

Distance teaching practice: toward a framework of reference for its evaluation

Práctica de enseñanza a distancia: hacia un marco de referencia para su evaluación

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Received: 12/06/2018 • Approved: 27/07/2018

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ABSTRACT:

This article presents the beginnings of a work to adapt the Teacher Competency Evaluation Model for contexts of distance teaching in higher education. This article begins by defining the level of relevancy that the MECD has in blended teaching practices. The results show how a pre-established teaching model can be used in other modalities, with the required adaptations always taking into account its appropriateness depending on the context of the application and users' participation.

Keywords: Higher Education Teaching, Online Teaching, ICT in Education, Teaching Assessment.

RESUMEN:

El artículo presenta los inicios de un trabajo de adecuación del Modelo de Evaluación de Competencias Docentes en contextos de docencia no presencial en educación superior. Este artículo comienza por definir el nivel de relevancia que el MECD tiene en las prácticas de enseñanza combinadas. Los resultados dan cuenta de cómo un modelo de docencia preestablecido puede migrar a otras modalidades, con las adecuaciones necesarias, cuidando siempre la pertinencia de acuerdo al contexto de aplicación y la participación de los usuarios.

Palabras clave: Enseñanza de la Enseñanza Superior, Enseñanza en línea, TIC en la educación, Evaluación de la enseñanza.

1. Introduction

When distance education is discussed, it is important to be precise in the definition of this modality and its derivatives, given that, over time and as a result of the development and incorporation of Information and Communication Technologies (ICTs) to support the teaching-learning process, new concepts have emerged, such as online, virtual, and distance education supported by ICTs or e-learning. The latter is one of the most common modalities and is defined, for example, by the Organization for Economic Cooperation and Development

(OCDE) as: “the use of information and communication technologies to improve or support higher education” (2005, 2).

The concept of blended or hybrid education, also known as mixed-mode or b-learning, has also been defined in several ways. For example, the National Council for Science and Technology (*Consejo Nacional de Ciencia y Tecnología*) (CONACyT) presented the following definition: “those that combine on-site education and distance education in such a way that both learning experiences are essential to successfully complete the learning objectives” (2012, p. 13).

In both cases, the essential element is a basic understanding that there is a variable that is always present: a degree of teacher-student interaction mediated by ICTs. Having said that, moving forward in this text, the concept of distance education should be understood as the teaching-learning process that occurs in a delocalized manner—synchronously or asynchronously—and is completely mediated by ICT. While education in the blended modality is defined as the one that “is carried out with the simultaneous presence of teachers and students in institutional spaces (classrooms, labs, clinics, fields, etc.): and distance activities—synchronous or asynchronous—mediated by ICT” (Open and Distance Education Center, 2016, para. 4).

However, in the context of higher education in Latin America, a study conducted by OECD (2015) in the last few years indicates that distance education has had its greatest development in distance program creation initiatives, as an opportunity to democratize education, generate greater flexibility conditions in the teaching-learning practice, and bring quality to the new pedagogical models. In this process, higher education institutions in Mexico have adopted different ways to implement this educational modality, among them, creating virtual universities with an organization that is parallel to its on-site version, and even universities that have emerged exclusively to offer distance-learning programs. However, different educational modalities have emerged, which combine on-site and distance-learning solutions supported by technologies. Thus, blended education appears to be the current trend (Rama, 2014; Best College, 2016).

In any of these cases, delving into these educational models—distance or blended—demands that institutions transform not only their organizational, educational, and technological processes, but also the roles of different actors in the teaching-learning process (teachers-students). A fact is that in this process of change, teachers are one of the main actors, since they bear the responsibility of designing and/or conducting enriching learning experiences (United Nations Educational, Scientific and Cultural Organization, 2013). Therefore, various efforts have been made in the last ten years to characterize teaching competencies within the framework of using technologies in education and diversifying educational modalities. That is the case of the International Society for Technology in Education (ISTE) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) that developed a series of teaching performance and competency standards for the use of technologies in teaching-learning processes, aimed at guiding the efforts of institutions to develop educational initiatives supported by ICT by strengthening the teachers’ profiles.

Teaching performance/competency standards for using ICT:

ISTE

- Facilitate and inspire student learning and creativity.
- Design and develop digital learning experiences and assessments.
- Model digital work and learning.
- Promote and model digital citizenship and responsibility.
- Engage in professional growth and leadership.

UNESCO

- *Basic ICT notions*: Basic knowledge, integrating ICT, basic tools, Standard Classroom, ICT Literacy.
- *Knowledge deepening*: Knowledge application, complex problem solving, complex tools, collaborative groups, manage and guide.
- *Knowledge creation*: 21st century competencies, self-management, widespread technology,

learning organizations, and the teacher as model learner.

