

# Teaching models on good teaching practices in virtual classrooms

## Modelos de enseñanza sobre buenas prácticas docentes en las aulas virtuales

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### ABSTRACT

#### Keywords:

Virtual classrooms; good teaching practices; virtual education; online teaching

The study of good educational practices in virtual classrooms is focused on knowing the characteristics of pedagogical experiences that have been successful for the achievement of learning. However, in the studies published to date, a coincident approach that integrates the characteristics that distinguish good practices and the traits that are relevant to assess pedagogical interventions in virtual classrooms is not identified. Faced with this situation, this paper presents a comparative analysis of teaching models on good educational practices in virtual education, to identify the characteristics of effective practice. A bibliographic review consisting of 11 proposals and 25 evaluation features is synthesized; in which it was found that continuous feedback, interactivity, knowing the student's needs, multisensory teaching materials and promoting active learning are some of the most successful practices. Based on these results, it is concluded that the characterization of good educational practices in virtual classrooms is more focused on pedagogical strategies than on the technological supports of virtual education, therefore, the interest of teachers considered effective in their practice, is inclined towards their didactic and academic specialization

### RESUMEN

#### Palabras clave

aulas virtuales; buenas prácticas docentes; educación virtual; enseñanza en línea

*El estudio de las buenas prácticas docentes en aulas virtuales se enfoca en conocer las características de las experiencias pedagógicas exitosas para el logro de los aprendizajes; sin embargo, en los trabajos publicados hasta la fecha no se identifica una orientación coincidente que integre las características distintivas de las buenas prácticas o los rasgos relevantes para valorar las intervenciones pedagógicas en las aulas virtuales. Frente a esta situación, este artículo presenta un análisis comparativo de modelos de enseñanza sobre buenas prácticas docentes en la educación virtual, con la intención de identificar las características de una práctica efectiva. Se sintetiza una revisión bibliográfica compuesta por once propuestas y 25 rasgos de evaluación, en los cuales se encontró que algunas de las prácticas más exitosas son: la retroalimentación continua, la interactividad, los materiales didácticos multisensoriales, conocer las necesidades del alumno y fomentar el aprendizaje activo. A partir de estos resultados, se concluye que la caracterización de las buenas prácticas docentes en las aulas virtuales se centra más en las estrategias pedagógicas que en los apoyos tecnológicos de la educación virtual, por lo que el interés de los profesores considerados como efectivos en su práctica se inclina hacia su especialización didáctica y académica.*

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## INTRODUCTION

Education systems are in a continuous innovation process; likewise, there currently is a greater interest in using virtual education models to favor learning processes, have better coverage and offer a flexible and quality educational alternative to the population that cannot access face-to-face education, since it is available to any potential recipient who has a technological device with an Internet connection (Baelo, 2009). This educational modality has significantly increased its offer in recent years. In addition, information and communication technologies (ICT) have become an essential element of learning for all educational levels (Hernández, 2017), and the effective use of these in education implies incorporating technological resources -associated with a transformation- in the traditional paradigm of the teaching-learning process.

Although virtual education emphasizes the importance of the use and implementation of ICTs, it does not consider the use of technologies as its main characteristic. What defines virtual education is the non-physical coincidence between teachers and students, which allows the use of digital tools -synchronous or asynchronous-. This type of education includes any other form of learning that does not involve the traditional lecture, where a face-to-face interaction space is shared (Salmon, 2000; Area, 2004 and Dorrego, 2016).

The non-school-based teaching model, developed from ICTs, is open, interactive and flexible, in addition to having distinctive characteristics: it is collaborative, requires a learning community, is student-centered, has no limits of place or time, requires connectivity and authenticity, involves exploring and sharing knowledge and multisensory experiences for the construction of learning (Kearsley, 2000).

Specifically, the pedagogy implemented from virtual education favors teaching processes based on the making of networks and active learning; that is, it is supported by the creation of interactive learning communities, where the essential is not the interaction of the person with the technological tool, but the interactivity and communication between teacher and student, as well as among students (Cabero, 2006). This teaching is based on a constructivist pedagogical model centered on the student, which requires a community that shares knowledge to favor autonomy in the acquisition of learning (Kearsley, 2000; Baelo, 2009 and Dorrego, 2016).

