

Good practices of the teacher in Virtual Learning Environments design

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Problem statement

Several scholars in pedagogical field around the world have established various models or sets of actions that characterize good practices of a teacher in Virtual Learning Environments (VLE) based on a given context. However, this specific collection acts responds to a particular space and time. Therefore, it is not advisable to provide a same set of actions as a generality of success in Virtual Learning Environments due to varied situations faced by both, teacher and learner.

Of course, educational institutions around the world are not lagging behind increasingly Virtual Learning Environments emerging concept. A clear example of this is Cali, Valle del Cauca, in 2020, when Icesi University initiated a virtual education system at a graduate level. This University's wing called Icesi Virtual, among many of its functions, sought teachers' intervention in their virtual courses design that were within University's growth plans. Thus, an Icesi Virtual area focused its efforts on accompanying teachers during their Virtual Learning Environment design process in accordance with University's educational model described in Proyecto Educativo Institucional guidelines (PEI). However, as a consequence of recent creation of this University's wing and virtual education resistance due to lack of knowledge of teaching methods and techniques based on this modality, Icesi Virtual had not yet achieved greater prominence.

As it said before, this team accompany teachers during their subject planning process. To clarify, curricular design process of different virtual courses is an essential and indispensable step before implementation of these with learners. Before that, they must be reviewed by responsible entities, which it assesses virtual graduate programs relevance according to virtual education guidelines in higher education. To carry out this process, teachers are guided by a 'curricular designer', whose profile corresponds to a professional or practitioner in educational area and who is responsible for accompanying teachers during their subject planning process.

In March 2020, one of the most shocking events of 21st century took place. Well, virus called COVID-19 was born in Wuhan, China. With it came a worldwide pandemic because disease was so contagious and dangerous that millions of people died; even today, numbers continue to be alarming as a result of strains and variants that have emerged in certain places in last year.

As a consequence of previous worrying global situation, all-kinds changes and adaptations were unleashed and continue to this day, including in educational field. Education was no longer face-

to-face but at a distance, and Colombia was no exception. Millions of all-ages learners and teachers suffered as a consequence of this. It is true there were distance and virtual education models conceived before everything happened; however, they were not very well known or aroused some resistance between teachers and students. Likewise, these models were little practiced and studied due to preponderance of face-to-face education. Thus, each educational center began a semi-structured adaptation process towards distance and virtual education based on different teaching models and techniques. Thus, during this global destabilization, Icesi Virtual grew exponentially as a result of learning environments need different to face-to-face ones. Professionals from various areas took up the challenge of continuing their studies virtually due to preventive isolation conditions.

With above mentioned in mind, from my position as an Icesi Virtual's curricular designer and as an Icesi University's intern in educational field, I have evidenced a need for critical interpretation of teachers process design in charge of graduate courses offered by Icesi University for knowledge production and meaningful and transformative learning in relation to this planning process. This systematization seeks answer the following question: what are those good practices of the teacher in Virtual Learning Environments design of graduate programs' courses offered by Icesi University in 2021-2022?

Justification

Concept of 'Sistematización de experiencias educativas' is a method that has gained popularity in last decade for its critical interpretation of experiences through a lived process reconstruction for producing significant and transformative knowledge and learning (Holliday, 2014). Therefore, this systematization linked to my professional educational experience as a curricular designer becomes a critical study with an eye on human/professional component analysis of good practices of the teacher in Virtual Learning Environments design of graduate programs' courses offered by University Icesi. Thus, this study linked to my professional educational practice is of utmost importance for identifying knowledge and transformative learning in relation to this planning process.

In short, personal reason for this critical look linked to my professional educational practice pursue to contribute to education science, especially, to virtual modality. All this, seeks nothing more than organized, aligned and coherent Virtual Learning Environment based on University's virtual education model. All for quality virtual education promotion and implementation a broad vision of this modality implication in this educational era. Thus, from this University's wing, we envision a future where virtual education gradually equals face-to-face education in all its levels.

Objectives

General objective

To analyze human/professional axis of good practices of the teacher in Virtual Learning Environments design of virtual graduate programs' courses offered by Icesi University in 2021-2022.

Specific objectives

1. To gather human/professional axis information (pedagogical and professional preparation) of good practices of the teacher in Virtual Learning Environments desing of virtual graduate programs' courses offered by Icesi University in 2021-2022.

2. To interpret human/professional axis findings (pedagogical and professional preparation) of good practices of the teacher in Virtual Learning Environments desing of virtual graduate programs' courses offered by Icesi University in 2021-2022.

Methodology

According to Jara (2011) systematization is a critical interpretation of experiences within a given educational practice through reconstruction of these experiences for production of knowledge and significant and transformative learning. It should also be recognized that there are different moments for these systematizations of experiences, and from this, they acquire a different intention. In this sense, according to FONDEP (2014), this study is characterized as a corrective systematization: "la finalidad es detenerse en medio de la experiencia para comprender lo que ha estado sucediendo y mejorar el trabajo con los aprendizajes que surgen de lo vivido" (FONDEP, 2014, p, 12). Well, what this systematization aims with this look is a critical interpretation of Virtual Learning Environments design process of teachers in charge of the virtual graduate programs' courses offered by Icesi Virtual in 2021-2022 to produce knowledge and learning in relation to this planning process. To achieve this goal, the following was done:

In first instance, five steps were considered of Fondo Nacional de Desarrollo de la Educación Peruana (FONDEP) publication, called 'En el corazón de la escuela palpita la innovación. Una propuesta para aprender a sistematizar experiencias de innovación y buenas prácticas educativas'. Specifically, FONDEP (2014) proposes the following moments for Systematization development: "planificar, recoger, documentar, analizar y comunicar" (FONDEP, 2014, p, 40).