However, these standards are generally for technology use but do not emphasize any kind of specificity to differentiate between distance and blended modalities. For that reason, it is important to be able to characterize teaching in these modalities in order to observe those competencies that will be essential for a satisfactory performance.

Nevertheless, in order to identify the teaching competencies that must be developed for a particular modality, it is relevant to analyze the teaching model used. In the specific case of the blended modality, at least four models can be identified: the inverted classroom, the rotated seasons, the flexible model, and the online lab (Bhaskar, 2013; Thompson, 2016). Each of these has characteristics that demand specific competencies from the teacher that designs and carries out those experiences.

Inverted classroom: This approach suggests that comprehension activities that require a lower level of thinking take place outside the classroom, supported by technologies such as video, and that learning activities of higher thinking take place in the classroom with the teachers' participation in feedback and direct counseling.

Rotated: This approach implies that students work in a series of activities or different centers, including whole-group instruction, instruction in small groups, activities among peers, assignments with paper and pencil, and also individual work in a computer or a tablet.

Flexible: Students attend a facility at the educational center and use online instruction as the core tool for the course, having the teacher and the support as needed. The instruction schedules are personalized and smooth, and the depth, frequency and type of support given by the teacher can vary depending of the implementation model in each institution.

Online lab: This model involves students that travel and attend a school where whole courses are delivered online. There are no certified teachers available. Instead, there are trained paraprofessionals that supervise.

In that sense, we cannot disregard the need to have mechanisms that allow observing the quality of teaching performance by assessing their competencies to teach and guide blended learning.

Some organizations have not only developed instruments to observe educational aspects of teaching in the blended modality, but have also incorporated organizational and technological aspects that must converge in order to provide quality learning experiences. The Online Learning Consortium (OLC, 2016) developed a quality scorecard with criteria grouped into six categories: Institutional support, Course development/Instructional design, Course structure, Teaching and learning, Faculty support, Student support, and Evaluation. The International Association for K12 Online Learning, even though it's not linked to higher education, provides a teaching competency model for the blended modality that is interesting to analyze. It identifies within its framework twelve competencies that are organized into four larger domains: Mentality, Qualities, Adaptative skills, and Technical skills (Powell, Rabbitt, and Kennedy, 2014).

Nevertheless, in Mexico there are no sound and reliable evaluation models for blended teaching, hence the interest in developing one for these competencies. With this as our goal, the Teacher Competency Evaluation Model (*Modelo de Evaluación de la Competencia Docente*) (MECD) by García et al. (2008) is a relevant framework. This model incorporates three dimensions directly related to teacher competencies in a face-to-face model in higher education and one associated with the institutional context, which was not considered for the purpose of this exercise (see Table 1).

Table 1
Teacher Competency Evaluation Model (MECD)

Dimension: Teaching-learning process pre-planning	
Competencies	Indicators

Course planning

- *Is knowledgeable of his subject matter.
- *Defines the teaching approach (goals, philosophy, epistemological and didactical position).
- *Places knowledge in wide disciplinary, curricular, and social contexts.
- *Structures knowledge to facilitate significant learning experiences.
- *Selects or develops didactical materials.
- *Organizes the time of instruction and distributes it appropriately.
- *Defines clearly, and according to the students, the rules of coexistence, supported on universal values of respect to human rights.
- *Establishes the course’s performance criteria and accreditation.
- *Designs situations to facilitate learning experiences:
 - significant;
 - collaborative;
 - independent.
- *Incorporates the use of information and communication technologies to support teaching, learning, and evaluation processes.
- *Establishes alternative strategies to support students according to their learning needs.

Dimension: Conducting the teaching-learning process

Competencies	Indicators
<p>Managing learning progression (class plan).</p>	<ul style="list-style-type: none"> *Establishes a sequence for learning the different types of content included in the course. *Designs activities for individual and collaborative learning. *Selects or creates didactic and evaluation materials. *Includes the use of teaching strategies based on different technologies. *Projects relationships with other professionals and institutions in wider working spaces.
<p>Carrying out didactic interaction in the classroom</p>	<ul style="list-style-type: none"> *Handles problematic situations that emerge unexpectedly during the class. *Works with students that have difficulties. *Promotes collaborative work among students. *Provides feedback about student performance. *Provides equal opportunities for participation in the classroom. *Uses diagnostic, continuous, and cumulative evaluation. *Involves students in the self-evaluation, evaluation, and co-evaluation processes. *Contributes to creating a social climate in the classroom that facilitates the comprehensive development of students.
	<ul style="list-style-type: none"> *Logically structures the presentation of ideas, both in oral and written presentations. *Speaks clearly and enhances presentations with body language, the

