Evaluating Distance Education and E-Learning

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INTRODUCTION

The number of distance education and e-learning programs has been on the rise for some time now (Hannan & Silver, 2000). In the United States, the National Survey of Information Technology in Higher Education, as part of its Campus Computing Project, carries out regular surveys of the use of information and communications technology (ICT) in higher education (USA-DOE, 2000). Its surveys reveal that:

- An increasing number of college courses are incorporating ICT as part of their teaching and learning transactions.
- Students and faculty alike are spending an increasing amount of their study time on the Internet, and both student and faculty percentages in this regard are highest in research universities.
- Across all sectors of higher education, a growing number of institutions are using the Web to provide students access to admission forms, financial aid applications, course catalogs and other related material.
- Major challenges that confront colleges and universities in their use of ICT include a) getting faculty to systematically integrate ICT into their teaching, b) providing adequate user support, and c) financial planning for the upkeep of such technologies.

BACKGROUND

In the midst of this interest in and proliferation of distance and e-learning practices, there is a great deal of variability in the quality of e-learning and teaching. This shouldn’t be any surprise, as there are just as many instances of poor and reckless teaching in the conventional face-to-face mode, just as there are instances of excellence in that regard (see Boshier, Mohapi, Moulton, Qayyaum, Sadownik, & Wilson, 1997). While this is a somewhat dated study, it does shed some interesting light on practices at that time, which are probably, on the whole, not very different from current practices. In this study, researchers focused on the attractiveness and face validity of ‘stand alone’ Web-based courses (i.e., courses that ‘might include supplemental material but can be completed entirely without face-to-face interaction with an instructor’ (p. 327)).

Of the 127 courses they reviewed, the investigators classed 19 of them as ‘not enjoyable’ to walk through; 42 were considered ‘mildly enjoyable’; 43 ‘moderately enjoyable’; 19 ‘very enjoyable’; and 4 a ‘complete blast.’ They also found that very few of the courses surveyed offered opportunities for interactivity or for collaborative learning. They found that many of the courses seemed overly driven by an obsession with statement of objectives, assessment outcomes and a hierarchical ordering of subject matter content, as opposed to a focus on building rich resource-based learning environments around enduring themes. The researchers concluded from this study that the biggest challenge for Web-based course developers seemed to be conceptual, not technological. They suggest that course developers ought to be focusing more on how to make their courses “attractive, accessible and interactive” (Boshier et al., 1997, p. 348).

Clearly, despite growing awareness among educators in the literature on learning and instructional design, we continue to fail making the best use of the opportunities that alternative delivery technologies afford. Evidence of this is all around us in the form of course Web sites, which contain little more than the schedule, brief outline of the course content, slides of lecturer’s notes, and sometimes, sample examination papers. Instead of exploiting the unique attributes of information and communication technologies, such practices replicate education characteristic of the transmission of information model of teaching that is so common in conventional classroom practices. Much of educational practice con-
Evaluating Distance Education and E-Learning continues to be teacher-directed and delivery-centered. We rarely pause to think about why we are teaching the way we teach and support learning, and whether our approaches are based on sound educational principles of learning and cognition.

This kind of instructional practice has led to a great deal of frustration for learners and teachers, many of whom have grown increasingly skeptical about the benefits of the newer delivery technologies and distance education generally (Kirkwood, 2000; Rumble, 2000). This has a lot to do with the failure of instructional designers and subject matter experts to approach the design and development of learning and teaching practices in a systematic way. Information and communication technologies offer tremendous opportunities for building rich and resource-based learning environments. However, these technologies are vehicles of the educational transaction, and their impacts on learning outcomes are the subject of much contention (Clark, 1983; Kozma, 1991).

To make the most of the opportunities these technologies offer, careful attention needs to be paid foremost to the pedagogy of the learning and teaching transaction, and to the entire design and development process. This refers to how subject matter content is presented, what the learners will do, how learning will be supported, what would comprise formative and summative assessment, and how feedback will be provided.

This is achievable with rigorous planning and monitoring of all faces of program development. Such a process would entail adopting a proactive process, rather than reacting to learning problems encountered by students post implementation (Sims, Dobbs & Hand, 2002). The notion of proactive evaluation advocates an approach to program development where all planning, design and development activities are assessed against various evaluation criteria as part of the design and development process. By carrying out these checks proactively, all relevant factors and issues will have been considered and resolved. More importantly, for those program developers new to distance education and e-learning, adopting a proactive approach to evaluation will serve as a scaffold for professional development.

The Evaluation Process

This chapter offers a proactive framework for effectively prosecuting the above processes. Evaluation comprises the systematic acquisition of information on the use, worth and impact of a program, project or process in relation to its intended outcomes. Systematic gathering of this feedback is crucial to ensuring quality of provision and the successful management of a program or project. The most basic distinctions between the various types of evaluation are often drawn between front-end analysis, formative, summative, and monitoring or integrative evaluation.

About the Terminology

The term “evaluation” is sometimes used to refer to the process of assessing student learning. For our purposes here, however, we see “evaluation” and “assessment of learning outcomes” as distinctly different processes. Evaluation, as described above, comprises the gathering and observing of a broad range of evidence in order to gauge the impacts and effectiveness of an object, program or process. “Assessment” is the process of examining the achievement of intended learning outcomes by students.

STEPS IN THE PROCESS

Table 1 offers an action plan which, if pursued, is likely to lead to quality processes and provision. It covers all the phases of the evaluation process, their foci and possible strategies for prosecuting these processes. Also included in the table are numerous key online resources where examples of evaluation instruments can be found. The following steps suggest where to begin this process and how to proceed from there.

1. Defining the Purpose and Scope of the Evaluation

The first thing to be very clear about is what needs to be evaluated. Is it the students’ experience with the course or program, or their cognitive outcomes? Clear answers to this question help to identify the
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