In second instance, to obtain the most current systematization conceptualizations and guidelines, a work of a reflective and critical nature, a preliminary search was conducted in two databases, Google Academic, from Google, and Biblioteca Digital, from Icesi University. On the one hand, first research was carried out in Google Academic and in Biblioteca Virtual with 'Sistematización de experiencias educativas' concept and with a filter imposed on both databases from 2015 to 2022. In another opportunity, second research was executed in Biblioteca Virtual with 'Virtual education' and 'Educación virtual' Boolean operator and with a filter imposed from 2018 to 2022. It is worth noting that University's virtual database explorations focused on the following dissemination means of academic and scientific information: Academic Search Complete, Biblioteca Digital of Icesi University, Globethics, Jstor, Taylor & Francis, SpringerLink, Redalyc and Scielo. Finally, for information related to Icesi University's institutional aspects and Icesi Virtual unit public and private institutional documents were used such as: the latest version of University's Proyecto Educativo Institucional, a private presentation

on Icesi Virtual unit and a private document under construction on University's virtual educational model. Below is a table with conceptualizations described above:

Figure 1.

Concept	Source	Filter
Sistematización de experiencias educativas	Google Academic and Biblioteca digital of Icesi University	2015-2022
‘Virtual education’ and ‘educación virtual’	Biblioteca digital of Icesi University	2020-2022
University’s educational model	University’s Proyecto Educativo Institucional	2017
University’s virtual educational model	Private document under construction on University's virtual educational model	Unpublished
Virtual Icesi unit information	Private presentation on Icesi Virtual unit	Unpublished

In third instance, this study has seven primary sources of data collection: two semi-structured interview with two Icesi Virtual directors; a semi-structured interview with a virtual graduate program Director of Derecho y ciencias sociales faculty; a semi-structured interview with an Icesi Virtual Curricular Designer; four semi-structured interviews with teachers in charge of virtual courses belonging to Derecho y ciencias sociales and Escuela de ciencias de la educación faculties; a survey with nine teachers in charge of virtual courses belonging to Derecho y ciencias sociales and Escuela de ciencias de la educación faculties; some public, private and under construction Icesi University’ institutional documents; and a daily format logbook with a daily format from my position as an Icesi Virtual curricular designer. It should be noted that this logbook started in mid-November 2021 until end of January 2022 and has an extension of ten thousand (10,000) words.

To specify, these semi-structured interviews were conducted to some directors and teachers to gather statements about teachers design process. Additionally, daily format logbook was made in order to contribute to teachers’ testimonies during their desing process. A table with the seven primary sources described above is presented below:

Figure 2.

Systematization axis		Source	Technique methodology
Human/professional	Pedagogy	An Icesi Virtual director	Semi-structured interview
		An Icesi Virtual curricular designer analyst	Semi-structured interview
		Four teachers in charge of four virtual courses belonging Derecho y ciencias sociales faculty	Semi-structured interview
		Nine teachers in charge of virtual courses belonging Derecho y ciencias sociales and Escuela de ciencias de la educación faculties	Survey
		An Icesi Virtual Curricular Design intern (own elaboration)	Daily format logbook

		Icesi University' institutional documents	Institutional documents' reading
	Teacher training	An Icesi Virtual director	Semi-structured interview
		A virtual graduate program Director of Derecho y ciencias sociales faculty	Semi-structured interview
		An Icesi Virtual curricular designer analyst	Semi-structured interview
		Four teachers in charge of virtual courses belonging to Derecho y Ciencias Sociales faculty	Semi-structured interview
		Nine teachers in charge of virtual courses offered belonging to Derecho y ciencias sociales and Escuela de ciencias de la educación faculties	Survey
		Icesi Virtual Curricular Design	Daily format logbook

		intern (own elaboration)	
		Icesi University institutional documents	Institutional documents reading

Conceptual framework

For development of this systematization of good practices of the teacher in Virtual Learning Environments design, the following conceptual and normative clarifications are necessary:

Evolution of the virtual education term

First substantial conceptual clarification of this systematization deals with University's virtual educational model. However, it is essential to first provide a brief overview of what has been virtual education evolution term because of importance of this notion in this study. There is a general idea among experts about virtual education considerations. It is understood as a set of pedagogical practices oriented to learning based on Learning Management Systems in search of meaningful and timely learning from any place and at any time, through any smart device. However, Vallejos Salazar & Guevara Vallejos authors (2021) state that this notion has not always been defined in this way. Well, according to academics, before virtual education, distance education was spoken of as a response to compatibility of working and academic days; distance education was implemented in a more rudimentary way than through the virtual education modality. Initially, distance education was delivered through mechanisms such as radio and television. However, with Web 2.0 emergence, this notion took on a different perspective. Thus, virtual education came to be known as a set of actions aimed at construction of instructional modules with no interaction and without timely follow-up by the teacher. This was due to virtual education at that time did not have many virtual participation mechanisms such as forums, streaming tools, collaborative platforms with ubiquitous evaluation and monitoring techniques. Afterwards, and as a consequence of arrival of the COVID-19 virus pandemic, educational entities' migration and adaptation to virtual education was inevitable in order to continue with different levels and disciplines training.

Thus, Vallejos Salazar & Guevara Vallejos (2021) state that ICTs have become a range of virtual tools to expand traditional learning environments scope, and that we will probably see soon that Learning Management System platforms will be allied with so-called Mobile Learning or M-Learning for educational support through smart devices. The following is what the authors have to say about M-Learning idea: “es el próximo eslabón en la cadena evolutiva de la tecnología

educativa que en virtud a la complicidad entre tecnología móvil y aprendizaje electrónico va respondiendo a las demandas de una sociedad cada vez más dinámica que requiere de una educación individualizada, permanente, global y autónoma” (Vallejos Salazar & Guevara Vallejos, 2021, p. 168).

