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Emergency remote teaching and the medical student

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Abstract. In the midst of the Covid-19 pandemic, the teacher transformed classroom education, guaranteeing access to transformational cognitive learning, migrating from classroom teaching to confinement teaching, called emergency remote teaching. Adapting has generated hard collaborative work with open education resources, implemented by the teacher. Objective. To evaluate the emergency remote teaching implemented in the education of medical students during the contingency period. Results. There are 3 spheres in emergency remote teaching: Digital Resources (Learning Activities) with 87% satisfaction, Educational Intermodality 47% (interaction of educational modalities) and Evaluation Criteria 32%. Conclusion. The digital resources and the evaluation criteria depend on the teaching commitment in each Learning Unit. Educational intermodality is based on the digital ability of the teacher, being important to implement training alternatives in them and therefore motivate the student to continue in the educational process.

Keywords. Covid-19, remote teaching, Educational Intermodality, learning

Introduction

With the change that was presented by the health crisis of the Covid-19 pandemic, the entire world had a global change in its social structures, but fundamentally in education. The World Health Organization defined the coronavirus as a large family of viruses that cause disease, ranging from the common cold to more serious diseases, considering its magnitude, one of the largest pandemics recorded in the world (WHO, 2020). That is why the closure of physical facilities of educational centers was presented, which prohibited any face-to-face teaching that would make the population vulnerable.

The Countries, Mexico and the state of Campeche generated strategies that would guarantee education and learning in a different way, although already used, having the component of online and distance learning.

Adapting face-to-face learning to remote learning, as some advanced countries call them, open resources and educational practices, suggested changes in the need for effective pedagogical approaches to keep students active and engaged during this long period of online learning. Institutions and educational centers were forced to adapt their pedagogical activity to a virtual environment, what is known as Emergency Remote Teaching (Hung, et. Al., 2020).

In Campeche, at the Faculty of Medicine, the learning of Medicine students during the contingency period was taken up by teachers, with the term Emergency Remote Teaching, in

which strategies were presented implementing educational planning with digital resources, (pedagogical activities), the implementation of educational intermodality (designs of educational plans according to the conditions of the environment offering services in the classroom but also at home; Shanghai American School, 2020) and Evaluation criteria, according to the times that were being lived.

Therefore, the objective of the research is to determine the impact of Emergency Remote Teaching on Medicine students in the face of the Covid-19 health contingency.

Method Description

The study contains methodological support from several authors that allowed us to visualize what we are currently experiencing with the Covid-19 health contingency, however, due to this same situation, the implementation of an educational Intermodality in students for learning, presented from the beginning inequities and inequalities that are manifested in the analysis of educational processes. The technologies were not within the reach of the entire population, which is why Emergency Remote Teaching was taken to guarantee an equitable, quality, warm and, above all, inclusive education for the learning of the entire University community.

Type and design of the Project

A descriptive-observational study with a quantitative approach was carried out in a sample of 120 students with a 1:1 sex who are in the fourth semester of the Medical Surgeon degree with an age range of 19 to 21 years. The sampling was carried out from January to May 2022. Regarding the acquisition of the data, the questionnaires were applied in Google Form format for the analysis of the information. It is worth mentioning that the approach to evaluate Emergency Remote Teaching was situated in three spheres: a) digital resources, which were all the activities that teachers requested from students during the semester; b) Educational intermodality that was defined as the strategies that were adapted to carry out distance learning; and c) Evaluation Criteria, were the percentages implemented by the teacher for the approval of the Learning Unit. It should be clarified that the subjects that the students took in the semester were evaluated in their entirety, without making any distinction.

In the first stage of the project, a multiple-choice questionnaire was applied to find out the type of activities that the teachers assigned in their Learning Unit (UA, Unidad de Aprendizaje), the evaluation criteria that they proposed for the approval of the same and, at the end, they were provided with a short definition of Educational Intermodality, so that the student had a contextualization of the construct.

The personal data questionnaire was applied to the student, which contained age, sex, grade, number of subjects and place of origin. The other questionnaires that will be referred to were applied with the Likert scale to measure attitudes and to know the degree of conformity or satisfaction of the student with the proposed affirmation.

The questionnaire applied to digital resources referred activities as mind maps, videos of group or individual presentations, research projects, essays, internal exams, which were the proposals with a higher percentage indicator. The questionnaire applied for the evaluation criteria consisted of referring if they were satisfied with the way teachers evaluated in all their Learning Units that they took in the referred semester and finally if they agreed with the Educational Intermodality due to the sanitary contingency.

The informed consent form was delivered in advance to each student for the application of the questionnaires. For data analysis, SPSS software for Windows version 22 was used.

Summary of Results

After performing the analysis of the data obtained in the questionnaires that were carried out in the students of the Bachelor of Medical Surgeon, the following results are recorded.

Among the digital resources, it can be seen in Figure 1 that of the total sample of 120 students, 87% show satisfaction with them and 13% are not satisfied, considering that the 7 Learning Units the student takes during the semester are being included.

