Propuesta de un modelo de evaluación integral para cursos en línea en la institución educativa CENID

Proposal of a Comprehensive Evaluation Model for Online Courses at the CENID Educational Institution

Proposta de um modelo abrangente de avaliação para cursos online na instituição de ensino CENID

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Resumen

El presente trabajo surge de un proyecto macro del Centro de Estudios e Investigaciones para el Desarrollo Docente (Cenid) titulado "Integración de las TIC a la actividad docente universitaria". El objetivo fue presentar una propuesta metodológica para realizar los elementos de diseño, evaluación y seguimiento de un curso en línea a impartirse entre los docentes de la institución en cuestión. Se trata de una investigación exploratoria descriptiva cuya finalidad fue la de contribuir al establecimiento de lineamientos curriculares y pedagógicos para la creación de cursos en línea. Para validar el curso se implementó un curso piloto y al final de este una encuesta. Los resultados obtenidos indican que para los involucrados el curso piloto fue enriquecedor y de provecho para su trayectoria profesional. Como ventajas más importantes están la realización de actividades prácticas, la gran participación en los foros de debate, las actividades elaboradas por cada profesor, la claridad y la calidad de sus presentaciones, así como la calidad del material. Finalmente, aunque el curso fue valorado generalmente de manera positiva, también hubo algunas desventajas: la falta de un curso de inducción en línea donde se planteara cada punto a trabajar, las escasas actividades que promuevan el trabajo colaborativo y en especial los desfases que se

presentaban en algunos módulos, ya que el tiempo otorgado para la realización de cada una de las actividades en ocasiones o era demasiado o era muy recortado para su entrega. Estas observaciones realizadas por los participantes invitan a reflexionar sobre la necesidad de planificar más adecuadamente los elementos pedagógicos.

Palabras clave: educación a distancia, educación en línea, diseño instruccional, gestión de proyectos, seguimiento de proyectos.

Abstract

The present work arises from a macro project of the Centro de Estudios e Investigaciones para el Desarrollo Docente (Cenid) entitled "Integration of ICTs in University Teaching Activity". The objective was to present a methodological proposal to carry out the elements of design, evaluation and monitoring of an online course to be taught among the teachers of the institution in question. This is a descriptive exploratory research whose purpose was to contribute to the establishment of curricular and pedagogical guidelines for the creation of online courses. To validate the course, a pilot course was implemented and at the end of it a survey. The results obtained indicate that for those involved the pilot course was enriching and beneficial for their professional career. The most important advantages are the performance of practical activities, the great participation in the discussion forums, the activities developed by each teacher, the clarity and quality of their presentations, as well as the quality of the material. Finally, although the course was generally positively valued, there were also some disadvantages: the lack of an online induction course where each point to work on was raised, the few activities that promote collaborative work and especially the gaps that presented in some modules, since the time granted for carrying out each of the activities was sometimes either too much or too short for their delivery. These observations made by the participants invite us to reflect on the need to plan the pedagogical elements more adequately.

Keywords: distance education, online education, instructional design, project management, project monitoring.

Resumo

O presente trabalho surge de um macroprojeto do Centro de Estudos e Pesquisas para o Desenvolvimento Docente (Cenid) intitulado "Integração das TICs na atividade docente universitária". O objetivo foi apresentar uma proposta metodológica para realizar os elementos de concepção, avaliação e acompanhamento de um curso online a ser ministrado entre os professores da instituição em questão. Trata-se de uma pesquisa exploratória descritiva cujo objetivo foi contribuir para o estabelecimento de diretrizes curriculares e pedagógicas para a criação de cursos online. Para validar o curso, foi implementado um curso piloto e ao final do mesmo uma pesquisa. Os resultados obtidos indicam que para os envolvidos o curso piloto foi enriquecedor e benéfico para sua carreira profissional. As vantagens mais importantes são a realização de atividades práticas, a grande participação nos fóruns de discussão, as atividades elaboradas por cada professor, a clareza e qualidade de suas apresentações, bem como a qualidade do material. Por fim, embora o curso tenha sido geralmente avaliado positivamente, também houve algumas desvantagens: a falta de um curso de iniciação online onde cada ponto a ser trabalhado foi levantado, as poucas atividades que promovem o trabalho colaborativo e principalmente as discrepâncias que surgiram em alguns módulos, uma vez que o tempo concedido para a realização de cada uma das atividades era às vezes muito ou muito curto para a entrega. Essas observações feitas pelos participantes nos convidam a refletir sobre a necessidade de planejar os elementos pedagógicos de forma mais adequada.