Accompanying students in their learning process is an important feature of the teaching practice in this pedagogical model. Beyond presentation and transmission of knowledge, the teacher must intensify group work that helps collaborative learning, design the contents and didactic strategies, as well as follow up the students to evaluate their learning within the educational platform (Montoya, 2014). The teacher, by means of interaction through the virtual classroom, will guide the student in the learning process and will become a facilitator who implements

communication, feedback and follow-up actions, which allows the information in the student to become knowledge (Cabero, 2006).

Teachers should focus their decisions and methodologies on student learning, and not only worry about the ICT they will use (Garcia, 2002; De Zubiria, 2006). In practice, educational institutions limit their efforts to training teachers in technological tools, but leave aside training in the pedagogical model that would allow them to carry out an adequate teaching practice in virtual education (Mirete, 2010). Based on this problem, it is considered pertinent to inquire about the models of good teaching practices in virtual classrooms that may be appropriate references to improve the quality of online educational interventions.

Different models of teaching and teaching practice in virtual education have been presented in literature. Some authors, based on their experience in these spaces, have proposed pedagogical practices that have been effective in achieving learning in this modality. Based on the paradigm of good practices, teaching interventions that have demonstrated systematicity, replicability and successful results have been integrated into some teaching models and didactic proposals that share a series of characteristics and features that define them as effective strategies to improve the quality of student learning in virtual environments.

The term 'good practices' is defined as the way of performing an activity or work that produces a successful result (Hammer, 1990). In the professional field, a successful practice is distinguished by being innovative, replicable, evaluated and with cost-effective benefits for institutions (Duran, Estay-Niculcar and Alvarez, 2015). Good practices, according to Epper and Bates (2004), are actions or interventions that are characterized by improving the performance and results of a process. Therefore, it has been pointed out that their adoption in teaching methods would significantly improve the quality of learning processes in any educational modality (Romero *et al.*, 2014).

The concept of good teaching practices has been used since the 1950s (Zabalza, 2012) and has been defined by different authors, some based on the underlying pedagogical model and others when considering the different didactic moments within the teaching-learning process. Bain (2006) considers that good teaching practices are the successful result of encouraging students to learn through a positive, substantial and continuous influence on their way of thinking, acting and feeling.

Based on the characteristics of the pedagogical model for virtual education, the Research and Multimedia group of the Autonomous University of Barcelona (DIM Group, 2014) defines good practices as educational interventions that promote the development of learning experiences to efficiently achieve training objectives and learning of high educational value. They point out as indicators to define a good practice the significance for the students, the involvement of the students, the treatment of the diversity of the contents and the characteristics of the students, as well as the collaborative work.

On the other hand, instead of making an exposition of the term, some authors focus on the strategies that the teacher should follow according to the didactic moment of teaching; for example: De Pablos and Jiménez (2007) define good teaching practices as a process of change that should modify the ways of knowledge construction to configure new teaching-learning environments, while Cabero and Romero (2010) detail that the educational interventions of teachers and institutions facilitate the development of learning activities or experiences to help students achieve established objectives, skills and competencies.

Based on the contributions of these authors, good teaching practices can be defined as educational actions or interventions that have been shown to favor learning and produce successful results. They are a compendium of effective experiences that have been tested and validated, that have been replicated and deserve to be shared and disseminated with the purpose of being applied by as many teachers as possible to facilitate learning in the teaching process.

Specifically, the qualifier "good" in relation to teaching practices is subject to the pedagogical model that underlies an educational action in a given context, so that, based on the educational modality -school-based or non-school-based-, some models propose guidelines for each moment in the teaching practice -from planning, materials development and implementation, to monitoring and assessing learning-, while others focus on the teacher's functions.

Although there is no consensus on the definition of good practices, it is possible to identify key elements that are alluded to in each of the approaches to the term, indicators from which different teaching models or proposals for good teaching practices have been built, both in face-to-face and virtual education. The purpose of this article is to carry out a comparative analysis of some of these teaching models based on good practices in virtual education and, from this, to establish which are the features that allow identifying a practice as good and effective, in order to refer to a set of attributes that allow characterizing good teaching practices in virtual classrooms.

