



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 27, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

Pedagogical strategies for the learning of medicine students

Karina Maldonado

Universidad Autónoma de Campeche, Mexico

kimaldon9@hotmail.com

Abstract. With the epidemiological contingency, the learning processes were modified by teaching with virtualization. The teaching staff implemented pedagogical strategies structuring methodologies, interaction dynamics, fulfilling the objectives set out in the educational curriculum. Objective: To implement pedagogical strategies involved in virtualization during the learning process in medical students. Methodology: A descriptive, observational study with a qualitative approach over a period of 8 months. The sample was 225 students from the 5th semester of the Surgeon Degree. Results: It was shown that group activities, synchronous online conferences have 68% approval, dynamics such as discussion forums have 85% approval. Video recording has 45%, essays 25%, and mind maps 30%. Conclusion: Implementing educational strategies allows assessing efficiency and effectiveness promoting learning for the development of professional intellect.

Keywords. Pedagogy, virtualization, learning, students

Introduction

Currently, changes have arisen due to the health contingency caused by the COVID-19 pandemic. This change in strategies based on “emergency teaching”, “suspension without suspension”, terms that emerged from many countries to consider that teaching maintained its continuity, guaranteeing learning and avoiding its interruption as much as possible (Chang and Yano, 2020), beyond sanitary measures.

The educational intermodality implemented where distance education and online education processes interacted, which had been implemented since 2004 and was called the virtual environment, transgressed a generational change from one moment to another. We had had social strikes due to different political and cultural processes and why not remember them, health such as the H1N1 Influenza; however the political strategies and the times were different.

The need to implement effective pedagogies that would allow the medical student to be connected online for long periods of time, with different learning resources for the construction of methodologies according to the teaching processes, were some alternatives used by the teacher to motivate the student to follow in the educational process.

Creative, innovative, reflective, critical towards analysis, approaches that would define the teacher today, but this is allowed by the different modalities present in this virtualization, synchronous and asynchronous. Collins and Kikut (2020) define synchronous communication as the communicative activity that occurs in real time as well as face-to-face communication

and the participants interact with each other, although not necessarily in the same physical location. Capanegra, et.al (2001) defines asynchronous communication as that learning that takes place differently in time and space, such as forums, videos or recorded conferences, etc.

It is therefore that the educational strategies valued in medical students present a real panorama of the 2021 century teacher, which can guarantee the student quality learning and training in the professional field.

Method description

Overview of Research challenges

It is important to recognize that there are studies that allow sustaining the methodological bases of the research project; however, based on the contingency that we are currently experiencing, the existing technologies for each student are diverse and inequitable as some authors refer. These inequities and inequalities that occur in student learning can be considered a small difficulty based on obtaining some parameters, which was solved with the statistics implemented in the project, discarding the information that was not essential for the project. That is why the results obtained will impact the educational environment and therefore their professional performance in the short term and are preventable in the near future.

Type and design of the project

A descriptive-observational study was carried out with a quantitative approach, in a sample of 225 students, 1:1 sex, who are in the 5th semester of the Medical Surgeon Degree with an age of 20 to 22 years, totally dedicated to the study. The sampling was carried out from May to December 2020. A questionnaire was applied that referred the personal data of the student (Age, sex, place of origin), another questionnaire that included the different pedagogical strategies implemented during the virtualization period that to date are still working. It is worth mentioning that the questionnaires were carried out in "Google Form" format to capture the responses.

Regarding to the questionnaire of the pedagogical strategies carried out based on the students' learning, the values were grouped into 2 scales, group activity and individual activity.

The group activity was classified into two categories: a) synchronous learning based mainly on online classes where topics presented by the student and the teacher were presented and b) asynchronous learning where the student intervened in discussion forums presenting arguments based on a clinical case or based on a question in your professional activity.

The individual activity was analyzed with three pedagogical tools, the recording of videos made by the "Loom" or "Google Meet" platforms, the analysis of documents of scientific interest such as trials, based on clinical practice and the development of mental maps, an area considered for the research and deepening of topics.

Informed consent was given to each student in advance for the application of the questionnaires.

SPSS software for Windows version 15 was used for data analysis.

Summary of Results

After performing the analysis of the data obtained in the form, the following results are shown. Among the pedagogical strategies included in the students' learning, it was shown that of the total sample based on group activities, synchronous online conferences represent 68% approval in the students, as shown in Figure 1.