Consideration of virtual education evolution takes center stage in this systematization to prove virtual programs offered by Icesi University make a difference in their teaching didactics compared to other educational organizations with virtual educative offers. Well, with previous bibliographic retrieval provided by experts, it will be possible to evaluate Virtual Learning Environments of the University in comparison with other educational institutions.

Icesi University's virtual education model

Now, before focusing on Icesi University's virtual educational model, it is essential to describe University's educational model as such in all its curricular levels. In this sense, based on latest update of Plan Educativo Institucional of the University (2017), educational model is characterized, at a macro curricular level, by a liberating formation of its students through exercise of their autonomy in any nature. That is to say, institution fosters continuous development of learners' autonomy, both at a personal and social level as well as at a scientific, disciplinary, and professional level. For this purpose, competency-based learning model is used, which is divided into skills (how to know and how to do) and dispositions (how to be). In relation to skills, these are understood as a set of knowledge that give way to abilities. As for dispositions, these are understood as a set of attitudes, values and habits. Thus, both skills and dispositions make up competencies stipulated to achieve liberating formation putting autonomy into practice.

Also, it should be clarified that at meso-curricular level, University's educational model training route is based on following five lines of formation and three transversal programs throughout the curriculum: Línea de formación en Lenguajes, Línea de formación en Ciudadanía, Línea de formación en Artes, Ciencias y Humanidades, Línea de formación en Experticia disciplinar and La Línea de formación para el Trabajo. The cross-cutting programs given through the curriculum are: Programa English Across the Curriculum (EAC), Programa de Ética a través del currículo y El Programa Lectura, Escritura y Oralidad (LEO).

Up to this point, Icesi Virtual unit has no major involvement in macro and meso curricular structure of any program. During macro and meso curricular development of the programs, areas of Dirección y Programación académica have influence, as one of the senior managers of the University have detailed in a semi-structured interview. However, before sending curricular structure of programs for review by responsible national entities and their subsequent approval, it is necessary to submit a finalized percentage of macro curricular of a program, whether face-to-face or virtual. Likewise, according to program modality (face-to-face, virtual or blended) conditions change for program presentation to these national control entities of educational field.

Specifically, for virtual graduate programs' openings, control entities request a finalized percentage of meso and micro curricular design of the program to approve its opening. At this point, it is where Icesi Virtual begins its work with teachers accompaniment during their meso and micro curricular design process. Well, in this case, once Master's program has already established at least teachers in charge of virtual programs' courses design. Thus, Icesi Virtual begins accompanying teachers during virtual course design under pedagogical, didactic and technological guidelines of University's virtual education model.

In relation to the above, it is essential clarity of University's educational model regarding to micro curricular level. Institutional training route at this level is based on Active Learning, defined in University's Proyecto Educativo Institucional as:

La construcción del saber de manera autónoma por parte del estudiante, y que sitúa al docente como una guía que acompaña al estudiante a pensar por sí mismo y a aprender a aprender, a través de una serie de estrategias de enseñanza-aprendizaje. (PEI, 2017, p. 61).

This constructivist learning model is justified under five key components for autonomous and liberating learning students' according to University's Proyecto Educativo Institucional (2017):

- 1) la calidad, excelencia académica y éxito personal y profesional de los estudiantes; 2) la educación liberadora y autonomía del estudiante; 3) el aprendizaje activo como principio filosófico; 4) el triángulo didáctico: competencias y resultados de aprendizaje, actividad formativa docente y actividades de aprendizaje de los estudiantes; 5) la mediación por herramientas semióticas (instrumentos psicológicos) (PEI, 2017, p. 61).

Having clarified University's educational model as such in all its curricular levels. It is of utmost importance to clarify what is understood by University's virtual educational model. In this sense, in first instance, it must be said that in Icesi Virtual courses are no longer focused on the transmission of knowledge through recorded classes, but rather on written learning guides mediated by an Learning Management System in company of didactic and interactive virtual techniques in order to promote active and autonomous role of student. It is also convenient to detail that virtual educational model principles are:

First, calidad, excelencia académica y éxito personal y profesional de los estudiantes; second, Educación liberadora y autonomía del estudiante; third, Aprendizaje activo como principio filosófico; fourth Triángulo didáctico: competencias y resultados de aprendizaje, actividad formativa docente, actividades de aprendizaje de los estudiantes; and fifth, Mediación por herramientas semióticas (instrumentos psicológicos), divided into two phases, one intrapersonal and the other interpersonal.

Of course, it would be convenient to clarify in detail each of these principles that govern University's virtual educational model, as well as its pedagogical, didactic and technological guidelines, however, this document is under construction by Icesi Virtual unit.

With some fixed University's virtual educational model aspects, it is feasible to examine virtual graduate programs micro curricular designs in charge of teachers responsible for these subjects. Thus, it will be assessed Virtual Learning Environments organized, aligned and cohesive with University's virtual model.

Virtual Learning Environments (VLE)

On the other hand, another valuable conception for this systematization has to do with Virtual Learning Environments idea of University's virtual educational model, especially. In first instance, it should be clarified that Virtual Learning Environments are considered as spaces where teaching-learning-evaluation process takes place through instructional learning guides mediated by an Learning Management System, such as Canvas in University's case, with virtual didactic and interactive techniques. In second instance, from Icesi Virtual unit, it is essential to understand role of teachers in relation to Virtual Learning Environments, since teachers have a key role in proper

development of these virtual spaces, which are composed of online activities, multimedia content and social communication through different digital tools according to ULLaudiovisual –La Laguna University (2015). Additionally, according to this lecture of La Laguna University (2015), used as a source in Docencia en ambientes virtuales de aprendizaje Icesi Virtual course for teachers regarding to management of Virtual Learning Environments teaching, among teachers' functions stand out:

1. Crear espacios virtuales donde los estudiantes se comuniquen permanentemente.
2. Diseñar actividades de aprendizaje para los estudiantes.
3. Combinar actividades grupales con actividades individuales.
4. Ofrecer un calendario detallado con las tareas del curso.
5. Incorporar guías y recursos para la realización autónoma de las actividades.
6. Estimular la motivación y participación del alumnado.
7. Incorporar documentos de consulta en distintos formatos.
8. Actualizar periódicamente una tabla de noticias sobre aspectos importantes del curso.
9. Establecer públicamente la tabla evaluativa del curso.
10. Ofrecer retroalimentación continua a los enseñantes; en especial, en los resultados de valoración de los aprendizajes.