## **METHODOLOGY**

In order to identify models of good teaching practices in virtual classrooms, a bibliographic methodological strategy was used, which consisted of searching for information in academic databases. The review focused on literature that explicitly mentioned models of good practices or proposals developed from virtual education, in addition to those that contemplated key aspects such as: effective practices, good practices and teaching practices; the pedagogical aspects of online teaching were prioritized.

The descriptors used to search for relevant articles for the analysis were: models of good teaching practices in virtual classrooms, teaching practices in virtual classrooms, best teaching practices in online education, successful teaching experiences in virtual education, and successful pedagogical practices in online education. These were considered in Spanish and English, and the research was conducted through the Internet search engines Google, Google Scholar and ERIC (Institute of Education Sciences). From the contents that were explored, a purification of the information was carried out, where a total of eleven articles were chosen, published between 1998 and 2017 by universities, researchers and research teams, containing proposals, teaching models and research developed from virtual education. Some are based on models of good classroom practices, and others on the experience of researchers as teachers in virtual classrooms.

The following is a brief description of the teaching models on good teaching practices identified in virtual education from the research reviewed, developed in the international context. The models are presented grouped in two classifications, first those describing practices focused on pedagogical strategies -developed in seven of the eleven selected papers- and, subsequently, those covering good practices identified in each phase of teaching: from planning to learning assessment -according to the remaining four articles-. The analysis of the papers considered the authors, the year of publication, the objective of the model and the characterization of the good practices proposed.

## **RESULTS. COMPARATIVE ANALYSIS OF TEACHING MODELS ON GOOD TEACHING PRACTICES IN VIRTUAL CLASSROOMS**

### **Good teaching practices in pedagogical strategies**

At the beginning of the century, Graham et al. (2001) proposed in their research a list of seven strategies based on the principles of Chickering and Gamson's (1987) model aimed to propose a guide to evaluate teachers' good practices in virtual classrooms. These strategies consist of:

- 1) Encourage interaction between students and teachers with clear guidelines for communication.
- 2) Foster cooperation among students through discussion tasks designed to facilitate collaborative learning.
- 3) Encourage active learning. To this end, students should be allowed to present projects and discuss their contributions among themselves, with special emphasis on the time allotted for the assignment, and establish deadlines for it.
- 4) Provide informative and acknowledging feedback with prompt, timely and appropriate response.

- 5) Communicate academic expectations through challenging assignments.
- 6) Respect diverse talents and learning styles.
- 7) Allow the student to choose topics of interest to develop academic projects.

Years later, Banjert (2004) conducted a study to evaluate online teaching practice by students through a questionnaire based on Chickering and Gamson's (1987) model of good teaching practices. Based on the results obtained, he proposed a compendium of good practices focused on pedagogical strategies necessary for teaching virtual education, which propose:

- a) Establish close contact between teachers and students. This is a critical factor to motivate and succeed in online studies. Friendly behaviors on the part of the teacher, interest in the student's learning, enthusiasm and good disposition, as well as communication skills, generate an adequate climate for learning.
- b) Encourage social interaction. This promotes learning in the student, since having the opportunity to share and respond to each of their peers, as well as discuss the topics of study among the learning community, leads to a deeper knowledge and understanding.
- c) Incorporate audio, video and links to other virtual worlds, resources that allow instructors to create authentic and interactive problem-solving activities, and enhance students' efforts to actively construct meaningful knowledge.
- d) Effective feedback is facilitated when the instructor gives prompt and timely feedback, as well as including individual comments on student performance.
- e) Clearly designate the time available to complete the assignment and automatically remember assignment due dates.
- f) Set clear expectations about the quality of assignments. Examples that model the instructor's expectations provide the student with precise guidelines on the type of work required for proficient assignment completion.
- g) Create a series of multisensory learning activities to demonstrate knowledge and skills to explore the diverse range of learning preferences and skills in learners.