Palavras-chave: educação a distância, educação online, design instrucional, gestão de projetos, monitoramento de projetos.

Introduction

The Spanish Association for Standardization and Certification [Aenor] (2012) points out that a project is a unique set of various processes consisting of coordinated and controlled activities with start and end dates in order to achieve an objective and solve a problem. Along the same lines, Pérez and Gardey (2015) use the project concept to name the set of actions that are executed in coordination with the aim of achieving a goal. For Phillips, McNaught and Kennedy (2012), it is a simple and clear image of what is going to be taught and how it is going to be taught. While González, Esnaola and Martín (2012) relate it to the general

planning of the course, understood as the design through which the educational purposes are expressed. "It does not refer to a mere set of techniques, but must consider the various scenarios, restrictions and possibilities of said plan" (p. 19).

On the other hand, and based on what was said by Barabasz and Wiśniewska (2012), the project of a course taught online becomes a fundamental methodology that establishes the bases of the distance learning process and that helps the general overview of the concept. didactic and clear training objectives to be achieved.

The ideas presented above help structure a proper definition of an online course. It is a planning of training objectives with a series of activities and other necessary elements to be developed in a certain period that, together, have the purpose of reaching and developing the teaching-learning process of a subject taught in non-school modality. All this implies the elaboration of a general online course plan that will seek to solve a problem, with training objectives in a correct and well-organized manner, considering human, material, technological and economic resources.

When carrying out an online course, it is necessary to design a project that constitutes a guide that ensures that all teachers are informed about what the structure of the course will be like. An online learning project is feasible if it has the right design and structure. Orellana, Hudgins and Simonson (2009) mention that, to tell the truth, it is a dream to want to design a perfect course; however, even with everything, it is possible to approach this perfection. For this, following McVay and Roecker (2007), two things are important: guarantee quality in the design stage of the project and maintain it during its development, this is the biggest challenge.

Now, it is necessary to say that there are no exact formulas that lead to the curricular and pedagogical design of the online course. Experts on the subject agree that each design depends on the goals, content, recipients and budget.

Of course, there are some methodological proposals worth taking into account when developing an online course. Here we will take as an example that of the International Institute for Educational Planning [IIEP]-United Nations Educational, Scientific and Cultural Organization [Unesco] (2007) and that of Meza (2012). The first considers the following four points:

1) Select and describe the curricular and pedagogical problems.

2) Design the project plan, which should include objectives and goals to be achieved, resources, actions, evaluation and types of technological products.

3) Investigate the feasibility to achieve the planned project.

4) Timely and relevant information that allows monitoring of the previous stages.

While la Meza (2012) recommends the following:

1) When developing an online course consider all aspects.

2) Be clear about the target population.

3) Consider the person you want to train.

4) Clarify the concept of desired learning.

5) Methodological proposal structure

Finally, in 2014, as part of the results of the Inclusive Virtual Higher Education – Latin America (Esvial) project, a methodology was presented for the design of an accessible virtual curricular project (Amado, Quan and Hernández). This consists of seven stages that go from planning, through implementation, to finally evaluation. As for the planning stage, it consists of the following sub-stages:

1) Identification and description of the requirements, demands, restrictions and objectives of the project.

2) Identification of the framework and context of the project, as well as its planning.

3) Conception and design of the didactic elements of the project.