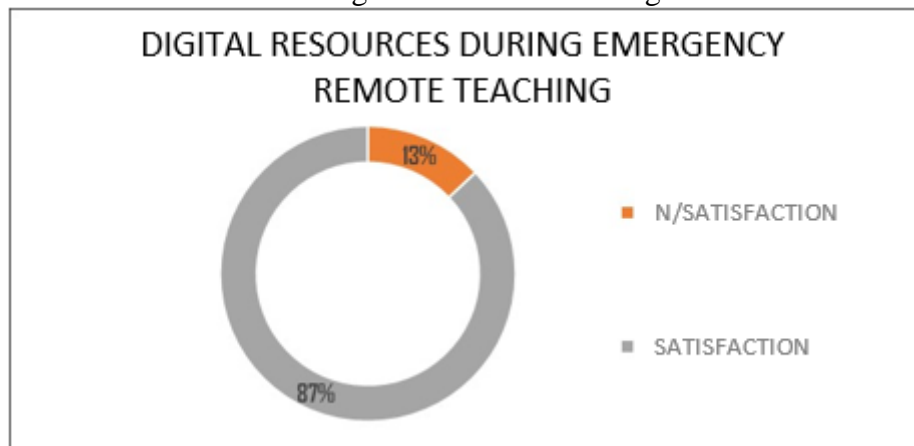


Figure 1. Representation of the satisfaction of the Digital Resources used in the Emergency Remote Teaching referred by the students of Medical Surgeon

Among some points that stand out and are shown in Figure 2, the individual presentation video resource is the most preferred by students with 23% satisfaction, with research projects remaining in a lower percentage with 10%. This data can be interpreted in several ways, one of them being the education of the medical student who accepts individual work with 23% than the collaborative work referred to in research projects with 10% acceptance. Based on the processes that have been developed in the student with the health contingency, the lack of interpersonal relationship increased, probably being the recreational environment for interaction instead of the academic.

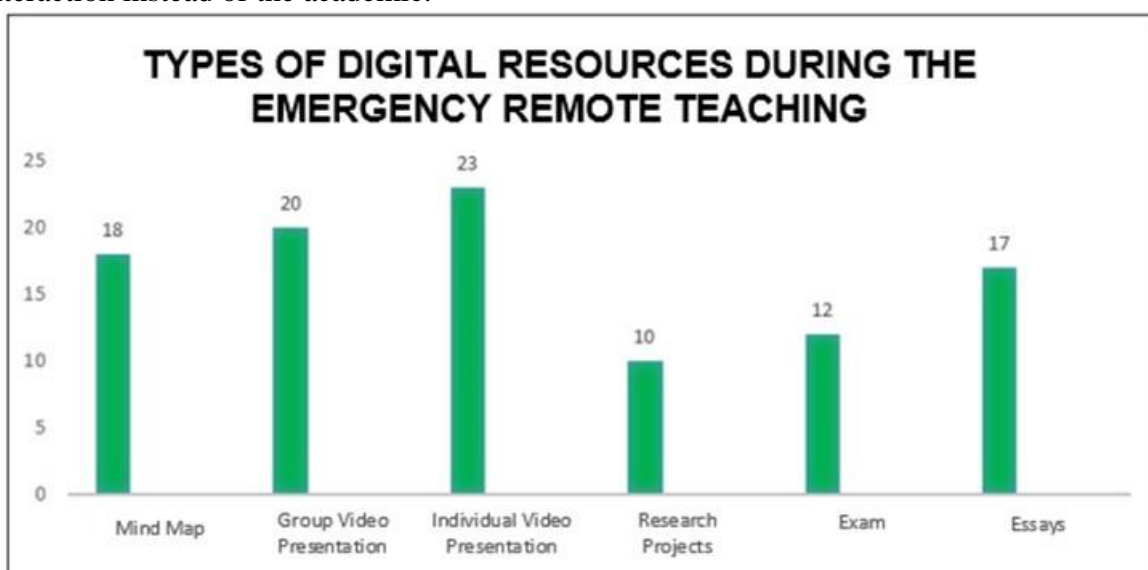


Figure 2. Percentage of satisfaction of the types of Digital Resources used in the Emergency Remote Teaching by the students of Medical Surgeon

Based on the results of educational intermodality, Figure 3 shows that the satisfaction of the Medicine student is 47% of the total population, leaving 53% dissatisfied with this type of educational program implemented in the health contingency. It has been considered that there are various factors for which the student is dissatisfied with this modality, with repercussions as a predominant factor, technology based mainly on the Internet and the economic resource of cellphone technology when the former is lacking.