As previously mentioned, Icesi Virtual unit, in charge of virtual graduate programs offered by the University, provides a course for selected teachers to design the respective subjects. This course has to do with management of Virtual Learning Environments teaching. Based on the above, some of considerations of Virtual Learning Environments design by teachers will be made.

Frank Coffield and Sheila Edward's model of good teaching practices

Another fundamental notion for realization of this systematization are dimensions to consider for good teaching practice. For this, we will base ourselves on proposal of Frank Coffield and Sheila Edward authors in 2009. In their article 'Rolling out 'good', 'best' and 'excellent' practice.

What next? Perfect practice?' academics explain good practice idea based on a central strategy of British government for educational system radical change based on context need, its democratic culture, and its educational policies. In this order of ideas, nine dimensions described in authors' research expose abandonment of individual responsibilities idea for good practice within educational sector. Thus, it is evident an educational practice need to be under control of reflective professionals, aware of local changes and who have ability to identify and disseminate educational practices complexity. All this with the aim of increasing pressure on performance and innovation in educational sector, which must necessarily be accompanied by policies of continuity for institutions, stability for students, professional autonomy, and adequate funding.

The nine dimensions presented by Coffield and Edward (2009) are:

1. Context, e.g. what localities do teachers and students come from and how should that impinge on my practice?
2. Knowledge, e.g. how is the 'codified' knowledge learned in college to be related to the 'situated' knowledge of the workplace?
3. Curriculum, e.g. what selection of knowledge should be presented to these students?
4. Pedagogy, e.g. do my teaching methods dovetail with the subject I'm teaching?
5. Assessment, e.g. what is the backwash effect of the assessment criteria on my teaching and students' learning?
6. Management, e.g. how do I plan, sequence and evaluate my practice? And what constraints have been imposed on my teaching by government policies as they have been translated into institutional practice by senior management?
7. Students, e.g. what are their needs, capabilities and understandings?
8. Professional training, e.g. what more do I need to know about teaching and learning?
9. Society, e.g. what influence are local labor markets or particular employers having on my students, the college and its courses?

Having clarified Coffield and Edward's model of good teaching practices, it is essential to point out that not all the dimensions proposed by these academics will be used for development of this

systematization. For the use of good teaching practices model in Virtual Learning Environments micro curricular designs analysis of Icesi University' graduate programs, it was decided to dispense with some dimensions because development of this study does not have enough information for macro and meso curricular analysis, nor it is thought of until an implementation phase with learners. Therefore, dimensions of context, curriculum, knowledge, management, evaluation, students and society are considered when assessing good practices of the teacher in Virtual Learning Environments design. While dimensions of pedagogy and professional preparation are those that are considered for the human/professional analysis axis since these are the ones that have the greatest impact on Virtual Learning Environments designs of University' graduate programs courses, in addition, they are better adapted to information scope collected in this systematization.

However, decision to use this good teaching practices model is because of Coffield and Edward (2009) authors intention to increase pressure on performance and innovation in educational sector. Like these scholars, purpose of this systematization is seen as an opportunity for knowledge and transformative learning in the teacher's practices design of Virtual Learning Environments. Moreover, decision to select this specific model is based on the recognition and significance that authors Coffield and Edward give to contextual need aspect. Thus, reconstruction of this educational experience analysis from reflective professionals capable of identifying their context and acting in order to improve their teaching at a micro curricular level such as Virtual Learning Environment design.

Thus, this systematization has a central axis (heart of the experience) and sub-axis (arteries) that feeds the first one, which we call: 'human/professional', which in turn is articulated through 'pedagogy' and 'professional preparation' sub-axis.

Experience heart

Good practices of the teacher in Virtual Learning Environments design of virtual graduate programs' courses offered by Icesi University in 2021-2022.

Human/professional axes

Pedagogical sub-axis

This axis refers to virtual teachers teaching methods in relation to their disciplinary area.

Professional preparation sub-axis

This axis refers to what virtual teachers should know about teaching, learning and evaluation.

Interpretation of good practices of the teacher in Virtual Learning Environments design

The following are interpretations of this educational experience heart of good practices of the teacher in Virtual Learning Environments design based on some director and teachers experiences and from my point of view as an Icesi Virtual curricular designer. It is also valid to clarify that this analysis is based on some good teaching practices model dimensions proposed in 2009 by Frank Coffield and Sheila Edward, in their article 'Rolling out 'good', 'best' and 'excellent' practice. What next? Perfect practice?'

Human/professional sub-axes

Pedagogical sub-axis

For this first dimension (pedagogical) findings, the following data collection methods were taken into account: a semi-structured interview with an Icesi Virtual director; a semi-structured interview with a Icesi Virtual curricular designer; four semi-structured interviews with teachers of Derecho y ciencias sociales and Escuela ciencias de la educación faculties; a survey with nine teachers of Derecho y ciencias sociales and Escuela ciencias de la educación faculties; public, private and under construction Icesi's institucional documents; and a daily format logbook from my position as an Icesi Virtual curricular designer.

