Sinergias Educativas

Article

Remote emergency education two professional schools, two different experiences

Educación remota de emergencia dos escuelas profesionales, dos experiencias diferenciadas

Antolina León Hichpas*
Julio Castillo Amado*
Luis Miguel Arias Martinez*
Filomeno Zubieta Núñez*
Norman Sifuentes Martínez*

Abstract

The present research work is inscribed in a context of sanitary crisis, product of the Coronavirus pandemic, which keeps the world in constant anxiety aggravated with the beginning of a Second Wave. We are talking about a plague that has sown death and economic disaster throughout the world, causing fear, uncertainty and impatience. This has forced a radical change in people's way of life, and in the interruption of activities such as education, disrupting the normal development of education, both school and university. Since March 2020 (date of the beginning of the Pandemic), the government has been forced to implement remote education as a way

* Sociologist, Academic Professional School of Social Sciences and Tourism. Lima, Peru lleon@unjfsc.edu.pe https://orcid.org/0000-0001-9670-7796

* Sociologist, Faculty of Social Sciences UNJFSC. Lima, Peru, jcastillo@unjfsc.edu.pe, https://orcid.org/0000-0001-6925-9633

* Sociologist, Faculty of Social Sciences UNJFSC. Lima, Peru, larias@unjfsc.edu.pe. https://orcid.org/0000-0002-5856-5974

* Professor, Academic-Professional School of Social Sciences and Tourism. Lima, Peru, fzubieta@unjfsc.edu.pe. https://orcid.org/0000-0003-3766-1032

* Sociologist, graduate of the School of Sociology, Faculty of Social Sciences UNJFSC. normansifuentes@gmail.com https://orcid.org/0000-0002-1157-8647

Sinergias educativas
October - December Vol. 6 - 4 - 2021
http://sinergiaseducativas.mx/index.php/revista/
eISSN: 2661-6661
revistasinergia@soyuo.mx
Page 46-58
Received: March 09, 2021
Approved: June 05, 2021

to give continuity to teaching at all educational levels using technology to ensure remote learning. In this sense, the use of devices, connectivity and the availability of alternative spaces of instruction to give continuity to studies and the implementation of technological resources have become necessary mechanisms to be implemented in the present stage.
Keywords: Remote education, digital training

Resumen

El presente trabajo de investigación se inscribe en un contexto de crisis sanitaria, producto de la pandemia del Coronavirus, que mantiene al mundo en constante zozobra agudizada con el inicio de una Segunda Ola. Estamos hablando de una plaga que ha sembrado la muerte y el desastre económico en todo el mundo, provocando el miedo, la incertidumbre y la impaciencia. Esto ha obligado a un cambio radical en el modo de vida de las personas, y en la interrupción de actividades que como la educativa, trastocan el normal desarrollo de la enseñanza, tanto escolar, como superior universitario. Desde marzo del 2020 (fecha del inicio de la Pandemia), el gobierno se ha visto obligado a implementar la educación remota, como una forma de darle continuidad a la enseñanza, en todos los niveles educativos valiéndonos de la tecnología para garantizar un aprendizaje remoto. En tal sentido, la utilización de dispositivos, conectividad y la disponibilidad de espacios alternativos de instrucción para dar continuidad a los estudios y la implementación de los recursos tecnológicos se han convertido en mecanismos necesarios a implementar en la presente etapa.
Palabras clave: Educación remota, capacitación digital

Introduction

The opinions of the students of the Professional School of Secondary Education in the area of Social Sciences and Tourism on the instrumental endowment provided by the institution, the preparation of teachers and the students' own endowment in the face of emergency remote education. (Mollis, 2014, p.40) Their knowledge about the meaning of the virtual, synchronous-asynchronous teaching-learning modality, the use of technological means and that of continuing with virtual classes with this new process, allows a diagnosis on non-face-to-face (virtual) classes. In the work of Belvís et al. (2021) states that it is also important to consider the academic-technological institutional, the adaptation of teachers and the response capabilities of students because the students and teachers of the Universidad Nacional José Faustino Sánchez Carrión, the

university authorities and those interested in planning and practicing on the virtual teaching modality require basic informative material that provides an overview of the reality of our students.

It is worth mentioning the initiative of the INDES group of the IDB, which is based on Santana et al. (2010) and has developed throughout this time, short and intensive courses in order to familiarize teachers in this educational modality, from: short courses, webinars, seminars, awareness workshops, weekly meetings of wide dissemination and acceptance and in which the axis was placed in the idea of concentrating all efforts on the student and his needs, in the evolution of the role of the teacher towards a new way of being in teaching, that of the facilitator and an important element that was the planning of the didactic sequence.