<p>Using appropriate forms of communication to support academic work.</p>	<p>use of an appropriate tone of voice, and audio-visual media as support.</p> <p>*Uses terms, examples or illustrations, as well as syntactic structures that are appropriate for written communication.</p> <p>*Has the ability to communicate both written and orally, using a foreign language efficiently.</p>
<p>Dimension: Assessing the impact of the teaching-learning process</p>	
<p>Competencies</p>	<p>Indicators</p>
<p>Using appropriate methods to assess the teaching-learning process and its impact.</p>	<p>*Evaluates the achievements of the course goals using strategies and different tools, according to the educational goals of the course.</p> <p>*Involves standards of excellence in academic activities, both personal and professional, geared to obtain high-level outcomes and focused on continuous improvement.</p> <p>*Follows the individual paths of students.</p> <p>*Uses performance self-evaluation strategies.</p> <p>*Involves peers in reflection processes about achieving the goals of the course.</p>

Source: García, Luna, Loredó and Rueda (2008)

2. Methodology

A mixed methods approach was used in this study, with an exploratory and descriptive scope (Hernández, Fernández, and Baptista 2010). The goal was to identify to what extent each MECD indicator could be reused from the point of view of experienced teachers in the blended modality from the Universidad Autónoma de Baja California (UABC). This was done through a workshop that allowed discussion of each indicator and ended with participants responding individually to a comparison list-style instrument with a scale associated with the reuse level of each indicator.

The instrument used was developed specifically for the workshop and was structured according to the MECD's thirty-three indicators and included a scale that the participants could use to define how relevant each indicator was to the blended modality, after the discussion. The scale options were: 4 = High relevance, 3= Medium relevance, 2= Low relevance, and 1= No relevance. In addition, the instrument's format allows participants to suggest adjustments to each indicator, in case they think it can be reused. Furthermore, participants could suggest other indicators to supplement each dimension.

The participants were a group of twelve professors from UABC who met two criteria. They had more than three years of experience as teachers in the blended modality or entirely online, and they needed to represent different knowledge areas, according to the institution's educational programs. The information was gathered in a two-stage workshop. The first stage was the presentation and discussion of the MECD, and the second, involved responding to the instrument. To gather and integrate the data, a Google sheet was used with a share file in Google Drive that was accessed by all participants during the workshop. Then, the qualitative data was analyzed and the average reuse level of the indicators was incorporated, according to the scale used. For the purposes of this article, only the qualitative results of the exercise are presented.

3. Results

The section below shows the average results of the twelve teachers that participated in the exercise. The presentation of this data follows the order of the three dimensions that make

up the MECD. The values of the scales used were: 4 = High relevance, 3 = Medium relevance, 2 = Low relevance, and 1 = No relevance. In the "Use as is" column, the X indicates that all participants said that it was not necessary to adjust that indicator.

Table 2
Dimension: Teaching-learning process pre-planning

Indicators	Level of relation	Used as is
• Is knowledgeable of his subject matter.	4	X
• Defines the teaching approach (goals, philosophy, epistemological and didactical position).	3	
• Places knowledge in wide disciplinary, curricular and social contexts.	4	X
• Structures knowledge to facilitate significant learning experiences.	3.9	X
• Selects or develops didactical materials.	4	X
• Organizes the time of instruction and distributes it appropriately.	4	
• Defines clearly, and according to the students, the rules of coexistence, supported on universal values of respect to human rights.	3	
• Establishes the course's performance and accreditation criteria.	4	
• Designs situations to facilitate learning experiences: significant, collaborative, and independent.	4	
• Incorporates the use of information and communication technologies to support the processes of teaching, learning, and evaluation.	3.8	
• Establishes alternative strategies to support students according to their learning needs.	4	
Dimension average:	3.79	

Source: Based on García, Luna, Loredo, and Rueda 2008.

This first dimension is at medium-high relevance level. That is, the majority of participants agreed with every indicator, though they suggested corrections to some. Participants said that, of the eleven indicators that integrate the first dimension, four (36.36 percent) should be kept as they are, while 63.64 percent could be improved.