Methodology

Although the methodologies presented above show differences in terms of stages and denominations, at the same time common elements are observed in each one, namely: project objectives, identify and characterize the recipients and design a pedagogical proposal, elements that can be the basis for the optimal design of an online course.

At this point, it is worth explaining that the objective of this work is to design and implement a course that will be taught to all teachers of the Center for Studies and Research for Teacher Development (Cenid). Undoubtedly, this is a goal that requires the involvement of a multidisciplinary team for each of the methodological stages.

The proposed methodology is based on a constructivist pedagogical model which in turn is based on aspects such as prospective, operational, evaluation and monitoring of the
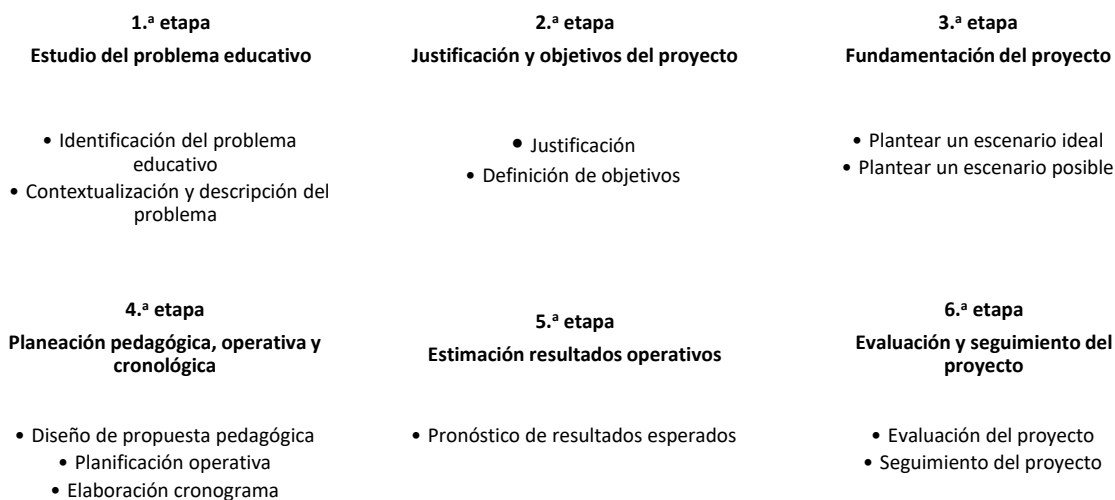
project. Because it is necessary to monitor the development of the plan, a trained team with high human quality and an open mind was required.

Design of an online course project. Methodological proposal

To execute a project of these characteristics, it is necessary to organize and plan a set of activities and tasks encompassed in stages and sub-stages that involve the development of online learning scenarios.

For the purposes of this work, to design an online course based on the proposed methodology, the following stages and sub-stages were followed:

Figura 1. Etapas y subetapas

1.ª etapa	2.ª etapa	3.ª etapa
Estudio del problema educativo	Justificación y objetivos del proyecto	Fundamentación del proyecto
• Identificación del problema educativo • Contextualización y descripción del problema	• Justificación • Definición de objetivos	• Plantear un escenario ideal • Plantear un escenario posible
4.ª etapa	5.ª etapa	6.ª etapa
Planeación pedagógica, operativa y cronológica	Estimación resultados operativos	Evaluación y seguimiento del proyecto
• Diseño de propuesta pedagógica • Planificación operativa • Elaboración cronograma	• Pronóstico de resultados esperados	• Evaluación del proyecto • Seguimiento del proyecto

Fuente: Elaboración propia

The design of the proposed online course project will be divided into six stages and twelve sub-stages.

Tabla 1. Estudio del problema educativo

1.ª stage. Study of the educational problem
a) Identify the educational problem Identification of the educational problem to be solved with the support of educational non-conventionality.
b) Describe the context of the problem Approach to the problem.