Thus, according to the gathered information from semi-structured interviews and survey, teachers in charge of virtual courses designs of Derecho y ciencias sociales and Escuela ciencias de la educación faculties were mostly characterized by using real and significantly complex teaching techniques such as Project Based Learning mediated by learning guides with different own and external technological resources. Some teachers opted for medium complex teaching strategies such as traditional learning guides (readings and evaluative workshops) and problem solving of these same guides. While a few others teachers chose lower complex teaching techniques such as traditional learning guides and forums.

However, according to the logbook findings, few teachers used real and significantly complex teaching techniques such as Project Based Learning mediated by learning guides with different own and external technological resources. While, there is a strong tendency of teachers for medium

complex teaching strategies, where instructional traditional guides took great prominence to carry out problem solving. Well, during daily format logbook writing almost two months from my position as an Icesi Curricular curriculum designer, it was found most of the teachers' learning guides were characterized by having only external or external readings and resources as a basis for certain questions or problems solving. Likewise, it was found that some teachers do use real and significantly complex teaching techniques such as Project Based Learning mediated by learning guides with different own and external technological resources.

From this, several things can be assumed:

In the first instance, there are several teachers in charge of virtual courses desing that employ useful teaching strategies for the Virtual Learning Environments design characterized by learners active protagonism within their learning training. Certainly, through this methodology, learners began their own knowledge construction based on their previous knowledge and teacher's guidance. In second instance, it should be pointed out there is an important number of teachers in charge of virtual courses desing who use teaching strategies based on traditional learning guides (readings and evaluative workshops) and problem solving based on these same guides. In this way, teachers have limited themselves to provide a grade for learners' reproductive narratives from subject learning resources, leaving aside students active participation.

Results have to do with an affectation in learners formation bet through an active learning model as it is described in University's Proyecto Educativo Institucional. Let me remind us this bet is about an autonomous knowledge students' construction, where teachers become into a guide during this students' learning process in how to learn to learn. In this sense, it is essential virtual teachers are clear about the most useful teaching strategies in Virtual Learning Environments desing for learners' active learning promotion within these virtual spaces, where main protagonists are students. These strategies have to do with real and significantly complex teaching techniques, such as Project Based Learning, mediated by learning guides with different own and external technological resources through Canvas Learning Management System.

Also, it should be noted that the results showed that there were several teachers who used real and significantly complex teaching techniques mediated by learning guides with different own and external technological resources. According to virtual education bibliographic reconstruction by Vallejos Salazar & Guevara Vallejos in 2021, it can be said these virtual teachers are using

innovative instructional learning guides with didactics according to course learning objectives, University's Proyecto Educativo Institucional values (such as autonomy), pedagogical and didactic bet that promotes skills of doing, knowledge, but also dispositions or attitudes that reflect a comprehensive and meaningful virtual education. Well, Vallejos and Guevara affirm different educational organizations tendencies during COVID-19 contingency were through learning guides mediated by Learning Management Systems, where M-Learning or Mobile Learning would take next protagonism in this virtual education research without end.

Professional preparation sub-axis

For this second dimension (of preparation) findings, the following information collection methods' were taken into account: two semi-structured interviews with two Icesi Virtual directors; a semi-structured interview with a virtual graduate program director of Derecho y ciencias sociales faculty; a semi-structured interview with an Icesi Virtual curricular designer; four semi-structured interviews with teachers of Derecho y ciencias sociales and Escuela de ciencias de la educación faculties; a survey with nine teachers Derecho y ciencias sociales and Escuela de ciencias de la educación faculties; public, private and under construction Icesi's institutional documents; and a daily format logbook from my position as an Icesi Virtual curricular designer.

Personal skills

Organized

Thus, according to the information gathered from semi-structured interviews and the survey, teachers have determined organization is one of the characteristics virtual teachers should have. This in order to know in detail their subject desing. This is what a teacher says: " Un profesor tiene que tener claro cuál es su materia, qué pidió, cómo está diseñado su curso, fechas, todo".

Additionally, according to the information gathered from daily format logbook, it is very important for virtual teachers to be organized. The logbook states these organized virtual teachers know like as the palm of their hand each one of their materials, the way in which their teachings

will be developed, foresee possible problematic situations towards their learners and design alternatives to them. All this seems like a tailor-made harmony for their students.

Flexibility

On the other hand, according to the information gathered from semi-structured interviews and survey, teachers speak of flexibility as one of the characteristics virtual teachers should have. Thus, those teachers who take on virtual teaching challenge must be aware of the change involved in being a teacher in the classroom and being a teacher in the virtual world. In this sense, teachers must assimilate that their pedagogical strategies will change because their students demand a constant adaptation of their virtual learning activities designs. For example, take a look at what one teacher states about it:

Tiene que ser un profesor inclusivo en la medida en que sus estudiantes pueden traer diferentes problemas. Actualmente, yo veo que ya hay más estudiantes con más disposición. Pero, hay estudiantes que no entienden cómo funciona la plataforma, que no entienden, en el sentido de que son ellos sólitos los que tienen que trabajar. Entonces, el profesor tiene que ayudarlos, a incluirlos.

Learners arrive with different needs, either due to technological tools scarcity, lack of knowledge of how these tool work, lack of knowledge of active and autonomous learners' role, lack of time, and so on. As the previous ones, there are multiple situations in which virtual teachers must change their pedagogical strategies. Take a look at what one teacher utter in regard:

Yo creo que esta persona tiene que ser muy flexible, eh, porque si bien, por ejemplo, en presencial, uno identifica que hay estudiantes que son más visuales, otros que son más auditivos. Pues en virtual, yo siento que eso se pone aún más complejo porque entonces así mismo te toca inventarte un montón de estrategias para que tu clase sea más interesante que un correo, que un WhatsApp, que cualquier cosita que aparezca en la pantalla.