On the other hand, the study by Cabero and Romero (2010), carried out in Spanish universities, aimed to analyze good teaching practices in university virtual classrooms. Based on a biogram, interviews and observation of materials, the authors identified the most favorable results in the following teaching strategies: showing flexibility in the delivery of the course, opening a communication channel with the teacher that makes

it possible to consult information and resolve doubts, establishing a human and personal treatment of the teacher towards the students, updating and developing innovative materials, as well as evaluating the teaching materials in technical, pedagogical and communicative aspects.

In the same year, Valverde, Garrido and Fernandez (2010) developed a research focused on evaluating teachers from different dimensions within their practice, with the purpose of training them in pedagogical strategies and skills for online education, and thus promote an effective practice in virtual classrooms. The proposals of this study are summarized in four good practices necessary for teachers in virtual environments:

- 1) To understand the representation and formulation of concepts and procedures through ICT.
- 2) To develop constructivist didactic strategies that use ICT to favor the teaching of curricular contents.
- 3) To identify the difficulties in learning the contents and to know how ICT can help to overcome them.
- 4) To note the students' previous knowledge, as well as the epistemology of the curricular content in order to understand how ICT can generate new learning over the pre-existing one.

A broader study was conducted by Cabero, Llorente and Morales (2013), which aimed to identify whether teachers employ good practices in virtual education and to learn about the technical, didactic and organizational difficulties reported by teachers, as well as the characteristics of the materials they use and their learning experiences. Based on their results, the authors suggest as good teaching practices: having a positive attitude - both teachers and students- towards online education, especially when interacting on the digital platform; making the delivery of courses and attention to student needs more flexible; increasing student involvement and participation in the virtual classroom; and acquiring digital skills in the use of the didactic tools of the educational platform, the design of learning materials and the management of the resources available in the virtual classrooms.

As part of their research on good practices in virtual environments, Garcia, Guerrero and Granados (2015) propose a guide of good practices, based on their teaching experience and knowledge on the subject. In this guide, they establish a series of criteria for developing good practices in virtual environments, divided into five categories: pedagogical, technological, methodological, organizational and social. Based on these, the authors present strategies (good practices) to be followed at different stages of the learning process; some examples are as follows:

- a) Having constant communication with the students and try to keep them motivated.
- b) Recognizing differences and diverse learning styles, and adapt virtual environments to improve learning.

- c) Prioritizing self-assessment and co-assessment among students.
- d) Considering the flexibility of virtual environments and not be bound by a rigorous timetable that must be met.
- e) Diversifying the use and application of the platform tools.
- f) Presenting didactic materials in different formats.
- g) Collaborative work should be preceded by individual work to assess the student's previous knowledge.
- h) Generating processes of social and communicative interaction among the learning community.

A more recent study, conducted by Carmona and Rodríguez (2017), aimed to identify a set of technical, administrative, communicative and pedagogical specifications to improve the results of virtual education. The research identified characteristics such as usability, accessibility, adaptability and modularity, which are validated and shared internationally within virtual courses, presented by different entities specialized in standardization; in addition to other characteristics such as consistency, transversality, functional design, administrative management, licensing and conceptual unity, which respond to reflections around educational and contextual peculiarities. Based on these, a set of specifications was designed, contained in a manual of specialized pedagogical strategies and a methodology to implement it, so that this compendium of good practices would be a guide to improve the results of virtual education and would have a role in the training of teachers.

In summary, these first seven studies on best practice models propose specific pedagogical strategies that online teachers can implement to promote student learning in virtual classrooms. Among everything mentioned in these studies, the importance of having an adequate mastery and management of the curricular contents, possessing skills for the adequate use of ICT -on the part of the teacher and the student-, and maintaining favorable behaviors to improve attitudinal aspects and to carry out a positive tutoring and interaction among the learning community can be highlighted.

### Good teaching practices in teaching stages

Area, San Nicolás and Fariña (2010) developed a specific teaching model for online education, based on the models of good teaching practices for face-to-face environments, mainly those proposed by Chickering and Gamson (1987), Alexander (1997), and Coffield and Edward (2009). The purpose of this study was to improve quality in the virtual educational modality, so it proposes good practices based on the different stages of teaching:

- Planning stage: consider the needs of each student in terms of time, space, tranquility and learning styles; guide with clear



information about the educational program according to their abilities and academic profile.