Figure 1. Representation of the synchronous Pedagogical Strategies referred by the students based on the total sample obtained

Figure 2 represents the dynamics implemented in the discussion forum based on the group activities, which represents 85% of the total sample obtained, where a strong interest in the proposed activity is observed.

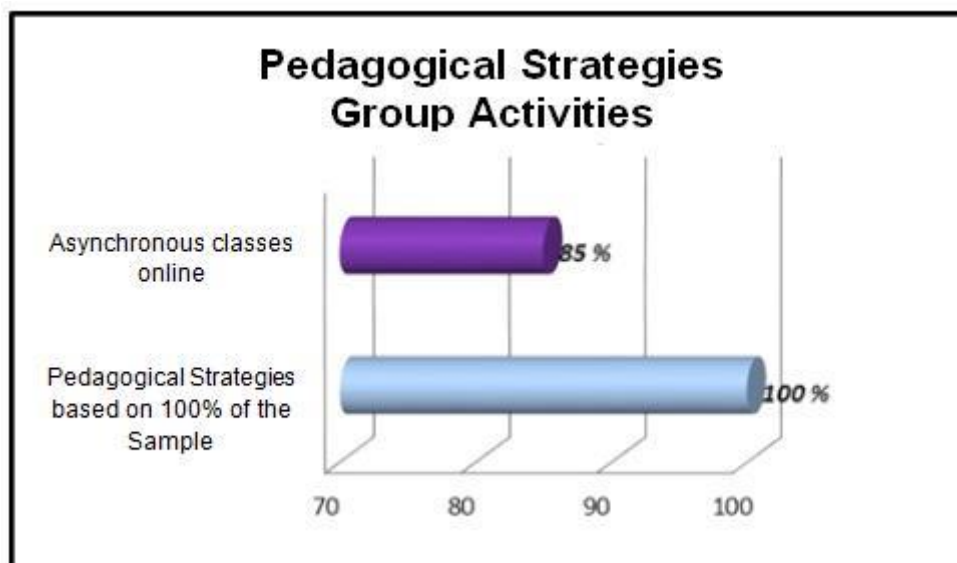


Figure 2. Representation of group Pedagogical Strategies (Discussion Forum) carried out by students based on the total sample obtained

The individual activities are represented in figure 3; it is observed how the recording of videos by the students is of greater relevance considered based on 100% of the sample, representing 45% approval. The second individual activity with less relevance in the students was the analysis of documents supported by the essays with a percentage of 25%. Finally, 30% of the sample considered by the students of intermediate importance was the development of mental maps, items considered for the investigation and deepening of topics. These results can be compared in the work carried out by Martínez (2008), where despite the fact that the strategies were implemented in other circumstances, the visualization towards tools of more visual considerations, are the ones that impact the highest percentage in the approval of the Medicine student.

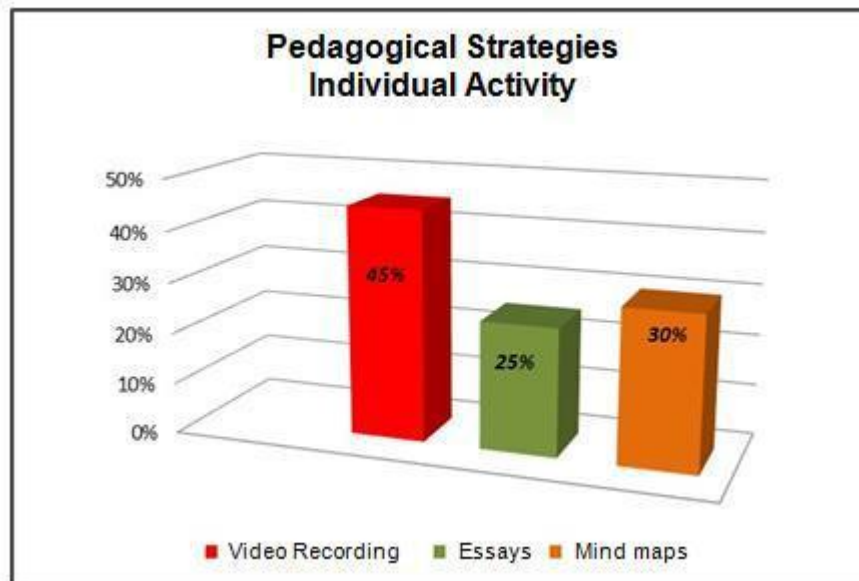


Figure 3. Representation of the individual Pedagogical Strategies (asynchronous) carried out by the students

Conclusions

The impact of the teaching and learning processes based on the confinement that we are currently experiencing and will continue to face without having an immediate change, have transcended in the education of the medical student. The educational pedagogical strategies with the different synchronous and asynchronous modalities constitute a fundamental part in the training of the medical student, promoting their potentialities with new scenarios that transform educational spaces in the promotion of learning that allow the development of the professional intellect for an educational performance and effective.

