



Health students learn to work in inter-professional teams with an innovative methodology

Students noted that there were very valuable and serious contributions in each category. For example, some assured that the experience allowed the development of critical thinking and the opportunity to learn about other professions from different dimensions, not just the clinical one.

A group of professors of Universidad del Rosario created an innovative learning community. In six weeks, students from different programs, with tutors from various health disciplines, virtually learned to work in inter-professional teams using case resolution.

By Marisol Ortega Guerrero
Pictures Leonardo Parra, Freepik, URosario

They were all first-year students from the School of Medicine and Health Sciences of Universidad del Rosario. Some were preparing to graduate in Speech Therapy, others in Medicine, and others still in Occupational Therapy, Physiotherapy, Psychology, or Biomedical Engineering. In total, there were 250, who, in groups of 10, had to attend to an important clinical case on the basis of their knowledge.

It was about a 17-year-old college girl, pregnant, who had problems in not only her physical health (such as emesis or recurring vomiting, loss of appetite, and onset of hearing problems) but also her mental health (she went through social conflicts). When her parents found out about her pregnancy, her mother supported her, but her father did not. A tough situation for her.

For six weeks, students analyzed the implications and solutions of this hypothetical case, which could well have been a fact of real life. The objective of the professors was not to evaluate the disciplinary results, but show them how teamwork is carried out and to understand the identity of the different health-related professions. Thus, in the future, everyone will be able to do integrated work, and not with each one contemplating their subject in isolation, as is often the case.

“With the project *The inter-professional education mediated by ICTs at the beginning of health studies*, we try to put together an instructional design team with experts from different health areas and to choose facilitators that have professions other than those of the students. A biomedical engineer was probably the tutor of a group of Medicine, Physiotherapy, Speech therapy, etc. students” explains Dr. John Vergel, MD., Ph.D., from the School of Medicine and Health Sciences of Universidad del Rosario and member of the team that decided to perform a pilot test with these students.

They started from the premise that training health professionals under a collaborative or teamwork model Educación Interprofesional, EIP (Inter-professional Education), mediated by Information and Communication Technologies (ICT), represents a great benefit for patients in care and with regard to security issues. This way, for a month and a half, they took students to immerse themselves in a virtual and practical learning environment designed particularly for them, from the e-Modules of Educación Interprofesional en Salud, Meip (Health Inter-professional Education), which were developed in levels, each with a pedagogical purpose.

“With this, we hope that when students arrive at hospitals to do their internships or practice their profession, they have different competences in relation to those who have not done inter-professional education. They have a high ability to work in a team and know and recognize the identity of the



←
 “With the project *The inter-professional education mediated by ICTs at the beginning of health studies*, we try to put together an instructional design team with experts from different health areas and to choose facilitators who come with professions other than those of the students. A biomedical engineer was probably the tutor of a group of Medicine, Physiotherapy, Speech therapy, etc. students,” explains Dr. John Vergel, School of Medicine and Health Sciences.

A second stage

This first part of the research job *The inter-professional education mediated by ICTs at the beginning of health studies* was based on the structuralist functionalism theory, which sees society as a complex system, the parts of which work together to promote social harmony. Professor John Vergel explains that although it is a relevant theory, it does not allow us to understand work conflicts. Therefore, the Rosario team is designing a pilot test for sophomores, who have greater knowledge of their disciplines. In addition, they will involve conflict's sociology, a discipline that allows an understanding of how disagreements arise, how these should have a process, and even how they can be turned into something positive by addressing them in the best way. “We are facing a job that is going to be a two-way highway,” highlights Professor and Researcher Ricardo Alvarado, a public health specialist, for whom it is very positive that, on the one hand, it meets the objectives of generating learning, and, on the other, it serves the community, the patients, and the clinical and community sector in the real world with on-ground actions.



other professionals, decreasing tribalism, which is one of the problems of health care in hospitals and health centers,” says professor Vergel.

He and several members of the team acknowledge that they had not ventured into inter-professional education in every sense of the word, and precisely that helped them create a pedagogical strategy for students, who could even learn about other professions. “It was not clear to me, for example, who was a biomedical engineer, what they did although, every week, I had meetings with biomedical engineers, and now I know,” confesses Vergel.

For her part, Physiotherapist Sandra Lilia Forero highlights that those who were involved in this grew as professionals and educators. “We advance in the discourse in building a pedagogical methodology, which not only implies the case but also how we interact together to do quality work at the service of patients,” she points out.

Reassessing leaderships

Another of the fundamental objectives of this disruptive pedagogical model was understanding learning experiences from the tutors' perspectives. Therefore, at the end of six weeks of work, a feedback process came with researchers (curriculum designers and 12 virtual tutors of the different professions of the school), who were facilitators of the students' tasks on the Virtual Learning platform Moodle.

For Speech Therapist Rocío Molina, who has been part of the team since its creation, it has been fundamental to be able to implement the theory, working in class on all sub-



jects, and acquiring a learning of their own. “Because when speaking of the inter-professional team, sometimes we do not even know very well the functions of each among ourselves. But more than the functions, the important thing is how to determine the quality of life together, how to provide solutions, how to share knowledge, and how to be part of a collaborative model.”

Occupational Therapist Karen Aguíá Rojas agrees on this, and she describes this opportunity as “a deep learning, from case design to virtual tool management.” She also considers that it has allowed them to change their perspective regarding case resolution to one that is more critically analytical, by having different professionals interact. Precisely, in this analysis, the vision of a nursing professional could not be left out. Given that Universidad del Rosario seeks to open the Nursing Program, in the research study, there is Ángela Fernanda Espinosa, who is a professor of the Medicine Program, and who is interested in this initiative. For her, the experience was an opportunity to learn about the other disciplines and an exercise to recognize her own.

“When we get a bit lost in building a case, we return to two fundamental points: One, the cases become more like a means. They are not the end. Two, it needs to be recognized that sometimes egos emerge when we face a discussion of a disciplinary order. We come back to the center, the patient, the subject of care, or the user,” she points out.

Doctor Pablo A. Bermúdez agrees with this assessment, for whom interdisciplinarity aims precisely to recognize health professionals as a group that works depending on the patient, which implies changing the tradition of putting doctors on top of a pyramidal organization. “They don't always have to be the leaders, or simply, the pyramid model is not the alternative,” he assures. ■

Students highlight the methodology

In this innovative pedagogical process, it was not possible to omit the perception of the students, who manifested themselves in three categories of analysis: Strengths, learnings, and opportunities for improvement. In general, they noted that there were very valuable and serious contributions in each category. For example, some claimed that the experience allowed the development of critical thinking and the opportunity to know the other professions from different dimensions, not just the clinical one.

In the learning category, they indicated that this type of experience encourages motivation and the development skills to learn autonomously and in a self-regulating manner. Therefore, just as the tutors, they proposed that the model be replicated in the first two years of study of each discipline and in advanced semesters. Another great advantage that they highlighted was being able to join around 250 students, from different streams of studies, something that cannot be done in person because there is no room that supports such a large number of people.

Having made it possible to design improvement plans to overcome deficiencies, the disadvantages are related to there being communication only in a synchronous way and the lack of clear concepts regarding entering the virtual classroom, what to do, how to do, and for how long to do.

“Students tend to get lost, and that is why it is necessary to be very insistent. We, for example, had not realized that, and when we recognized that the times were not clear for them, we thought about using some resources, such as a weather map (graphic) that tells them, ‘you have already done this task, you are missing this one,’ ‘you have already done this, you are missing this other one,’” affirm the researchers.