In parallel, the VRAC-UNJFSC, developed an intensive training strategy with teachers according to Barros-Bastidas & Gebera (2020) and Rodríguez et al. (2021) who according to their work try to reach the maximum number of teachers in their attempt to catch up in the use of tools for remote education (MOODLE) but without reaching to identify precisely the constituent elements of this nature which are in principle, those proposed by INDES and on which it is necessary to insist, in view of the coincidence with other educational proposals in the sense that it was necessary to insist, in planning, organization of the sequence, arrangement of materials, this means that for Pavón & Ferruz student-centered teaching and active participation in the teaching process so that the student is gaining in autonomy and abilities to self-organize their own learning process. (2018, p. 53).

In this sense, the governing institutions of the branch, the Ministry of Education, issued a series of legal instruments that have allowed to face in the best possible way the educational process in an emergency situation that went through the forced closure of educational institutions and the articulation of proposals for the development of educational activities in remote modalities. (Barba, 2015, p. 60).

A first approach to a framework of useful references to try to understand and identify the elements present in the new context, is provided by: Cabrales, et al. (2020) due to the health crisis, caused by the emergence of COVID-19, studies on virtual meetings, editing documents online, teleworking, the use of tutorials, among other functions of virtual tools and ideas to develop solutions in the work

and studies that were face to face, to ensure continuity to educational services, state and non-state.

One of the hardest hit by the health emergency is the education sector, which has been forced to close its classrooms, both in basic and higher education, followed by the subsequent #quedateencasa; generating levels of stress on teachers, parents and students. All this has created a new concept in education: "Emergency remote teaching".

For their part, professors Cabañas, et al. (2003). state that the virtual classroom is a distance learning methodology that recreates the motivational elements of face-to-face training, through: The use of groups that begin and end a course together.

The virtual classroom can be synchronous when there is simultaneity or asynchronous when the interactivity between sender and receiver does not need to occur simultaneously. They also describe synchronous and asynchronous resources. Among the interactive resources available on the Internet, a classification can be made between synchronous and asynchronous services.

Mejía et al. (2019) raise some relevant questions regarding the scope and limits of the current intervention.

For Vasquez-Sullca, (2020) it will be impossible for every faculty member to suddenly become an expert in online teaching and learning in the current context, where deadlines vary from a single day to a few weeks so they anticipated the dimensional effort to be faced by all stakeholders in the higher education system in this context, namely: students, teachers and the institutions themselves.

While there are resources that faculty can turn to for assistance, the speed of change currently required on many campuses will emphasize the pressure on the systems that provide those resources and will likely overwhelm their capabilities.

According to the Inter-American Development Bank, as a consequence of forced digitization, most universities have had to digitize curricular content in an accelerated and precarious manner, constraining planning capacity and hindering effective communication channels. The digital divide and limited access to technologies is the psychological effect of confinement impacts students' ability to learn. The emerging family problems that have not been lacking and have to do with delocalization, the search for connectivity for children with displacement to cities to enable access (Viniegra, 2016, 269).

It is necessary to consider that the situation we have experienced has been extremely complex, but we must nevertheless appreciate how, despite the limitations, evidenced on a multidimensional scale that has to do with the allocation, access, the consistency of the proposals, with high economic, experiential and emotional costs, in view of the results, we could consider that we are coming out of a new experience that has been presented as a challenge to which we have been able to respond.

For Cabañas and Ojeda (2003), synchronous services are those in which the sender and receiver of the message in the communication process operate in the same time frame, i.e., in order to transmit the message it is necessary that the two people are present at the same time. These synchronous resources become truly necessary as a socializing agent, essential so that the student who studies in the distance mode does not feel isolated. Collazo et al. (2020) state that a consequence of this is that the intellectual production of the teacher, consisting in the generation of a training proposal for the corresponding course, is at this moment completely hosted in the cloud and consequently, his work seems somehow alienated.

Asynchronous services are the most valuable resources for use in the distance education modality, since access to information in a deferred manner in time is absolutely necessary due to the special characteristics of the students who study in this modality.

In response to the requirements, the authorities developed a student survey on Internet access and Virtual Learning, which is available through the intranet, prior to the 2020-I enrollment. "It will allow a diagnosis to determine whether to adopt non-face-to-face (virtual) classes before COVID-19, the result of that survey so far is unknown, since it was conducive to start the next academic semester.

The virtual relationship between teacher and student is a new form of educational interaction, technologically mediated. In the Virtual Teaching model, the student becomes the main protagonist and the teacher transforms his functions to provide guidance and orientation of the appropriate learning method. The student is the one who 'sets' his own pace of work, acquiring the knowledge exposed in the contents, doing the self-evaluation exercises and ideally, acquiring self-organization and self-learning skills.

