

Information and Communication Technology (ICT) and its Practice in Educational Evaluation

Tecnología de Información y Comunicación (TIC) y su práctica en la evaluación educativa

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Summary

The ways in which pedagogical practices have evolved and how to understand the teaching and learning process are different. With the use of the Internet, the sources of information and evaluation are amplified, and educational agents within virtual education play an important role, reflecting on a new paradigm of learning and knowledge construction. From the theoretical review carried out in this document, aspects for virtual education and the tendency to an evaluative practice that does not deal exclusively with the classroom are exposed, since the intercommunication tools become and contribute to a new pedagogical practice focused on learning, giving rise to a more active role for students.

Keywords: Information and Communication Technology; Educational Evaluation; Education; Virtual Training.

Resumen

Son diferentes las formas que han evolucionado las prácticas pedagógicas y la manera de comprender el proceso de enseñanza y aprendizaje. Con el uso del internet las fuentes de información y de evaluación se amplifican, y los agentes educativos dentro de la formación virtual cumplen un rol de importancia, reflexionando sobre un nuevo paradigma de aprendizaje y de construcción del conocimiento. Desde la revisión teórica llevada a cabo en la presente investigación, se exponen aspectos que orientan a una educación virtual y la tendencia a una práctica evaluativa que no se circunscribe al aula, pues las herramientas de intercomunicación se convierten y contribuyen en una nueva práctica pedagógica centrada en el aprendizaje, dando lugar a un rol más activo a los estudiantes.

Palabras clave: Tecnología de Información y Comunicación; Evaluación educativa; Educación; Formación virtual.

Introduction

Thanks to the Internet arrival and the current constant technological advances, there is a series of transformations that have impacted on the education world giving rise to new ways of communication, interaction, relationship, work and learning (Coll, 2013). Thus, the ICTs have become a key tool for the future education. They can be important opportunities to improve the education of students and teachers (Tapia, Martinez, & de la Luz, 2015).

The recognition that distance education has achieved during the last years has become an alternative answer for the professional training, an answer to a growing demand for educational institutions by society (Aguilar, 2004). This new educational paradigm, as Martín and López call it (2012), has led to indicate that the teacher training is conceived as a constant, dynamic and inseparable learning process, thus the collaborative work is considered an emergent tool in the field of teacher training. Tezanos (2008) considers technology as the expression of the “new social paradigm”, comparable to that of the “new world”.

The relationship of the virtual environment, as a learning scenario and the face-to-face collaboration seek to eliminate the temporary space barriers and to open the doors of new ways of collaboration, communication and spaces with different learning times and pace (Guitert et al., 2005).

Mentioning the virtual training refers to the use of a technological system of mass and bidirectional communication that replaces the face-to-face activity in the classroom, thus the use

of various didactic resources promoting the autonomous learning of students is highlighted García Aretio, 2014; Almenara, Cejudo & Lozano 2018).

According to Cabero Almenara, Arancibia Muñoz, Valdivia Zamorano, and Aranedas Riveros (2018), there is a positive attitude, both in teachers and in students, to use virtual training actions that allows the teaching-learning process to be mobilized. Although the different theoretical approaches in which the ICTs are addressed, their impact on the teaching and learning process establishes the teacher as the key agent, mediator of educational and technological practices (Rubilar, Alveal, & Fuentes, 2017).

Evaluation Practices using ICTs

Rodríguez (2005) says that “evaluation is a set of systematic collection, analysis and interpretation processes of valid and reliable information, which compared to a reference or criterion allows us to make a decision that favors the improvement of the object evaluated.” (p.43)

Duart and Martínez (2001) say that a significant evaluation must meet a series of characteristics a) systematic (periodic activity, previous approval of a program) b) objective (guarantee of an evaluation with a diverse existence of information) c) participatory (the organization must consider a definition of evaluation) and d) Flexible (it is about the evaluation methodology based on the organization). We conclude that the evaluation not only covers technical aspects, but also organizational aspects.

The evaluation process is related to the decision making (Mateo, 1990; Pérez Juste & García Ramos, 1989), and this is due to the fact that it is intended to relate the evaluation process to the improvement process (Rodríguez, 2005). When there is an integration between the computer and evaluation, the teacher proposes to integrate the tools of the web into the evaluation. This model involves an evaluation always from a training nature, that is, as an instrument for the didactic improvement and, in particular, of each one of its processes and curricular components (Fernández Pérez, 1994).

According to Montesinos (2004), the ICTs can improve the quality of information, context of which will depend on the objectives set in the sessions and courses, thus seeking a non-automated but analytical, interpretative and collaborative evaluation. Let’s remember that the evaluation can be synonymous with information exchange. Below there is a model of possibilities of integration of the web into the evaluation process. In this way, we refer to the virtues of Internet to access, generate, and transmit knowledge.

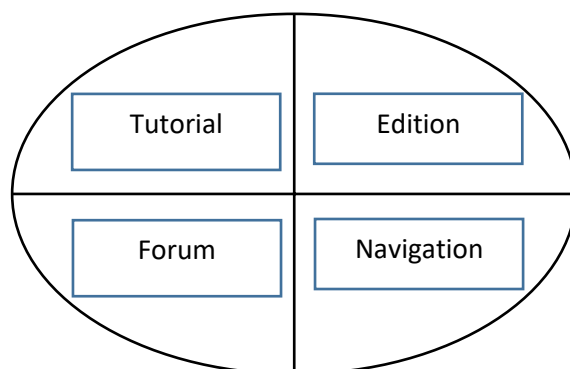


Figure 1. Model of possibilities of integrating Internet into the evaluation process (Montesinos 2004).

Conclusions

Virtual training, based on the new technologies, allows favoring and a promoting training evaluation systems, based on self-evaluations that allow student to be at the learning level achieved and redirect the process to higher levels of execution (Rodríguez, 2005).

To conclude, it is important to say that nowadays, an exclusive assessment is given to the approach of the evaluation of training programs by using Internet. The aim is to take training actions for a training in virtual training of teachers, basing their pedagogical foundation on didactic aspects referring to the design of materials for the network or strategies and e-activities that can be applied in it. Cabero-Almenara, Gallego-Pérez, Puentes Puente, & Jiménez Rosa, (2018).

Learning evaluation not only seeks to understand the assessment of the learning results of the students, but the analysis of the teaching and learning processes. Therefore, the evaluation supported with the use of technology seeks to: 1) integrate the improvement and understanding of the learning process, 2) link a training and summative evaluation; 3) emphasize that an evaluation using the web can be directional between teachers and students; 4) create the opportunity of a collaborative and democratic evaluation model (Montesinos 2004).

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