Fuente: Elaboración propia

Tabla 2. Justificación y objetivos del proyecto

2.ª stage. Justification and objectives of the project
a) justify the problem The justification must state the need and importance of the project.
b) Define goals Define both general and specific objectives.

Fuente: Elaboración propia

Tabla 3. Fundamentación del proyecto

3. ª stage. Project Rationale
a) Create an ideal scenario Propose a positive scenario of carrying out the project.
b) Create a possible scenario Propose a positive scenario if the project is not carried out.

Fuente: Elaboración propia

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Tabla 4. Planificación pedagógica, operativa y cronológica

4. ª stage. Pedagogical, operational and chronological planning
a) Design the pedagogical proposal You should explain what you want to teach and why; also how to carry out the teaching-learning process.
b) Plan operational aspects It is looking for a way to communicate how the project will work when it is in its implementation stage.
c) Work the schedule It is necessary to develop a schedule (Gulsun and Yuzer, 2013). This should propose, by means of a graph, the time of preparation and implementation of the project.

Fuente: Elaboración propia

Tabla 5. Estimación resultados operativos

5. ª stage. Estimated operating results
The expected results should be based on the individual, group and material possibilities that make up the project.

Fuente: Elaboración propia

Tabla 6. Evaluación continua y seguimiento del proyecto

6. ª stage. Continuous evaluation and monitoring of the project
a) Carry out the continuous evaluation of the project The evaluation of the project will provide the opportunity to continuously obtain information about the progress of the project and allow for improvement with feedback.
b) Follow the project Monitoring is key to perceive what happens with the results proposed at the beginning, during and at the end of the project.

Fuente: Elaboración propia

Results

As mentioned above, and as part of the methodological proposal that consisted of the design and implementation of a pilot online course to be taught among teachers at Cenid, a description of the elements that stood out the most is given below, as well as as part of the results obtained in each of the project stages. The course was taught during the semester August 2020 to January 2021.

Analysis of the educational problem

This first stage consists of identifying and subsequently describing the educational problem. In the first sub-stage it is described what it consists of and in the second, who has it.

Identify the educational problem

Throughout the course, Cenid academics will participate and give their opinion on the proposed topic in the discussion forums. Each academic is obliged to prepare and deliver each requested work, as well as the final product, according to the stipulated dates. In each activity, the academic will receive a score that will have an impact on its qualification. The study evaluation rules are as follows:

- 20 points for practical work.
- 30 points for the final work of the course.
- 40 points in activities linked to the forums.
- 10 additional points for outstanding participation.

Despite these rating ranges, in the satisfaction surveys there are complaints about a lack of knowledge regarding the assignment of scores and grades for each of the activities carried out. As there are no criteria or standards that were clearly detailed at the time of evaluating their activities, they believe that said qualification is insufficient to make a consistent and objective evaluation of the activities they carry out. For this reason, the learning activities they carry out become a problem for teachers who work in virtual modalities and make the academic and evaluation work in particular not very pleasant.

To solve the previous problem, the use of rubrics was agreed with the teachers when applying the evaluation of activities carried out by the academics. Teachers, before starting the course, design the rubrics and add them to the online course; Thus, each teacher knows from the beginning the evaluation criteria for each of the activities.

At Cenid there was knowledge about the use of rubrics in evaluation, however, and to be academically transparent, they were not applied as an evaluation tool. In order for the teacher to know everything about this instrument, an online course was designed and designed in which the types, advantages, and designs of rubrics as a learning tool were reviewed.

Describe the context of the problem

At the end of each module or at the end of the course, Cenid's 19 online teachers are responsible for evaluating each of their peers. All the teachers have a doctorate degree and nine of them have a postdoctoral degree.

Justification and objectives of the project

An important requirement detected by the institution is to have the acceptance of the academics, as well as to present them with the advantages both for their teaching work and for the institution. Next, we present the justification for the project and its objectives.

