica em pesquisa qualitativa: relato de experiência na entrevista com escolares. **Rev Bras Enferm** [Internet], v. 71, n. 1, p. 243-248, 2018. Available at: <http://dx.doi.org/10.1590/0034-7167-2016-0616>. Accessed on: May 30, 2022.

NOGUEIRA, S. C. G.; BATISTA, V. P. A. Educação em Tempos de Pandemia: EaD ou Ensino Remoto Emergencial?. *In*: Congresso Internacional de Educação e Tecnologias, 2020, São Carlos. **Anais do CIET:EnPed**, São Carlos: Grupo Horizonte - SEaD - UFSCar, 2020. Available at: <https://cietenped.ufscar.br/submissao/index.php/2020/article/view/1705>. Accessed on: Jan. 10, 2022.

OLIVEIRA, A. E. F.; ARAÚJO, F. L. S. M.; GARCIA, P. T. (Org.). **Redes de atenção à saúde: Rede de Atenção às Urgências e Emergências no Âmbito do Sistema Único de Saúde**. São Luís: EDUFMA, 2018. Available at: <https://ares.unasus.gov.br/acervo/handle/ARES/10272>. Accessed on: Jan. 03, 2022.

OLIVEIRA, D. H. I. et al. A formação inicial de/com professores pós-pandemia: novas discussões e os mesmos desafios. **Congresso Internacional de Educação e Tecnologias| Encontro de Pesquisadores em Educação a Distância**. Anais do CIET: EnPED: Ago. 2020. Available at: <https://cietenped.ufscar.br/submissao/index.php/2020/article/view/1162/846>. Accessed on: Aug. 08, 2022.

OLIVEIRA, G. *et al.* An exploratory study on the emergency remote education experience of higher





education students and teachers during the COVID 19 pandemic. **British Journal of Educational Technology**, v. 52, n. 4, p. 1357-1376, 2021. Available at: <https://doi.org/10.1111/bjet.13112>. Accessed on: Oct. 01, 2022.

OLIVEIRA, J. O. *et al.* Monitoria de Primeiros Socorros durante o ensino remoto em tempo de pandemia: um relato de experiência. **Diversitas Journal**, v. 7, n. 1, p. 0513-0520, 2022. Available at: <https://doi.org/10.48017/dj.v7i1.1872>. Accessed on: Oct. 02, 2022.

PEREIRA, G.; FRAGA, N.; GOUVEIA, F. Ensino remoto de emergência em tempos de pandemia da covid-19: que aprendizagens? Um estudo exploratório no ensino superior. **Revista Portuguesa de Investigação Educacional**, n. 21, p. 1-22, 2021. Available at: <https://doi.org/10.34632/investigacaoeducacional.2021.10132>. Accessed on: Oct. 08, 2022.

UNIVERSIDADE FEDERAL DE PERNAMBUCO (UFPE). Pró-Reitoria para Assuntos Acadêmicos. **Perfil**: 5908-1 Relatório Perfil Curricular do Curso de Enfermagem, 04 de novembro de 2013. Available at: https://www.ufpe.br/documents/38970/411209/enfermagem_perfil_5908.pdf/0a838802-c489-4fc2-96e6-c188da4d5ff3. Accessed on: Sep. 17, 2023.

SAUL, A. M. Na contramão da lógica do controle em contextos de avaliação: por uma educação democrática e emancipatória. **Educação e Pesquisa**, v. 41, p. 1299-1311, dez. 2015. Available at: <http://dx.doi.org/10.1590/S1517-9702201508143035>. Accessed on: Jan. 16, 2021.

SILVA, B. G.; PEIXOTO, B. A. R.; MOREIRA, R.S. O atendimento pré-hospitalar prestado por leigos a vítimas de acidentes de trânsito terrestre: revisão integrativa. **Brazilian Journal of Development**, Curitiba, v. 8, n. 3, p. 21673-21686, 2022. Available at: <https://doi.org/10.34117/bjdv8n3-390>. Accessed on: Sep. 1, 2022.

SILVA, J.; GOULART, I. C. V.; CABRAL, G. R. Ensino remoto na educação superior: impactos na formação inicial docente. **Revista Ibero-Americana de Estudos em Educação**, Araraquara, v. 16, n. 2, p.407-423, 2021. Available at: <https://periodicos.fclar.unesp.br/iberoamericana/article/view/14238>. Accessed on: Sep. 3, 2022.

SOUSA, K. H. J. F. *et al.* Humanização nos serviços de urgência e emergência: contribuições para o cuidado de enfermagem. **Revista Gaúcha de Enfermagem**, v. 40, n. 20180263, 2019. Available at: <https://doi.org/10.1590/1983-1447.2019.20180263>. Accessed on: May 17, 2022.

YIN, R. K. **Pesquisa Qualitativa do Início ao Fim**. 1 ed. Tradução de Daniela. Bueno. Revisão técnica de Dirceu da Silva. Porto Alegre, RS: Penso, 2016.