References

- [1] Aguilar, J., Alcántara, A., Álvarez, F. Amador, R. (2020) Educación y pandemia. Una visión académica. Instituto de Investigaciones sobre la Universidad y educación. UNAM. México. <https://iisue.unam.mx/>
- [2] Capanegra, H., Cabrera, G., Aguilar, L. Jorda, M. (2016). El empleo de las tecnologías de información y comunicaciones (TIC's) en el ámbito universitario. Santa fé, Argentina. <https://www.redalyc.org/pdf/3375/337546668006.pdf>
- [3] Cotino Hueso, L. (2020). La enseñanza digital en serio y el derecho a la educación en tiempos del coronavirus. Facultad de Derecho, Universidad de Valencia, España. <https://doi.org/10.1344/REYD2020.21.31283>
- [4] Chan, G y Yano, S. (2020) "How are countries addressing the Covid-19 challenges in education" UNESCO Section of education Policy A snapshot of policy measures, 24.3. https://www.academia.edu/44874422/Aproximaci%C3%B3n_cr%C3%ADtica_de_la_nueva_salud_p%C3%BAblica_una_visi%C3%B3n_postpandemia
- [5] Domínguez, J. y Rodríguez, J. La educación a distancia en el Perú. Universidad católica los ángeles. Virtual edu., Perú. https://virtualeduca.org/documentos/observatorio/la_educacion_a_distancia_en_peru.pdf

- [6] Kikut Valverde, L.(2020). Análisis de resultados de la evaluación de la virtualización de cursos en la URC ante la pandemia por COVID-19. Centro de Evaluación Académica. Universidad de Costa Rica. https://www.cea.ucr.ac.cr/images/stea/Eval_Doc/Analisis_Virtualizacion_I-2020.pdf
- [7] Kriz C., Iman N, Zaidi, S. (2020). Breaking down Covid-19. A living textbook. Publication of first medicine and global clinical partners. <https://static1.squarespace.com/static/55564587e4b0d1d3fb1eda6b/t/606134fe60b0890b877e01a8/1616983328229/Tomo+04+-+Investigaci%C3%B3n+y+Desarrollo+-+Reporte+Fresnillo+2021.pdf>
- [8] Gamba A. y Arias, s. (2017). El papel de la universidad y la cooperación universitaria al desarrollo en el nuevo escenario de la agenda 2030. Revista española de desarrollo y cooperación. Pp 13-24. <https://dialnet.unirioja.es/servlet/articulo?codigo=618711>
- [9] Martínez, C. (2008). La educación a distancia: sus características y necesidad en la educación actual. Educación, 33.México. <https://dialnet.unirioja.es/descarga/articulo/5057022> Martínez:Berruezo, A. y García
- [10] Varela, A. (2013). Análisis de la influencia de la virtualización en la motivación del alumnado universitario de primer curso de Magisterio. Revista de Educación-México. Pp 42-68 <https://www.educacionyfp.gob.es/dam/jcr:cec96f79-984d-4845-ad05-9baaba494900/re36202-pdf.pdf>
- [11] Ramón, L. Vieta, M., Vásques de Prada, M. (2004). De formación en línea: acerca de las desventajas de la educación virtual.Grupo Comunicar. Huelva, España. <https://www.redalyc.org/pdf/158/15802226.pdf>
- [12] Charles, G y Martínez, P. (2020). Docencia no presencial de emergencia. Formación virtual, España. <https://www.fundacioncarolina.es/wp-content/uploads/2020/06/AC-32.-2020.pdf> Padrón, J. (2207). Tendencias epistemológicas de la investigación científica en el siglo XXI. Moebio, Chile. <http://www.facso.uchile.cl/publicaciones/moebio/28/padron.pdf>