Project justification

The evaluation of the activity of the university teacher is one of the essential elements for obtaining learning achievements in the subjects taught at Cenid. In this regard, work is being done so that the evaluation of teaching activity is understood as a systematic value within its responsibilities in the teaching-learning process and thus, as a whole, achieve the institutional objectives in which it is involved as an essential element. Under this assumption, the teacher has to develop evaluation skills, as well as the management of tools that allow him to obtain information related to performance so that he can later interpret it, qualify it and use it for training and summative purposes. The use of rubrics is the resource that is considered adequate to support performance evaluation. Since the rubrics have to be developed by the teachers, it is correct to think that they must learn how to design them, guaranteeing that the teacher obtains answers as to what to evaluate, knows the criteria that

will be applied when being evaluated and the meaning of continuity. in the evaluation of each activity applied by teachers in the so-called virtual learning environment.

Define project goals

- Recognize as a whole the activities that the teacher carries out in the institution.
- Contribute to the improvement of teaching staff by providing proven evidence on their activity.
- Contribute to the evaluation of each teaching activity.
- Contribute to and promote the culture of quality by fostering and linking institutional objectives with the teaching activity of the teaching staff.
- Contribute to the decision-making process related to the evaluation.
- Contribute through the design and development of constant improvement processes to the quality of teaching activity.

Project Rationale

One of the primary objectives at Cenid is to improve processes and raise educational quality. Precisely for this, an online course has been developed where work with rubrics is proposed with the idea of evaluating learning. The goal is for teachers to have a clear overview and an adequate explanation of what each activity consists of and what it seeks, as well as the minimum adequate requirements that each of them must have in order to be evaluated. The purpose of this catalog of rubrics is to show the teacher the appropriate way to evaluate the learning activities that they request from their students in the course, always taking into account the following elements:

1) Detailed presentation of what has been done.
2) Clarity on the subject.
3) Design with quality.
4) The elements of each learning activity.
5) The presentation of the learning activity.

It is important to mention that at the institutional level this catalog of rubrics for the evaluation of learning has as its main objective to be a document that provides uniformity of criteria with respect to the activities of evaluation of learning towards students and at the same time serve as a parameter for teacher professionalization.

Pedagogical, operational and chronological planning

Prepare a pedagogical proposal

- Recipients of the course

Cenid online teachers. The challenge and the responsibility is that the teacher understands the importance of the rubric for continuous evaluation and that these same criteria are applied in the courses taken by the rest of the academics of the institution.

- Course objectives

Each teacher will be able to understand and develop rubrics for the evaluation of professional skills, design an evaluation strategy for complex skills and develop a formulation of rubrics.

- Course content
    - Module 1. Rubrics for the evaluation of professional competences.
        - Introduction to the formulation of rubrics.
        - Development of professional skills and learning.
    - Module 2. Learning assessment strategies.
        - Evaluation methods and techniques.
        - Design of an evaluation strategy for complex competences.
    - Module 3. Formulation of rubrics.
        - The general domains of open problem solving and their levels of achievement.
        - Examples of evaluation of the ability to solve open problems.
        - Discussion of specific cases of the participants.
    - Module 4. General feedback.
- Learning activities

The proposal of activities during the course is as follows:

Tabla 7. Planificación del aprendizaje

Objectives	Materials	Activities	Time
Basic concepts linked to the continuous evaluation of the teacher's learning activities.	Unit 1. Introduction to the evaluation of learning activities: 1.1. Evaluation of activities and their components. 1.2. Indicators and procedures for the evaluation of learning activities as a paradigm of student performance. 1.3. Selection of techniques and instruments for evaluating learning activities.	Read unit one. As an activity within the forum, you must enter and give your opinion on the current evaluation system.	Five Hours
Key elements of continuous evaluation.	Unit 2. Evaluation of learning activities: 2.1. The evaluation of learning activities. 2.2. Functions, characteristics and types of evaluation. 23. The activities to evaluate continuously. 2.4. Strategies for evaluating learning activities.	Reading of unit two and of the materials proposed by the advisor. Activity within the forum; advantages and disadvantages of continuous assessment of learning activities	Five Hours
Understand the importance of the use of rubrics for the continuous evaluation of learning activities.	Unit 3. The rubric as an evaluation tool: 3.1. Rubrics: notion and components. 3.2. Types and design of rubrics. 3.3. The evaluation of learning activities through the rubric.	Reading of unit three and of the materials proposed by the advisor. Watch and analyze video and recommended reading.	Five Hours

