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What's on the Menu for effective Instructional Design in ODeL?

Issue at-hand

A discussion on instructional design in open, distance and electronic learning is subsumed by the online technology that effectively enables distributed learning and brings about student persistence and satisfaction. Decisions about online Learning Management Systems, the audience, bandwidth, connectivity, program presentation as well as costs have to be taken. These variables are discussed at length in more modern theories like the Community of Inquiry and Salmon's e-tivities¹. So when taking decisions about the elements that should go in the instructional design of an ODeL content development, the above-mentioned theories have to be woven into all instructional design decisions taken.

What are the essential elements of instructional design in ODeL content development?

Instructional design can be defined as the application of elements of learning and teaching theories to a body of knowledge to ensure that those interacting with the 'learning materials' are in a position to construct new and meaningful knowledge out of the existing knowledge. It refers to the arrangements within the learning content to make it more manageable for the learner. An instructional designed program is mediated by technology to contribute to student persistence through an appropriate mix of dialog and structure. Instructional designing for online distance education or ODeL often represents a challenge given the fact that physical contact is often completely missing in such contexts: in fact it is the instructional design that has to bridge the transactional distance between the tutor and the learner.

¹ E-tivities are frameworks for enabling active and participative online learning by individuals and groups. E-tivities are important for the online teaching and learning world because they deploy useful, well-rehearsed principles and pedagogies for learning as well as your choice of networked technologies. (<http://www.gillysalmon.com/e-tivities.html>)

Policy recommendation: *When developing ODeL programs it is important to ensure that (i) several teaching and learning theories weave together to strengthen approaches that will support the learning experience, (ii) the teaching act is re-created to enable the ODeL professional gain full benefits of the programme, and (iii) enough space is provided to support the practitioner's reflection on what works best for his/her student.*

Elements of instructional design

There are important constructs surrounding instructional design variables that go into the making of a course for distance delivery. Essentially these are the degree of autonomy and control that the course developers wish to give over to their audiences, the level of interaction, learner persistence and satisfaction as well as the efficiency of the program.

Approach to content development

In the first instance, any chosen instructional design model should ensure that two elements are respected: **Effective Teaching** and **Effective Learning**. A comprehensive instructional design model that helps articulate both is a blend of the **ADDIE²** model of programme planning. During this planning stage, competency gap analyses will inform the development of the instructional materials and the choice of most appropriate delivery technology as well as provide clarity on defining the learning outcomes.

Audience

When we talk of instructional design, the first consideration goes to the audience. It is clear that a good understanding of the audience specificities like level of literacy, level of understanding and ability to grasp new notions as well cultural and environmental elements need to be evaluated to help construct an effective program. If the audience has a low literacy level and especially low digital literacy level, special approaches may need to be devised to enable the audience engage with the online learning content. If the audience cannot read for instance, alternative means of reaching it must be reflected upon. Audio and video alternatives are a good way to reach out to such learners. If there are environmental challenges like low bandwidth and connectivity, other arrangements must be made to scaffold the learner's participation in the learning endeavour.

Learner control/autonomy

Some scholars believe that since the learner is separated from the teacher, the learner has to exercise a considerable amount of autonomy and control over the learning process. This may mean the amount of control (i) over interaction with the course content (ii) in establishing

² The ADDIE model is an instructional systems design as well as a program planning model. ADDIE: Analysis; Design, Develop; Implement; Environment and Evaluate (Gokool-Ramdoe, 2008).

learning objectives as well as assessment strategies and (iii) over the entire learning experience (that is choices exercised regarding finances, registration , credit transfer (Shearer, 2007) and time frame for program completion for instance. The amount of control that a distance education program provides the learners is critical to their successful completion (Shearer, 2007). In the transactional distance theory, Moore (1993) argues that a careful balance must be struck in matters of learner control and autonomy: too much structure and little control in the learning program can alienate the adult learner. On the other hand, too little structure and guidance can also lead to the learner to flounder. So the instructional designer needs to be able to judge the amount of control that s/he can allow the learner to have.

Interaction

In online distance education, interaction happens at various levels as follows: learner-learner, learner-content, learner-tutor and learner-technology. The instructional designer should choose from the large range of media combinations available, those technologies that are most suitable for learners in terms of cost, accessibility and effectiveness. Interaction is of primordial importance: the main idea being to decrease distances in the teaching-learning transactions and to make the learning experience meaningful and satisfying (Gokool-Ramdoos, 2008). Learner-learner interaction and learner-tutor interaction especially have to be particularly examined with regard to the frequency of occurrence, timeliness of interactions and also the type of interaction (threaded conversations, forum debates, blogs etc.). It is also important to understand cultural and contextual issues when interaction is under consideration because these often influence learner participation online. Sometimes learners are simply passive observers lurking in the background while other learners can be more forthcoming and take the lead.

Technology

Powered by technology, distance education has become increasingly accessible for the masses, thereby opening up individual choices. Technology, especially Web 2.0 tools have been responsible for a makeover in the landscape of distance education. Online distance education has become almost ubiquitous, give and take connectivity and bandwidth challenges. On the online Learning Management System, the notion called 'distance' in distance education has changed completely. For instance, synchronous and asynchronous access to the tutor has broken down geographical barriers. The impact of technology on distance education has been such that it has required and prompted many important investigations. Some of these studies have suggested that continuous research in distance education has moved it from its earlier marginal status to the mainstream: in many respects it has even almost seamlessly merged with regular face to face education. With online forums and threaded conversations as well as constant opportunities to interact with fellow student and learners through blogs, secured

internal e-mails and drop-boxes, the online distance education classroom is only a mouse-click away. Distances are greatly reduced and whereas in face to face education the professor may never personally interact with the lurking student at the back of the lecture theatre, in the online classroom, nobody can lurk forever.

Instructional design challenges

In online distance education the quality conscious instructional designer has to devise strategies to (1) get to know each single individual student (Pimentel Bótas, 2008); (2) address the learning style and approach of each single individual student (Strother and Alford, 2003) in the classroom; (3) prepare and present the learning material and activities in various formats including texts, videos and audios in order to address most of the various abilities and multiple intelligences of a diversified students body (Strother and Alford, 2003); (4) provide structure while allowing students to take control over their pace and time of learning; (5) allowing time to students digest and make sense of the learning material and their own learning processes (meta-learning); (6) provide students with various types of assessment that take into account the 'learner variables, such as learning styles and multiple intelligences' (Strother and Alford, 2003: 1976); (7) keep the motivation of students going so they actively engage and interact of students with the learning content, learning and assessment activities, their peers and their teachers; and (8) provide a safe and trusting learning environment where students are not afraid in pursuing and presenting knowledge and expressing their concerns, feelings and anxieties.

In order to address all the challenges listed above, teachers must become aware of their philosophical standing point (Kanuka, 2008) and theoretical approach (Ally, 2008; Anderson, 2008) to their teaching practice, curriculum design, and the development of learning activities. And in ODeLPD content development, instructional designers must ensure that the professional has the opportunity to wear both, the hats of the teacher and the learner, to better reflect on both experiences.

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