Also, another teacher states:

Tiene que tener, también, una capacidad de empatía porque sus estudiantes son particulares. Generalmente, los estudiantes de educación virtual son trabajadores. Es decir, tienen un trabajo

aparte, tienen familia aparte. Entonces, tienen muy poquito tiempo para trabajar en nuestras materias. Entonces, uno tiene que ser empático en todas esas cosas. No ha pedirles como si fueran estudiantes regulares porque no lo son.

Thus, a teacher argues that:

Lo siguiente que debe tener un profesor que es profesor virtual es que debe aceptar que, así como a él le iba muy bien con su modelo didáctico, es posible que ese modelo didáctico que usaba en la presencialidad no le funcione en la virtualidad y que va a tener que ser capaz de desarrollar un nuevo estilo didáctico. O sea, así como hay estilos de aprendizajes de los estudiantes, también, hay estilos de enseñanza de los profesores. Entonces, el profesor tiene que desarrollar su estilo de enseñanza en la virtualidad. Pero lo tiene que descubrir él.

Likewise, according to the information gathered in daily format logbook, it is true that virtual teachers must be flexible. In this regard, virtual teachers with the best results in Virtual Learning Environments design were undoubtedly those who understood difference between face-to-face and virtual education. They were open to change and to learn virtual didactic and interactive learning techniques in order to always try to provide relevant and innovative education to their students. Virtual teachers should not assume a radical character towards their learners' situations.

Willingness

According to the information gathered from semi-structured interviews and survey, teachers propose that one of the roles of virtual teachers should be willingness. Being a virtual teacher implies a great responsibility. As mentioned above, students demand from their teachers a constant adaptation of their learning activities designs. Take a look at what a teacher maintains:

El docente de Icesi virtual tiene que entender que ahora sus estudiantes van a estar en cualquier momento y en cualquier lugar. O sea, que ya no tengo, eh, esos espacios en los cuales yo segmentaba mi actividad. (...) Entonces, lo primero es que el profesor tiene que entender que él es profesor las veinticuatro horas. Ya no es profesor de 2:00 p.m. a 4:00 p.m. y de 6:00 p.m. a 7:00 p.m. No, él es veinticuatro horas.

In addition, flexibility is related to disposition, in the sense of accepting and preparing oneself for what it implies to be a teacher in the classroom and another in the virtual world. Part of this flexibility is the willingness to accept the changes that this change of mindset implies. This is what some teachers say about it:

Entonces, tienes que estar dispuesto a grabar videos; tienes que estar dispuesto a grabar Podcast, si es así; tienes que estar dispuesto entonces a aprender a usar otras plataformas que te permitan facilitar el aprendizaje.

Also, a teacher states: “Tiene que tener disposición a: responder preguntas, de hecho, escritas, o también por Zoom”.

According to the information gathered in daily format logbook, virtual teachers dispositions towards their students is meaningful in order to identify what their learners need based on their need. If it is not the teacher responsible for making knowledge compatible with distant places and people, who will do it? Let me remind us technology, along with its useful advances in educational field, is nothing more than a means for virtual education development.

Disciplinary Skills

According to the information gathered from the semi-structured interviews, the survey and the logbook with daily format, virtual teachers must be a professional in their disciplines. In this way, it is guaranteed that it is an expert who make real Virtual Environments desing. According to semi-structured interviews and survey with teachers in charge of virtual courses of Derecho y ciencias sociales and Escuela de ciencias de la educación faculties, it is found most of the teachers are professionals in their disciplinary field. While some teachers have education specializations, different from their professional disciplinary training. And very few of the teachers have an bachelors' degree.

Undoubtedly, there is an expertise on the teachers' part in charge of virtual graduate programs' courses of Derecho y ciencias sociales and Escuela de ciencias de la educación faculties. However, it is possible to say that due to the lack of pedagogical preparation, many of these professionals find it difficult to conceive Virtual Learning Environments different from the traditional ones.

Therefore, Icesi University need to continue research in educational field, specifically in virtual modality, in order to delve deeper into the reasons why a significant number of virtual teachers still find it difficult to conceive Virtual Learning Environments designs different from the traditional ones.

Technological skills

According to the information gathered from semi-structured interviews, survey and daily format logbook, it is clear virtual teachers must handle a web 2.0. intermediate knowledge. Virtual tool basic knowledge is not enough to respond to learners needs who are probably digital natives, 2.0 citizens or simply curious Internet users. This is what a teacher states:

Creo que sí o sí tiene que saber manejar bien, o sea, ni siquiera un básico sino por lo menos un intermedio de software. (...) ¿Cómo usar Zoom? ¿Cómo usar Teams? ¿Cómo usar Meet? (...) Sino se vuelve frustrante para él como profe y seguro para los estudiantes también.

In this order of ideas, virtual teachers must possess intermediate technological knowledge that will allow them to adjust theirs Virtual Learning Environment designs as learners' requirements. Moreover, these technological capabilities will allow virtual teachers to cater to learners' particularities with a wider resources' set. If virtual teachers keep abreast of technological advances, especially in educational field, they will be sure to nurture their Virtual Learning Environment with innovative didactic and interactive virtual strategies within technological educational framework.

Up to this point, the information gathered have shown that teachers in charge of the virtual courses of Derecho y ciencias sociales and Escuela de ciencias de la educación faculties determined three types of skills that Icesi University's' virtual teachers should possess: personal, disciplinary and technological. They have determined these skills for the achievement of organized, aligned and coherent Virtual Learning Environments according to University's virtual educational model. In this sense, it can be expressed that teachers consider these capabilities set as those useful in contribution to learners' formation. In other words, this is the skills set that teachers believe benefit student's guidance in their how learn to learn process, it means, during learners'

own knowledge construction as it is described at a micro-curricular level within University's Proyecto Educativo Institucional.