Design and build appropriate rubrics for the development of learning activities with online modality.	Unit 4. Construction of rubrics: general procedure: 4.1. Selection of the objective of the evaluation. 4.2. Selection of the concepts (areas or dimensions of the activity) to be evaluated. 4.3. Identification of evaluation criteria. 4.4. Establishment of the number of performance levels in the rating scale. 4.5. Formulation of the description of the execution criteria of each level and aspect to be evaluated.	Reading of unit four and of the materials proposed by the advisor. Proposed activities: rubrics will be developed according to the instructions with the intention of evaluating the learning activities.	Five Hours
Know and design the existing tools in online mode to design and build online rubrics.	Unit 5. Online tools to design and build online rubrics: 5.1. What is an online rubric? 5.2. Types of e-rubrics and evidence 5.3. Study of cases. Description of good practices in the use of the online rubric in university teaching. 5.4. Virtual tools to design and create rubrics online.	Reading of unit five and of the materials proposed by the advisor. Consultation and description of the online tools indicated by the online teacher to design and build online rubric.	Five Hours

Fuente: Elaboración propia

Tabla 8. Rúbrica para evaluación de las actividades de aprendizaje

Score per level				
Elements to be evaluated from the rubric	not suitable (five points)	Appropriate (10 points)	Satisfying (17 points)	Very satisfying (25 points)
The rubric	The criteria or concepts need to be revised.	Minimally meets the concepts and criteria requested when specifying the desired evaluation .	Partially meets the appropriate concepts and criteria by specifying the desired assessment .	Meets the appropriate concepts and criteria by specifying the desired assessment .
Quality	The quality scale is not located in the top horizontal row .	The quality scale does not provide any level and does not have any graduation .	The quality scale is located on the top horizontal row with a graduation, but it does not go from best to worst .	The quality scale is located in the upper horizontal row, with a graduation, it goes from the best to the worst .
Concepts	A total review of concepts is required.	Inappropriate concepts and are not named properly; they are not well selected either .	Partially adequate and named concepts; are partially well selected .	Adequate concepts, well named and selected.
Criteria	Graduation of criteria is poor .	The criteria are graduated, but not in an equitable and balanced way .	The criteria are graduated, but not in an equitable and balanced way .	The criteria are graduated in an equitable and balanced manner .
Evaluation descriptors	The descriptors need to be reviewed, there is no good description.	Some of the descriptors are described clearly and concisely; however, few	Some of the descriptors are described clearly and concisely; most give an account of	All the descriptors account for the characteristics of a job, as well as its variations between an

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		realize what the characteristics of a job are, as well as its variations between one and the other.	the characteristics of a job, as well as its variations between one and the other.	excellent job and a bad one, and the intermediate variations between one and the other.
Orthography	Multiple spelling, stress, or verb conjugation errors . (+ 6)	Spelling, accentuation or verb conjugation errors . (+ 4)	Minimal spelling, accentuation or verb conjugation errors. (- 3)	No spelling, accentuation or verb conjugation errors and good writing style. (0)
Delivery and form	Out of time and form .	Out of time, but with form .	On time but not fit .	Delivered in a timely manner.

Fuente: Elaboración propia

Establishment of operational aspects

- Course framework: completely online, 48 hours workload distributed over 6 weeks.
- Communication tools: synchronous, asynchronous (forum, chat, email, among others).
- Delivery of activities: through the activities mailbox of the virtual classroom.
- Tutoring: an online teacher will be assigned to each group.
- Operation of the online environment.