- Preparing materials: include relevant and diverse didactic materials that encourage interest in the student's own work.
- Implementation: provide a technical support option within the virtual classroom, encourage interactivity and dialogue among virtual classroom participants.
- Monitoring and evaluation: offer continuous monitoring of student progress, record it for supervision during the process and not only at the end; allow the student to choose the intensity in his learning and the pace to achieve his objectives.

On the other hand, the study conducted by Montoya (2014) in the teaching process sought to identify and evaluate good practices in the virtual modality, with the intention that the results would be a reference for the development of teaching-learning models suitable for these educational contexts. The methodology of this work consisted of evaluating good practices in virtual education based on the European Quality Framework; however, the results were not favorable, since the participants were not familiar with the protocols for applying the quality of online education that was evaluated. In view of this, the author concludes that it is necessary to investigate good practices with larger samples, where trends and problems faced by teachers can be identified, in order to have more precise empirical evidence on what is expected of online teachers in virtual classrooms.

In another study on good teaching practices in university virtual education, Rodríguez and Niculcar (2016) propose a guide to favor permanent changes in the personality and behavior of teachers who teach online education, and structure their model in three stages that every good teaching practice should consider:

- Pre-active stage: consists of planning, gathering relevant information, studying and analyzing the information, implementing the learning activities, and evaluating whether behavioral changes were generated. The application of this first stage favors the adoption of good practices by the teacher.
- Teaching intervention: consists of assessing the student through a diagnosis -during and at the end of the course-, complying with the academic program, providing permanent feedback, updating the activities and evaluating the learning results. In other words, applying good practices in the execution of the virtual course.
- Post-tactical stage: it consists of reflecting on the process carried out and analyzing the expected results, in contrast with those obtained, in order to generate improvements in the next experiences.

Bolívar and Davila (2016), through their experience of a decade in the delivery of virtual education, delimit a model of good practices in virtual

environments of higher education. In this model, they organize the information according to two stages: the actions related to the preliminary administrative process to be carried out by the teacher, and the tasks and processes to be performed during the instructional process, both in planning and development.

a) Preliminary administrative process

- To have a basic training that allows to efficiently perform the role of teacher-tutor in the virtual environment, by knowing the dynamics of the training processes in this modality.
- Elaborate or update the instructional program of the subject, including the learning objectives, contents, evaluation and sources of information.
- Obtain the approval of the academic authorities to teach the course online.

b) Didactic planning

- Program in advance the curricular design of the course with the online activities, considering the characteristics of the students and the learning results.
- Select, design and organize didactic support materials or resources according to the objectives and in correspondence with the course contents.
- Design authentic and contextualized training activities according to the learning objectives.
- Design evaluation instruments with a formative and summative purpose.
- Design a plan for tutorial follow-up and be aware of whether students require support.

c) Didactic development

- Awaken interest and gain students' attention on the course, contextualize the course and its importance.
- Determine the cognitive and affective characteristics of the students through the design of interactive self-assessments.
- Execute the course and add didactic resources per unit and interactive activities.
- Facilitate learning and tutorial follow-up.
- Perform a training closure and elaborate the report on the qualifications.

- Elaborate a closing report of the course and socialize with other teachers about the learning experiences and results. Promote a process of continuous improvement.

The authors suggest that the proposals of good teaching practices they present contribute to generate a quality online education, which provides a suitable performance of teachers in terms of the adequate execution of didactic and tutorial strategies in this modality, as long as the processes and moments presented in their actions in virtual teaching are followed.

## DISCUSSION

As can be seen, there are similarities and divergences between the strategies and elements that are considered good practices in the different models. However, despite this variety, it is possible to distinguish specific indicators that allow characterizing a good practice in virtual classrooms. Table 1 shows a comparative analysis of the identified dimensions and characteristics shared by the models of good teaching practices presented in the eleven papers selected for the research, where the relevant elements present in most of the models are pointed out.