In addition, the roles established by teachers in charge of the virtual programs' courses of Derecho y ciencias sociales and Escuela de ciencias de la educación faculties have a relevant affinity with some of the actions that virtual teachers must possess, according to La Laguna University (2015), used in Docencia en Ambientes Virtuales de Aprendizaje course from Icesi Virtual for teachers training in Virtual Learning Environment design such as: 1) crear espacios virtuales donde los estudiantes se comuniquen permanentemente; 2) combinar actividades grupales con actividades individuales; 3) Incorporar guías y recursos para la realización autónoma de las actividades; 4) ofrecer retroalimentación continua a los enseñantes, en especial, en los resultados de valoración de los aprendizajes, among others exposed in this systematization referential framework. From this, it is valid to point out the findings about good practices of the teacher in Virtual Environments design is in accordance, in an indirect way, with the training that is being given to the same teachers in this wing of the University in charge of virtual education. For this reason and because there is still a long way to go, for example, from virtual learners' side, we should continue with education research in virtual modality within Icesi University. In this way, we will be able to contribute to educational field research in virtual modality with more avant-garde studies regarding virtual education and not only with similar results to other educational researches.

Conclusions

1. Based on the information gathered from semi-structured interviews, survey and daily format logbook, it is feasible to say there is a significant number of virtual teachers who use teaching strategies based on traditional learning guides (readings and evaluative workshops) and problem solving of those same guides. All this affects University's Proyecto Educativo Institucional bet for learners' autonomous knowledge constructions, where teachers become theirs' guide during their how learn to learn process.

2. Based the information gathered from semi-structured interviews, survey and daily format logbook, it is concluded for organized, aligned and cohesive Virtual Learning Environments design, virtual teachers must possess skills in three dimensions: personal, disciplinary and technological. To specify, within the personal skills that virtual teachers must own, the following stand out: organization, flexibility and willingness. Regarding disciplinary skills, virtual teachers must be experts in their areas to ensure that it is a professional who is planning learners' training. In relation to technological skills, virtual teachers must have a significant number of virtual resources to be at the forefront of possible knowledge and resolution needs of their learners. Thus, according to the teachers' findings, this skills set is the one they consider the most suitable for students' orientation in their how learn to learn, during learners' own knowledge construction as it is described at a micro-curricular level within University's Proyecto Educativo Institucional.

3. From my position as a curriculum designer at Icesi Virtual, I have evidenced curricular design significant role during virtual courses design. Well, through daily format logbook, I noticed that curricular design process has a preponderant role according to active learning promise exposed within University's virtual educational model. In other words, curriculum design plays a predetermining role in teacher's best practices contribution of aligned, organized and cohesive Virtual Learning Environment design according with University's virtual educational model.

4. Doing this work was eye-opening. During systematization course, I realized that as in other disciplinary fields, educational field is not perfect and still has concepts to investigate and develop for teaching-learning -evaluation process, especially in virtual modality. In this sense, understanding why virtual teachers do not have success as others in relation to their teaching techniques is also about understanding their context. That is to say, many of virtual teachers who present difficulties in Virtual Learning Environments design respond to a group with weak

pedagogical education and resistance to virtual modality. Therefore, it is transcendental to maintain research in relation to Virtual Learning Environments design in order to produce significant and innovative knowledge and learning in virtual educational field.

Bibliography

- Castaño, A., López García, J. C., Segura Antury, J., Bianchá, H. F., Ávila, C. A., & Sáenz, J. D. (2019). Sistematización de Prácticas educativas: Guía conceptual para educadores. *EduTEKA*, No. 7 – 2019, 7, 1–38. <https://doi.org/10.18046/edukafe.2019.7>
- Coffield, F., & Edward, S. (2012). Acceso remoto a bases de datos - Universidad Icesi, Cali - Colombia. [Icesi.edu.co. https://nebulosa.icesi.edu.co:4306/ehost/pdfviewer/pdfviewer?vid=1&sid=053cb23f-7a4e-480a-a334-bab4db6c824a%40redis](https://nebulosa.icesi.edu.co:4306/ehost/pdfviewer/pdfviewer?vid=1&sid=053cb23f-7a4e-480a-a334-bab4db6c824a%40redis)
- Durán Rodríguez, R., & Estay-Niculcar, C. A. (2016). Las buenas prácticas docentes en la educación virtual universitaria. [Repository.globethics.net. https://doi.org/10.4995/redu.2016.5905](https://doi.org/10.4995/redu.2016.5905)
- Jara Holliday, O. (2011). Alboan: Sistematización: Orientaciones teórico-prácticas para la sistematización de experiencias. [Centroderecursos.alboan.org. http://centroderecursos.alboan.org/sistematizacion/es/registros/6793-orientaciones-teorico-practicas-para-la](http://centroderecursos.alboan.org/sistematizacion/es/registros/6793-orientaciones-teorico-practicas-para-la)
- Jara Holliday, O., & López Bernal, G. (2017). Guía para la sistematización de experiencias educativas transformadoras | InteRed. [Www.intered.org. https://www.intered.org/es/recursos/guia-para-la-sistematizacion-de-experiencias-educativas-transformadoras](https://www.intered.org/es/recursos/guia-para-la-sistematizacion-de-experiencias-educativas-transformadoras)
- FONDEP (2014). En el corazón de la escuela palpita la innovación: una propuesta para aprender a sistematizar experiencias de innovación y buenas prácticas educativas. [Repositorio.minedu.gob.pe. https://repositorio.minedu.gob.pe/handle/20.500.12799/4225](https://repositorio.minedu.gob.pe/handle/20.500.12799/4225)
- Rodríguez, R. D., & Estay-Niculcar, C. A. (2016). Formación en buenas prácticas docentes para la educación virtual. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1), 209–232. <https://www.redalyc.org/jatsRepo/3314/331443195011/index.html>
- Universidad Icesi. (2017). Proyecto Educativo Institucional (PEI). [Calameo.com. https://es.calameo.com/read/000021490b305a81151f7](https://es.calameo.com/read/000021490b305a81151f7)