Moodle is the platform used to run the course. During the before, during and after the course, an administrator in charge will be responsible for controlling the contents, updating the available information and maintaining the platform.

The online advisor is the other element that will be participating in the online course. Her function will begin with the design of content, its organization and distribution of content through the management of all the tools that the educational platform has. Once the course has started, it will focus on monitoring, evaluation, feedback and qualification of the course participants.

Prepare schedule

The schedule is presented in table 9.

Tabla 9. Cronograma (año 2020)

Month	7				8				9				10			
Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1) Project Preparation																
Preparation of the online course project																
Approval by the educational institution																
2) project management																
Employment of project participants																
Preparation of project documentation																
3) Promotion of the course and enrollment of participants																
Design of promotional and registration materials																
Promotion of the course (brochures, emails, announcement on the Cenid website)																
Enrollment process for participants																
4) Completion of the course																
Preparation of training materials																
Training of course participants																
Organization of the online classroom of the course																
Preparation of teaching materials																
Publishing the materials in the online classroom																
Carry out the course according to the schedule																
Evaluation and analysis of the completion of the course																
Project Completion																
Analysis of project results																
Project tracking																

Fuente: Elaboración propia

Projection of expected results

Once the 12 months of implementation have elapsed, the 19 Cenid online teachers are expected to:

- Rubrics to evaluate the activities of academics.
- Achieve clear standards and adequate performance models for the teacher.
- A self-assessment based on a reflection on what was learned.
- Feedback on strengths and weaknesses to work on areas for academic improvement.
- Objective and consistent evaluation of activities.

Continuous evaluation and monitoring of the project

To give continuity to our project objective, at this stage it was necessary to make a description of the form of evaluation for the three stages through which the project unfolds: beginning, development and end. These stages also help to know if the objectives set at the beginning of the project were achieved.

Carry out project evaluation

Table 10 shows the project evaluation schedule.

Tabla 10. Cronograma de evaluación del proyecto

Evaluation phase	Period	Data collection	Indicators
When starting the evaluation	30 days prior to the start of the course	Data and documentation of the participants. Project documentation. Design and implementation of the online course.	Each member of the team is trained to carry out their activities. The project has sufficient economic, technological and academic support to carry it out. Both the platform and the course are ready to take the course.
Average evaluation	mid course	A survey is conducted virtually with each participant. The available information is analyzed. Non-participatory observation is carried out within the course.	The teacher uses appropriate teaching strategies to achieve the objectives of the project. The vast majority of participants deliver their activities in a timely manner. The established dates are properly met.
At the end of the evaluation	15 days after the end of the course	A survey is conducted virtually with each participant. The available information and protocols are analyzed. Non-participatory observation is carried out within the course.	The objectives set have been achieved satisfactorily. There is a similarity between results obtained and resources invested. The total of the participants concluded their activities and are capable of the manner and the rubrics adequately.

Fuente: Elaboración propia

Project tracking

With the idea of giving strength and continuity to the project, the idea is to carry out a follow-up through reflection workshops, the application of questionnaires and group interviews with the interested parties and a self-assessment of each stage of the project.

Discussion

At the end of the course, a compilation of the information obtained was carried out in order to identify strengths and weaknesses, as well as to determine if the applied methodology was adequate. To this end, a survey was applied with the 19 participants through the questionnaire that was anchored in the virtual classroom of the course. The response was favorable, since all the participants worked on it and concluded. The questionnaire was applied anonymously and voluntarily, questions were included aimed at knowing aspects of the teacher and of great importance for our objectives (see table 11). At the same time, each participating teacher was asked to indicate difficulties or strengths of the course. The questions are observed in tables 12, 13 and 14.