This comparative table was organized based on the stages of the didactic process, the dimensions pertaining to each of these and some indicators that describe the expected good practice were included, as well as the number of times when the dimension is considered as an important aspect of good practices by each of the models. The numbering of the good practice teaching models is as follows:

- 1) Area, San Nicolas and Fariña (2010)
- 2) Graham, Cagiltay, Lim, Craner and Duffy (2001)
- 3) Banjert (2004)
- 4) Cabero and Romero (2010)
- 5) Valverde, Garrido and Fernandez (2010)
- 6) Cabero, Llorente and Morales (2013)
- 7) Montoya (2014)
- 8) Garcia, Guerrero, and Granados (2015).
- 9) Rodríguez and Niculcar (2016)
- 10) Bolívar and Davila (2016)
- 11) Carmona and Rodriguez (2017)

**Table 1.** Comparative analysis of teaching models on good teaching practices in virtual classrooms

Didactic moment	Dimensions	Good practice models											
		1	2	3	4	5	6	7	8	9	10	11	*
Planning	Student needs	X	X	X		X			X		X	X	7
	Information about the program	X			X	X						X	4
	Training in concepts and procedures with ICT					X	X	X	X		X	X	6
	Mastery of curricular aspects	X		X	X	X		X			X	X	7
	Update or elaborate the instructional design										X	X	2
Elaboration of materials	Didactic materials	X		X	X		X	X	X		X	X	8
	Multisensory learning experiences		X	X	X		X		X	X	X	X	8
Implementation	Interactivity between students	X	X	X	X		X		X	X	X	X	9
	Technical support	X										X	2
	Teacher-teacher interactivity	X	X	X	X		X		X	X	X	X	9
	Learning pace	X	X	X							X		4
	Open learning intensity	X											1
	Intensity of restricted learning		X	X									2
	Active learning		X	X	X	X	X		X		X	X	8
	Constructivist didactic strategies					X			X	X	X	X	5
Tracking	Continuous monitoring / feedback to the student	X	X	X	X		X		X		X	X	8
	Communicate high expectations / set examples		X	X			X				X	X	5
	Friendly motivational teacher behavior			X	X						X	X	4
	Communication skills			X	X				X		X	X	5
	Flexibility				X		X					X	3

	Personalized tutoring		X	X		X	X	X	X		X	X	8
	Positive attitude						X				X	X	3
	Collaborative work								X		X	X	3
Evaluation	Evaluation instruments										X	X	2
	Propose to improve the practice carried out								X	X	X		3

When analyzing the models of the eleven papers, 25 different dimensions were identified. Although there is no characteristic that is common to all the models examined, it is observed that some of these are frequently repeated (the characteristic may be named differently from one model to another, but it refers to the same behavior or action of the teacher).

The dimensions most frequently mentioned -in seven or more of the models- are: interactivity among the learning community, continuous student follow-up or feedback, knowing the student's needs and personal characteristics, personalized tutoring, having relevant and updated teaching materials, favoring active learning, having multisensory learning experiences to promote learning in students according to their abilities and cognitive styles, mastering the curricular aspects of the subject, and having training and knowledge in the use of ICTs. According to the works reviewed, these are the practices that the authors consider relevant for virtual education.

When reviewing the presence of these dimensions in the articles, regarding students' needs, only in four of the eleven models was it not considered essential to know the characteristics and particularities of the student. In the rest, this dimension of good teaching practice is highlighted, since it allows adapting the contents and learning experiences of the students within the virtual classroom through the use of diverse support materials according to their learning styles, their rhythms and their level of understanding. In addition, in this same tone, it is recommended to complement the practice with a previous diagnosis of the skills and knowledge that the student has of the technological tools, in order to promote interactive communication and encourage active learning.

An essential element which became manifest in most of the teaching models reviewed -nine of the eleven considered it relevant-, is related to fostering interactivity between the teacher and the student, as well as among students, to favor active learning and collaborative work. Generating spaces for communication, discussion and knowledge construction through the learning community allows students to develop critical and reflective thinking about the knowledge they acquire, which resulted in meaningful learning.