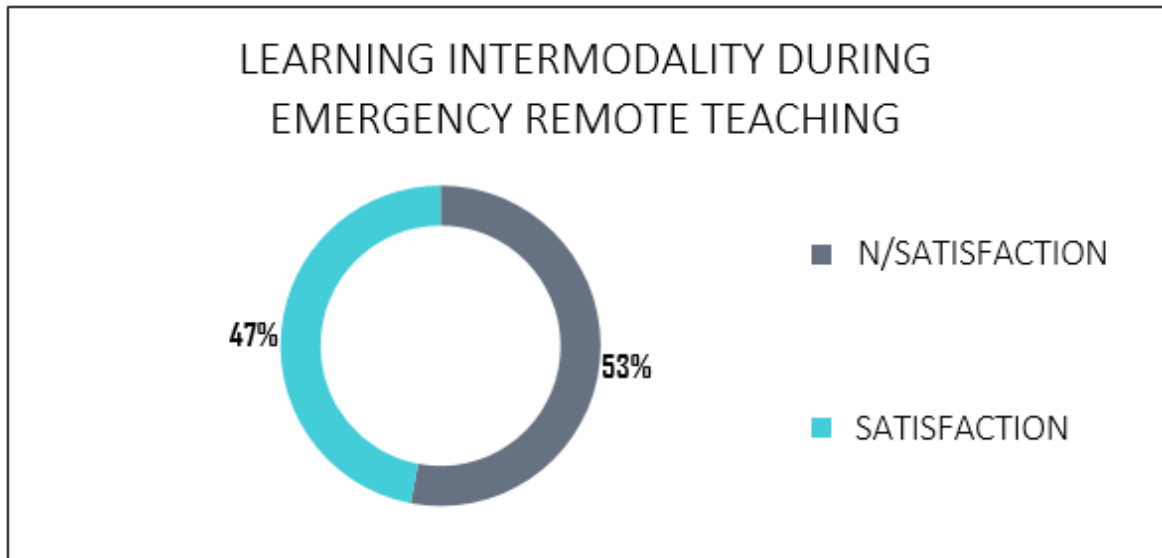


Figure 3. Representation of the satisfaction on the Educational Intermodality used in Emergency Remote Teaching by the students of Medical Surgeon

Among the last point to be evaluated of Emergency Remote Teaching is represented in Figure 4, where the student is not completely satisfied with the evaluation criteria established by the professor during the development of the semester in the Learning Unit, having a 32% satisfaction versus 68% dissatisfaction. It must be remembered that these percentages are the totality of the Learning Units and that the criteria are established by the teacher depending on the competencies that are developed in the educational program. Among the important points that were highlighted in the questionnaires was the lack of clarity in the criteria for the evaluation of the digital resource as well as the evaluations without the feedback that allows the student to improve the deliveries of the activities developed in the subject.

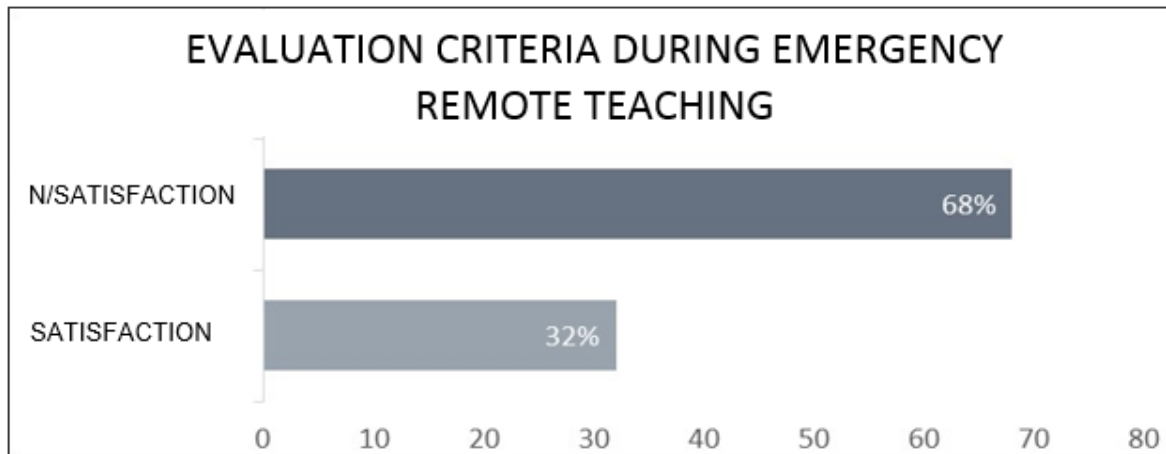


Figure 4. Representation of the satisfaction and non-satisfaction on the evaluation criteria used in the Emergency Remote Teaching by the students of Medical Surgeon

Conclusions

The evaluation of Emergency Remote Teaching is important because it establishes a more real picture of the current situation due to the health contingency caused by Covid-19. Educational processes were abruptly changed throughout the world, and we had to establish criteria that we never imagined implementing as teachers. This study was carried out at the beginning of the pandemic outbreak, so it would be important to carry out another investigation today to see the change in the percentages found in the project.

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