Tabla 11. Rúbrica de evaluación del curso

Evaluation				
questioning	1 (Needs improvement)	2 (Good)	3 (Very good)	4 (Excelent)
What is your opinion about the content of the course and how important was it for your professional development?	I consider that it was not important for my development.	The course had little impact on my professional development.	The course had a significant impact on my professional development.	The course met all my professional expectations.
What is your opinion about the quality of the teaching material used during the course?	I think it was not appropriate.	Inappropriate and not at all involved with the course.	It was appropriate only that it did not allow integration with learning.	Its excellent quality, varied and interesting.
What is your opinion about the learning activities?	Nothing relevant to the course.	The activities were relevant as a group, but I consider them not very relevant individually.	They did not motivate to get involved in learning, but in general they were important for the course.	Fully relevant to the course, they approached each part of the learning individually and in groups.
What opinion do you have about the argumentative quality of the advisor regarding the activities worked on during the course?	I think it was not focused properly.	The explanations were prompt, but left many doubts.	Yes, there was a response from the advisor, however, I do not consider that the explanation was very clear.	The answers were clear, understandable, explicit. Experience and knowledge was noted.
What is your opinion about the feedback that the advisor gave to the activities?	The feedback was very late, four to five days later.	After each activity sent, the teacher took two to three days to	After the task was completed, the teacher gave an	The teacher's response was appropriate, an approximate between 12 and 24 hours.

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		respond, although he did respond clearly,	answer between 24 and 36 hours later.	
What do you think about the tutoring carried out by the teacher?	There were no tutorials.	The tutor only carried out group tutorials.	There were only tutorials of an academic nature.	There were individual and group tutorials in both academic and personal subjects.

Fuente: Elaboración propia

Tabla 12. Satisfacción con el curso

Evaluation question	%
Does the course content strengthen your professional growth?	
How do you consider the material provided?	
How do you evaluate the course activities?	
How do you evaluate the advisor's way of explaining?	
How do you evaluate the advisor's response time?	
How do you evaluate the tutoring carried out?	
How do you evaluate the design of the course?	

Fuente: Elaboración propia

Tabla 13. Debilidades del curso

Mention the weaknesses of the course	%
Online class attendance	
Little contact with the advisor	
Course development	
Poor performance of online participants	
Lack of group activities	

Fuente: Elaboración propia

Tabla 14. Fortalezas de curso

Mention the strengths of the course	%
Adequate amount of activities	
Punctual and frequent attention of the online advisor	
Lots of forum activity	
The course is divided into academic units	
The advisory teacher showed capacity in the subject	

Fuente: Elaboración propia

Conclusions

The methodological application that was used to design and carry out the online course allowed validation in a real plane and to verify its usefulness and validity for the desired purposes. The survey yielded results that indicate that for each one of those involved the course was enriching, beneficial for their professional career. Among the most important advantages observed are the performance of practical activities, the great participation in the discussion forums, the activities prepared by each teacher, the clarity and quality of their presentations, as well as the quality of the material. However, although the course offered was evaluated positively in general, some of the opinions of the participants can be evaluated as disadvantages: the lack of an online induction course where each point to work on was raised, the few activities that they promote collaborative work and especially the gap that appeared in some modules, since the time granted for carrying out each of the activities was sometimes either too much or very short. These observations made by the participants invite reflection on the need to plan the pedagogical elements more adequately.

Future lines of research

The use of the methodology developed and exposed in this article can go beyond what was initially proposed, and become a tool that provides added value. As a future line of research, it is proposed to carry out a systematic planning process through which not only the needs and resources for the educational process are reflected upon, but also the planning of all the thematic contents, learning activities, evaluations. , feedback processes, methodologies, from the first sessions to the last, all this process has the purpose of helping the teaching-learning process and, consequently, reaching the achievement of the learning objectives.

Another proposed future line of research is the one that arises from asking ourselves what implications the implementation of a training model supported by information and communication technologies (ICT) entails. For this, it is necessary to reflect on the planning of university teaching following a new educational model for a society that regenerates itself over time. In this way, to achieve educational success, the needs of learners must be met within the context in which they find themselves.

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