Of the 181 students of Social Sciences and Tourism, 63 (34%9) considered that the virtual teaching-learning modality is a good

system, while 120 students (66%) considered that this modality is not good.

Virtual teaching-learning has meant a radical change and has permeated all areas and all educational levels; by means of ICTs (Information and Communication Technologies), most university institutions currently offer their students a large number of on-line courses, mainly undergraduate and graduate courses as a result of the declaration of the National Emergency of a Covid-19 pandemic. We had to adapt to a new modality and face the challenge of virtual teaching, compared to the traditional or face-to-face teaching model. At the beginning of the academic cycle (2020-I), the geography of the country has been one of the factors for connectivity coverage, because students in rural areas do not access the platform because the Internet that exists in their area are from other companies and not the one distributed by the university institution. Despite the difficulties, students acquire autonomy and responsibility in the learning achievements that will be the results of other studies to see the degree of evaluation achieved.

The institution provided students with their institutional e-mail to communicate with other departments: By means of this communiqué, we remind all senior management authorities, faculty authorities, officials, directors, heads of offices, heads of units, heads of areas and others responsible for the departments, that our institution approved the use of the e-mail service at the Universidad Nacional José Faustino Sánchez Carrión, through Rector's Resolution N°002-2020-UNJFSC of January 2, 2020, which is currently in force.

Materials and methods

The research is quantitative, non-experimental, exploratory, descriptive and explanatory. It intends to report the results obtained from a self-administered questionnaire online with the technology provided by Encuesta Fácil. For the case of the School of Education, the different questions were posed in a small questionnaire that was circulated among students and had a great reception, 181 students were reached who responded. In the case of the School of Sociology, this set of descriptive questions were incorporated into a broader questionnaire and integrated into a larger sequence that addressed issues with greater granularity and depth with open questions and

appealing to the Likert Scale; 85 students answered the questionnaire and as a sample, it is representative for the two cases under observation to account for trends within the group under study.

Results

The initial data seem to indicate that there was greater enthusiasm for participating in the questionnaire among the students of the Faculty of Education (Social Sciences and Tourism), 181 against 85 for the Faculty of Social Sciences (Sociology). However, the data seem to indicate some punctual questions that mark notable differences in reference to certain questions while, in others, the levels reached in certain items turn out to be equal or very similar.

In reference to structural issues that have to do with access and provision, in both groups and as we can appreciate in the summary table of results, high affectations are evidenced referring to the difficulties for access, 83% of educators have suffered these problems compared to 77% of sociology students with identical problems.

Table 1. *Summary of results in percentages of the application of the questionnaire in Social Sciences and Tourism and Sociology and referring to the items considered.*

			Education	**Sociology**	**Education**	**Sociology**
			Yes	Yes	No	No
1-2	1	Virtual classroom training with opportunity	59%	80%	41%	20%
	2	Synchronous and asynchronous virtual classroom knowledge	57%	93%	43%	7%

2-5	5	Effectiveness of e-learning	22%	49%	78%	46%
4-5	4	Interruption of connectivity and with virtual classroom	83%	77%	17%	23%
5-8	8	Collaboration between students and with teacher	41%	67%	59%	26%
	6	Research capacity and autonomous learning	61%	62%	39%	34%
6-9	9	Expectations for the new cycle	38%	76%	62%	21%

On this same level of structural elements, the expectation of the possibility of a new cycle in this same modality (question 9) is markedly different. While only 38% of the students in the Faculty of Education positively assume this possibility, the percentage reached among Sociology students is precisely double. 76%. It is evident that some elements may be involved in the generation of such a disparate response in one case or the other.

Likewise, and for the question referring to "Research capacity and autonomous learning" (question 6), the data obtained are again identical, 62% for Education and 61% for Sociology. From our point of view, this data shows that, in both groups, the fact of being able to study under this modality, assimilating the dominant modes and strategies in this educational model, has been assumed as a viable alternative. The figures, however, show a serious problem, which we point out because we consider that up to a third of the students have serious problems of accessibility and to be able to continue their studies in the remote modality, an important issue that we will address in future studies.

We point to the 3/3 hypothesis as an element with the capacity to account for the situation generated and experienced, but this should

be left for future studies in which we approach the problem with a perspective of greater explanatory capacity and incorporating some econometric questions. The idea that emerges is that according to initial information, one third of the students would go through the experience very profitably, the second third would overcome the situation with certain problems but also positively and a third group for whom the situation could have had dramatic conditions of multidimensional origin and with serious effects on the health and tranquility of our students in the face of the reiteration of known problems, connectivity, endowment, or the fact of being an active part in the support of their families.