Another characteristic of a good teaching practice is related to training, mastery and management of technological tools, both for the teacher and

the students. Teachers and students who master the educational platform and the multimedia tools available can take advantage of the resources available in the virtual classroom to optimize their learning experiences by focusing on the acquisition of new knowledge and not on the management of didactic technological resources. Thus, another dimension of good teaching practices that stands out in most of the models is the close follow-up and continuous feedback to students; this does not only refer to an accompaniment on academic aspects, but also to a personalized and group tutoring on the interests and personal well-being of students.

## CONCLUSIONS

Within the results reported in the studies on good teaching practices in virtual environments, there are coincidences. Researchers emphasize that good teaching practices are more focused on pedagogical strategies than on the technological support available in virtual education, so that the interest of teachers is inclined towards their specialization in didactic and academic aspects within virtual classrooms, considered as effective in their teaching practice. Likewise, the works highlight the importance of mastering the diversity of digital communication tools that virtual environments have at their disposal, since these allow them to establish a better relationship with students, provide individualized treatment and enhance virtual tutoring, practices that have favored the achievement of better learning results.

These findings are significant, since the managers of academic institutions are usually more concerned with the acquisition of powerful servers and innovative educational platforms, and neglect the training of teachers in appropriate pedagogical strategies for their performance in front of a group, as well as training in the development of digital teaching materials and resources that enable the empowerment of their teachers in good teaching practices in virtual environments. At this point, it is noteworthy to highlight those students must also be trained to adequately use virtual educational tools.

Based on the above, the analysis of these teaching models on good practices allowed the purpose of the study to be fulfilled: to generate a reference of specific indicators on good teaching practices in virtual classrooms, where these pedagogical practices are characterized at different stages of the educational process. Some of the dimensions considered are essential to favor online learning, and should be part of the training and education of any teacher in the virtual modality, in addition to verifying that their implementation is adequate and evaluating the results of their practice.

Virtual education is considered to be an educational modality that offers a quality training and learning alternative, which is supported by having a team of professionals involved in the execution of good teaching practices

in their didactic activities, academic advising, tutoring and in the design of learning materials. Currently, implementing effective teaching practices in virtual environments is a challenge that requires the adoption of a pedagogical model suited to online teaching and the needs of students to enhance the use of technology in education.

It is, therefore, necessary to increase efforts to promote effective online education, with results that favor student learning. This implies having a profile of specialized professional competencies and a specific compendium of successful and adequate pedagogical actions to train efficient teachers and promote quality academic training for students in virtual classrooms. For this purpose, this article provides a set of criteria to characterize good teaching practices in virtual classrooms, and contributes with empirical research to build models of good teaching practices to improve the quality of learning processes in this educational modality.