- Vallejos Salazar, G. A., Guevara Vallejos, C. A., Vallejos Salazar, G. A., & Guevara Vallejos, C. A. (2021). Educación en tiempos de pandemia: una revisión bibliográfica. *Conrado*, 17(80), 166–171. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1990-86442021000300166&lang=pt
- Véliz Salazar, M. I., Gutiérrez Marfileño, V. E., Véliz Salazar, M. I., & Gutiérrez Marfileño, V. E. (2021). Modelos de enseñanza sobre buenas prácticas docentes en las aulas virtuales. *Apertura (Guadalajara, Jal.)*, 13(1), 150–165. <https://doi.org/10.32870/ap.v13n1.1987>

Attachments

Attachment 1

Semi-interview with Icesi Virtual Directors and a virtual graduated program director from Derecho and ciencias sociales and Escuela de ciencias de la educación faculty

1. ¿Cuáles son las estrategias de enseñanza más utilizadas por los docentes de Icesi Virtual?
2. ¿Qué saberes debe poseer el docente de un curso virtual de un programa de posgrado ofrecido por la universidad Icesi?

Attachment 2

Semi-interview with teachers from Derecho y ciencias sociales and Escuela de ciencias de la educación faculties

1. ¿Cuáles son las estrategias de enseñanza más empleadas en el diseño de sus cursos virtuales?
2. ¿Qué conocimientos debe poseer un docente de Ambientes Virtuales de Icesi Virtual?

Attachment 3

Survey with teachers from Derecho and ciencias sociales and Escuela de ciencias de la educación faculties

1. ¿Qué curso virtual de la unidad Icesi Virtual estuvo a su cargo?
2. ¿Cuáles son sus estudios profesionales?
3. Seleccione la cantidad de experiencia en años en Ambientes de Aprendizaje:
 - Menos de dos años
 - Entre dos y cinco años
 - Entre cinco y diez años
 - Más de diez años

4. Seleccione la cantidad de experiencia en años en Ambientes Virtuales de Aprendizaje:

- Menos de dos años
- Entre dos y cinco años
- Entre cinco y diez años
- Más de diez años

5. ¿Desde hace cuánto se desempeña como docente dentro de la unidad de Icesi Virtual?

- Menos de un año
- Entre dos y tres años

6. ¿Cuáles son las estrategias de enseñanza más empleadas en sus cursos virtuales?

- Clase magistral
- Estudio de casos
- Aprendizaje Basado en Problemas
- Aprendizaje Basado en Proyectos
- Trabajo colaborativo
- Resolución de problemas
- Debate
- Seminario
- Otro, especifique su respuesta

Attachment 4

Daily format Logbook

Formato de registro diario				
¿Qué hice hoy?	¿Tiempo utilizado?	¿Para qué lo hice?	¿Quiénes participaron?	Comentarios
1.				

Attachment 5

Informed consent for semi-structure interviews

Consentimiento informado para la participación en la sistematización ‘Good practices of the teacher in Virtual Learning Environments design’

Propósito del estudio

Usted ha sido invitado a participar en la sistematización de ‘Buenas prácticas del docente en Ambientes Virtuales de aprendizaje’.

Esta sistematización es liderada por la estudiante de décimo semestre de Licenciatura en Lenguas Extranjeras, Stefania Grisales Ruiz; a su vez practicante del área de Icesi Virtual de la Universidad Icesi. Este trabajo tiene como objetivo analizar los componentes institucional y humano/profesional de buenas prácticas del enseñante a través del análisis del acompañamiento por parte del diseñador curricular a los diferentes docentes en el proceso de diseño micro curricular de los programas de posgrado virtuales ofrecidos por Icesi - Virtual en el periodo 2021-2022.

Desarrollo del estudio

Si usted decide participar en la sistematización, será invitado a realizar una entrevista que tiene como objetivo obtener información en relación a los componentes institucional y humano/profesional de buenas prácticas del enseñante en Ambientes Virtuales de Aprendizaje.

Confidencialidad

Toda la información que usted aporte en la entrevista individual será utilizada únicamente para los fines anteriormente mencionados. Los resultados de esta sistematización podrán ser presentados en proyectos de grado, pero su identidad permanecerá protegida y su privacidad será preservada. Solamente la investigadora tendrá acceso a la información que usted le proporcione, garantizando que tanto su nombre como sus datos personales no aparecerán en ningún reporte o publicación. Por ello, se han tomado todas las medidas necesarias para mantener en estricta confidencialidad su participación en este estudio.

Participación voluntaria

Su participación en la sistematización es absolutamente voluntaria; puede negarse a participar o retirarse del estudio en cualquier momento. También, puede negarse a contestar alguna pregunta en particular y a tener una copia de este documento. Si tiene preguntas o desea contar con información adicional, puede comunicarse con la investigadora, Stefania Grisales Ruiz, al número 3157771269; o bien, con la tutora de dicha sistematización, Ana María Ayala Román, al número 5552334, ext. 44149.

Con su firma usted acepta que ha decidido participar en este estudio, después de haber leído este documento, que se han respondido satisfactoriamente a sus preguntas, aclarado sus posibles dudas y que su participación es de totalmente voluntaria.

Consentimiento informado

Doy mi consentimiento para que se usen los datos que comunicaré en esta entrevista. Los resultados de esta sistematización son confidenciales.

Cualquier pregunta que me surja durante mi participación en este estudio podrá y deberá ser aclarada por las encargadas del estudio.

Acepto participar en esta investigación y mi nombre y firma son:

Entrevistado:

Stefania Grisales Ruiz

Entrevistadora: Stefania Grisales Ruiz

Usted recibirá una copia del presente consentimiento.