Table 3
Dimension: Conducting the teaching-learning process

Indicators	Level of relation	Used as is
• Establishes a sequence for learning the different types of content included in the course.	4	
• Design activities for individual and collaborative learning.	4	X

• Selects or creates didactic and evaluation materials.	4	X
• Includes the use of teaching strategies based on different technologies.	4	X
• Projects relationships with other professionals and institutions in wider working spaces.	4	X
• Handles problematic situations that emerge unexpectedly during the class.	4	X
• Works with students that have difficulties.	4	X
• Promotes collaborative work among students.	4	X
• Provides feedback about student performance.	4	X
• Provides equal opportunities for participating in the classroom.	4	X
• Uses diagnostic, continued, and cumulative evaluation.	4	X
• Involves students in the self-evaluation, evaluation, and co-evaluation processes.	4	X
• Contributes to creating a social climate in the classroom that facilitates the comprehensive development of students.	4	X
• Structures logically the presentation of ideas both in oral and written presentations.	4	X
• Speaks clearly and enhances presentations with body language, the use of an appropriate tone of voice, and audio-visual media as support.	4	X
• Uses terms, examples or illustrations, as well as syntactic structures that are appropriate for written communication.	4	X
• Has the ability to communicate both written and orally, using efficiently a foreign language.	4	X
Dimension average:	4	

Source: Based on García, Luna, Loredó, and Rueda (2008).

In the second dimension, participants indicated a high relevance level. Therefore, these indicators can be considered appropriate for the blended teaching evaluation model. Only 5.88 percent (1) of the indicators had changes suggested.

Table 4
Dimension: Assessing the impact of the teaching-learning process

Indicators	Level of relation	Used as is
• Evaluates the achievements of the course goals using strategies and different tools, according to the educational goals of the course.	3	
• Involves standards of excellence in the academic activities, both personal and professional, geared to obtain high-level outcomes and focused on continuous improvement.	4	X

• Follows the individual paths of students.	4	X
• Uses performance self-evaluation strategies.	4	X
• Involves peers on reflection processes about achieving the goals of the course.	4	X
Dimension average:	3.80	

Source: Based on García, Luna, Loredó, and Rueda 2008

Finally, the last dimension of the MECD was positioned at a medium-high relevance level, and 80 percent (4) of the indicators needed no modifications, according to the experts.

As shown, the three dimensions show a level of relevance between medium and high, where the dimension "Conducting the teaching-learning process" shows a total acceptance by the participants with an average of 4 points in every indicator. It is followed by the dimension "Assessing the impact of the teaching-learning process" with an average of 3.80 points and, finally, the dimension of "Teaching-learning process pre-planning" with 3.79 points.

Of the thirty-three indicators that make up the MECD, 72.73 percent (24) were approved for reuse as is, that is, without changes to the writing, while participants indicated that 27.27 percent (9) of the indicators needed some modification.

4. Conclusions

The main intention of this article was to present the partial results of a study associated with the adequacy of a face-to-face teaching evaluation model (MECD) for blended learning contexts. As a first approach, a workshop was conducted with teachers with vast experience in blended modality. They were introduced to the MECD, its dimensions and indicators, by means of an instrument that allowed participants to define the level of reuse of these indicators to assess blended learning.

As is indicated by the results, the majority of the MECD indicators show a high relevance level of reuse in the context of blended teaching, as long as some of them had adjustments for the contexts in which they are to be applied. Additionally, it is necessary to create new indicators for each dimension considering the challenges of blended teaching supported by ITC, especially in relation to instructional design, communication, and follow-up in virtual environments. Even though the quantitative results are positive, it must be bear in mind that the exercise was a process of accepting or rejecting previously established indicators of a face-to-face teaching model. Therefore, there is a lack of indicators and possibly dimensions to complement the model for a blended teaching experience; undoubtedly any addition should be based on a literature review on the best practices in the national and international context and on validation by experts and users of the modality. It is worth analyzing what has been said by Garrison and Vaughan (2008) and Spanjers et al. (2015), regarding the complexity of merging face-to-face teaching and online teaching, understanding and respecting the possibilities of each scenario to overcome it in its integration, as well as gain in its optimization.

This first approach shows evidence that the established plan for designing a tool for evaluating blended teaching is being developed in an appropriate manner and, if the work is carried out rigorously, it could result in a reliable instrument for evaluating this type of teaching practice.

A reliable instrument of this nature can guide the assessment of the practice of teaching in these scenarios of combined learning. It also contributes to the development of research on the implementation of this type of strategies in institutions, which are still limited (Graham, Woodfield, y Harrison, 2013), and can serve as a guide for other works in this same line.

We invite other colleagues to evaluate these partial results from a contextual perspective in

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Revista ESPACIOS. ISSN 0798 1015
Vol. 39 (Nº 46) Year 2018

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