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- Chickering, A. W. y Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(1), 3-7. Recuperado de: <https://www.lonestar.edu/multimedia/sevenprinciples.pdf>
- Coffield, F. y Edward, S. H. (2009). Rolling out “good”, “best” and “excellent” practice. What next? Perfect practice? *British Educational Research Journal*, 35(3), 371-390. Recuperado de: <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1080/01411920802044396>
- De Pablos, J. y Jiménez, R. (2007). Buenas prácticas con TIC apoyadas en las políticas educativas: claves conceptuales y derivaciones para la formación en competencias ECTS. *Revista Latinoamericana de Tecnología Educativa*, 6(2), 15-28. Recuperado de: <https://relatec.unex.es/article/view/345>
- De Zubiría Samper, J. (2006). *Los modelos pedagógicos: hacia una pedagogía dialogante*. Bogotá: Cooperativa Editorial Magisterio.
- Dorrego, E. (2016). Educación a distancia y evaluación del aprendizaje. *RED. Revista de Educación a Distancia*, 50(12). Recuperado de: <http://www.um.es/ead/red/50>
- Durán, R.; Estay-Niculcar, C. y Álvarez, H. (2015). Adopción de buenas prácticas en la educación virtual en la educación superior. *Aula Abierta*, 43(2), 77-86. Recuperado de: <https://core.ac.uk/download/pdf/82043774.pdf>
- Epper, R. y Bates, A. (2004). *Enseñar al profesorado cómo utilizar la tecnología. Buenas prácticas de instituciones líderes*. Barcelona: Editorial UOC.
- García, A. L. (2002). Aprendizaje y tecnologías digitales. ¿Novedad o innovación? *Red Digital*, 1. Recuperado de: [https://www.researchgate.net/publication/235742093\\_Aprendizaje\\_y\\_tecnologias\\_digitales\\_Novedad\\_o\\_innovacion](https://www.researchgate.net/publication/235742093_Aprendizaje_y_tecnologias_digitales_Novedad_o_innovacion)
- García, A.; Guerrero, R. y Granados, J. (2015). Buenas prácticas en los entornos virtuales de enseñanza-aprendizaje. *Revista Cubana de Educación Superior*, 34(3), 76-88. Recuperado de: <http://scielo.sld.cu/pdf/rces/v34n3/rces06315.pdf>
- Graham, C.; Cagiltay, K.; Lim, B.; Craner, J. & Duffy, T. M. (2001). Seven principles of effective teaching: A practical lens for evaluating online courses. *The Technology Source*, 30(5), 50. Recuperado de: [http://aris.teluq.quebec.ca/portals/598/t3\\_graham2001.pdf](http://aris.teluq.quebec.ca/portals/598/t3_graham2001.pdf)
- Grupo DIM. (2014). *Grupo DIMEDU: Didáctica, Innovación, Multimedia*. Universidad Autónoma de Barcelona. Recuperado de: <http://dim.pangea.org/dimnewinvestigacionesyproyectos.htm>
- Hammer, M. (1990). *Reengineering work: Don't automate, obliterate*. Boston: Harvard. Recuperado de: <https://hbr.org/1990/07/reengineering-work-dont-automate-obliterate>

- Hernández, R. M. (2017). Impacto de las TIC en la educación: retos y perspectivas. *Propósitos y Representaciones*, 5(1), 325-347. <http://dx.doi.org/10.20511/pyr2017.v5n1.149>
- Kearsley, G. (2000). *Online Education: Learning and teaching in cyberspace*. Belmont, CA.: Wadsworth.
- Mirete, R. A. (2010). Formación docente en TICS. ¿Están los docentes preparados para la revolución TIC? *International Journal of Developmental and Educational Psychology*, 4(1), 35-44. Recuperado de: <https://www.redalyc.org/pdf/3498/349832327003.pdf>
- Montoya, N. R. (2014). *Buenas prácticas e-learning en los estudios de posgrado de la Universidad de Granada. La perspectiva docente* (tesis doctoral). Universidad Internacional de Andalucía. Recuperado de: [https://dspace.unia.es/bitstream/handle/10334/2762/0568\\_Montoya.pdf?sequence=1](https://dspace.unia.es/bitstream/handle/10334/2762/0568_Montoya.pdf?sequence=1)
- Rodríguez, R. y Niculcar, C. (2016). Las buenas prácticas docentes en la educación virtual universitaria. *REDU: Revista de Docencia Universitaria*, 14(2), 159-186. Recuperado de: <https://polipapers.upv.es/index.php/REDU/article/view/5905/0>
- Romero, J.; Fernández, R.; Martínez, R.; Álvarez, D.; Álvarez, E. y Álvarez, W. (2014). Las tecnologías de la información y las comunicaciones, las del aprendizaje y del conocimiento y las tecnologías para el empoderamiento y la participación como instrumentos de apoyo al docente de la universidad del siglo XXI. *Medisur*, 12(1), 289- 294. Recuperado de: <http://www.medisur.sld.cu/index.php/medisur/article/view/2751/1452>
- Salmón, (2000). *E-Moderating: The key to teaching and learning online*. London: Kogan.
- Valverde, B.; Garrido, A. y Fernández, S. (2010). Enseñar y aprender con tecnologías: un modelo teórico para las buenas prácticas con TIC. *Teoría de la Educación. Educación y Cultura en la Sociedad de la Información*, 11(1). Recuperado de: <https://www.redalyc.org/articulo.oa?id=201014897009>
- Zabalza, M. (2012). El estudio de las buenas prácticas docentes en la enseñanza universitaria. *Revista de Docencia Universitaria*, 10(1), 17-42. <https://doi.org/10.4995/redu.2012.6120>



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