In this case, in order to concentrate our efforts on making a comparison between these departments of the Universidad Nacional José Faustino Sánchez Carrión, we will focus our attention on the following issues.

Education students are aware of the meaning of the difference between the concepts of synchronous and asynchronous virtual classrooms out of a total of 181, representing 57%; while 78 students, 43%, do not know what synchronous and asynchronous classrooms mean. The contrast with the data obtained in Sociology is significant, given that 80% of the members of this group claim to know the difference, while the percentage of students who do not know the difference is only 20%.

One possible explanation for this data may come from the size of the department. The Faculty of Education has twice as many students as the Faculty of Social Sciences. Apparently, within a smaller community, the communication channels work more efficiently.

A fact that would contribute in this sense and the following, since the first day, we have been able to count on the e-mail lists of all our students. The communication has been more agile and consequently, the calls to the trainings have been received by the interested parties in a personal and direct way.

The call for training has been solved with a call for training disseminated on the institutional web page and nothing more, the natural circulation of information relying on the networks. This considering that the students may have had an internet connection or, on the contrary, the possibility of being in a remote area or simply were working.

This table shows that the group of sociology students 80% (77%+3%) have received training and 20% (16%+4%) have not

received training on virtual classes; likewise, of the group of education students 59% (45%+14%) have received training and 41% (12%+29%) have not received training on virtual classes. The difference is remarkable. 20 percentage points, may define important future differences in the face of a completely disruptive situation for which we were not sufficiently prepared.

Differences in this level, increase differences in the following levels that reach 32% of measurement in reference to the knowledge of the conceptual pair: synchronous/asynchronous.

When comparing both groups (education and sociology) crossing both variables (training and knowledge), it is observed that 77% of the sociology group that has received training has knowledge of synchronous and asynchronous virtual classes, being superior to the education group that has received training where 45% has knowledge of synchronous and asynchronous virtual classes.

It follows that more training allows to have more knowledge of virtual classes and as a consequence, to move with some margins of self-confidence, and that's just to start with. Also, consider that the questionnaire will be turned in November 2020, in the first fortnight in the case of Education and from the second fortnight of November in Sociology.

It can be seen that the group of sociology students 54% (42% + 12%) indicate that there is effectiveness in virtual teaching and 46% (25%+21%) indicate that there is no effectiveness in virtual teaching; likewise, of the group of education students 22% (15%+7%) indicate that there is effectiveness in virtual teaching and 78% (26%+52%) indicate that there is no effectiveness in virtual teaching.

When comparing both groups (education and sociology) by crossing both variables (effectiveness in teaching and collaboration), it is observed that of the sociology group that indicates that there is effectiveness in virtual teaching 42% indicate that there is collaboration between students and teacher, on the contrary in the education group that indicates that there is no effectiveness in virtual teaching a higher percentage (52% versus 26%) indicates that there is no collaboration between students and teacher seems to find for the case of sociology students, better channels of generation and production.

Although the data are not as encouraging as we might have expected, the distances between the two units seem to be indicative of some

issues that need to be considered and probably explored further in future work.

The question of the size of the unit concerned seems to be equally significant. It is very likely that the smaller the unit, the better the possibilities for collaboration, exchange and interaction. Greater integration in small groups than in large academic units.

Discussion

The 3/3 approach is, from our point of view, absolutely plausible. 1/3 of the students meet the conditions to comfortably carry out an immersive experience in remote emergency education, they have the necessary resources and implements to do so. The second group is divided between those who can do it with certain comfort and solvency, and in the second half of the group, the problems that have to do with feeling certainly less comfortable in this modality begin. This evidently refers to the group of Sociology students, since the situation among the Education students has elements and indicators of greater maladjustment and lack of adaptation to the ERE.

The third group faces routine, recurrent problems in coping with this contingency. In this situation, it becomes evident that a more focused management of the aid received from the government is necessary.

In spite of the students' capacity to adapt, which is evident in their adaptation to the new modality, there is a marked preference for a return to the face-to-face modality.

Alternative proposals, referring to the testing of new modalities, are in the environment. Hybrid models are proposed as an alternative with face-to-face and remote classes.

It also seems necessary to propose alternatives at the level of teacher-student interaction. It has also become evident that one issue is the discourse on the cultivation of empathy and quite another, the exercise of pressure on teachers to develop control, supervision, evaluation and reporting activities in a model that reproduces, in our case, the strategy followed by the Ministry in the control of the academic activity of teachers in school education. This has generated surprise and resistance on the part of teachers.

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