Academic leveling: response of an intelligent organization that reads the context of an educational crisis

María José Quesada Chaves [0000-0002-2901-2297]

¹ Universidad de Costa Rica, Sede del Pacífico Arnoldo Ferreto Segura

Summary. The health emergency experienced worldwide due to COVID-19 during the years 2020 and 2021 has had a major impact on the educational field. The case of Costa Rica has not been the exception, where this eventuality, together with other factors such as the union strike in 2018 and the disasters caused by atmospheric phenomena such as hurricanes Otto and Nate, have caused a general lag in education. . Based on this set of factors, this article proposes a series of workshops to address the lag experienced by the high school graduate student population in Costa Rica. These workshops seek to improve logical-mathematical, research, language skills, and soft skills in first-year students at the Pacific Campus of the University of Costa Rica. These initiatives promote the awareness and participation of the teaching staff by applying effective techniques and methodologies for teaching in the university educational system, according to the characteristics and profile of the new generations of students who are received at the University of Costa Rica.

Key words: Dropping out of Studies, Educational System, Training Workshops, Methodologies, Higher Education.

1   Introduction

The University of Costa Rica, in its more than 80 years of experience, has received students of different profiles and contexts. In this sense, the population that currently enters this institution has particular features as a result of the situations experienced in recent years.

The State of Education report (2021) alludes to the fact that, in Costa Rica, an educational crisis is being experienced as a result of three factors: the exacerbation of the accumulated lags in the years prior to the COVID-19 pandemic –understood as the strikes carried out in 2018 and 2019, and the natural disasters of hurricanes Otto (2016) and Nate (2017)–; the rapid and widespread educational setbacks derived from the management of the health crisis; the low institutional capacities to mitigate the effects of the closure of educational centers. This set of critical situations has been called "educational blackout", since it led to primary and secondary students not reaching the basic skills and knowledge required by the Costa Rican curriculum.

The University of Costa Rica must be prepared and have a plan to reflect, propose and execute actions aimed at correcting said problem. For this reason, at the Pacific Headquarters level, the Pre-UCR Project was proposed as a measure to promote the

leveling of first-year students and mitigate university desertion. What this initiative consists of and how it has operated is explained below.

2   Theoretical Framework

As Martínez (2021) mentions, "education needs profound reforms and significant investment to build a fairer, more equitable and quality education system" (p. 2). The emergency that took place in 2020 and 2021 as a consequence of the pandemic it had a significant effect, since it highlighted the existing inequalities in the Costa Rican educational system.

In the words of Maggio (2021), from the field of education, it is necessary to implement a pedagogical proposal capable of articulating the voices and demands of the actors involved: "The curriculum, as a cultural, political and social project, will have to open up to those voices and assume them in a structural way in contents, methodologies, perspectives and didactic practices" (Maggio, 2021, p. 212).

Through the Pre-UCR Project, the Pacific Headquarters seeks to have an "introductory apprehension of a range of fundamentals that encourage the student population to apply/obtain logical-mathematical, investigative, technological and language skills useful in the development of skills" (Hernández Sánchez, 2023, p. 172). In this way, when using a program of this nature, there is an effective tool to prevent lag and guarantee student retention. Therefore, the creation of the project becomes a measure to correct these new educational needs indicated by Maggio (2021) and Martínez (2021).

3   Method

The Pre-UCR Project consists of generating both workshops for students and training programs for teachers; all to overcome deficiencies in areas such as mathematics, reading comprehension and other necessary skills for university.

To achieve this, it began with work tables at the level of each of the areas that make up the Headquarters careers. From these sessions, summaries of the analysis carried out were shared, in order to be clear about the situation that was being faced and to assess proposals for improvement.

Next, diagnostic tests aimed at first-year students were implemented to assess their knowledge, as well as a questionnaire to collect their sociodemographic information.

Through focus groups, a comparative matrix was created between traditional practices (applied before the pandemic) and new educational trends (supported by mainly technological resources). Additionally, in collaboration with the teachers, didactic materials and strategies that demonstrated effectiveness during the crisis were compiled.

Thus, we proceeded to the development of leveling workshops whose purpose is for the student body to become familiar with what they have to face in the university and to acquire knowledge in which deficiency has been demonstrated at the secondary level.

4   Discussion

The Pre-UCR Project has been executed for two consecutive years: February 2022 and February 2023.

In a feedback phase after its development, online questionnaires addressed to the faculty and students were applied to assess the initiative. It was obtained that the project must be repeated, nurtured and expanded, since it facilitates the adaptation to university life.

In addition, it was identified as a weakness that the workshops were optional, because they do not guarantee a reach of the entire first-year student body. Likewise, the virtual modality in which they were taught supposes a disadvantage due to the access to the Internet and electronic devices of said population.

5   Conclussions

It must be taken into account that addressing the lag registered in the Costa Rican student population should not be solely the responsibility of secondary education institutions, but that the public university, in its capacity as a social and state actor, must respond with intelligent actions to said problem. .

Likewise, guaranteeing the right to education should not focus solely on the issue of access, but should extend to making it possible for students to remain in the classroom. Therefore, spaces such as the one generated thanks to the Pre-UCR Project become innovative strategies to address the current educational crisis.

6   Limitations and further research

Within the limitations, it is found that a leveling program of two months is not able to fully teach content not covered during high school. In addition, despite the fact that technological resources have proven to be fundamental in the new educational trends, the Costa Rican population still has deficiencies in this matter, so that the virtual modality of the workshops means that 100% of the first income is not reached. .

A possible future investigation is to generate similar workshops in a mixed modality between virtuality and face-to-face, so that its scope is expanded. Likewise, the problem of educational lag and blackout must be followed up throughout the student body's careers and not only at the time of their admission, which will further ensure their permanence and graduation.

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