

Online Learning Environments

A Report of an Instructional Design Case Event

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Abstract

This is a discussion about the role of a case or authentic scenario in an online learning environment. Using authentic cases for intentional learning promotes effective, cognitive, and affective transfer between learning space and performance space. Creating an online case event provides an opportunity for learning design professionals to use instructional systems design in an authentic, team-oriented, web-based learning environment. A case approach aids the Instructional Systems Design (ISD) learning process and helps to facilitate further research of online learning environments. Case studies have been an effective tool for developing professional knowledge across disciplines, however, case events dedicated to the study and practice of instructional design is limited among learning services professionals. The purpose of this discussion is to offer educational benefits about learning and practicing instructional design within an online learning environment.

Introduction

There are too few opportunities for learning service professionals and students to practice authentic instructional design as a part of their respective training and academic preparation. The professional practice of instructional design (ID) requires high-level problem solving, critical thinking, and interpersonal skills; design problems are often complex and multi-dimensional. Novice instructional designers face practical issues for which they were not prepared (Julian, Larsen, and Kinzie, 1999). Analyzing cases provides an opportunity to explore professional issues while students learn (Kinzi, Hrabe, and Larsen, 1998). Learning through a case-based environment allows novices to analyze the case, reflect on relevant theories and techniques in attempting to understand a real problem, develop a response, and consider potential consequences.

Over the past several months, we have explored aspects of an educational approach using an online case event that served to provide designers with an opportunity for teamwork in an authentic environment. The components of this discussion include: 1) a review of the case method as a learning strategy, 2) the role of a case in an online learning environment, and 3) learning instructional design from a case experience. This discussion concludes with recommendations for using case method for a successful online learning environment.

The Case Method as a Learning Strategy

Case methods help students examine theories during the learning process, and to apply these theories to situations they may encounter when they are no longer students. Educators and trainers should regard a classroom as any learning space, performance spaces of the information age can be situated at remote sites, accessed at convenient times, and personalized to match the capability of individual learners. Each episode of guided learning is distinctive and separate, while remaining part of a larger curricular scheme. Using case methods and an online learning environment, students' learning space becomes larger than a traditional classroom and is similar to performance space.

Case events help learners to think like practicing professionals by seeking solutions in realistic situations. Case events have been used extensively in professions such as law, business, and medicine and more recently have gained popularity in other professions such as teacher education, engineering, nursing, and instructional design (Ertmer & Russel, 1995). Merseth (1994) advocates case study methodology for an appropriate tool for teacher education. Merseth states that a case study is a descriptive research document, often in narrative form that is based on an authentic situation. According to Merseth, "there are three purposes for using cases: 1) cases as exemplars; 2) cases as opportunities to practice analysis, the assimilation of differing perspectives, and the contemplation of action; and 3) cases as simulations for personal reflection" (1996, p.3). Case studies provide realistic scenarios that encourage students to recognize the link between theory and practice, weigh resource constraints in choice alternatives, practice

analytical skills, and develop related skills such as group decision making and communication (Rupe, 1993). Thus, case-based approaches help to close the gap between what happens in the classroom and the expectation of the reality outside the classroom in the performance space.

The Role of a Case in an Online Learning Environment

Internet technologies provide an effective vehicle for delivering cases to students, and other case event participants. The use of the Internet provides case materials and online environments for case discussion. Case studies are now available online and case discussions can be conducted using asynchronous and synchronous online discussion tools. Perry (2000) claims the “Internet and multimedia, which includes the non-linear integration of video, audio, graphics, and text, can provide a rich environment for case studies that promote the construction of knowledge about integrating technologies into the curriculum of a learning community of peers and faculty facilitators” (p. 4). The online instructional design case event discussed here subscribes to Perry’s position that an online case experience promotes an integrated, action learning approach with the potential to increasing effective practice. Kovalchick, Hrabec, Julian, and Kinzie (1999, p.145) suggest that the web provides three significant capabilities for the delivery of case studies:

1. The ability to simulate real-world complexity,
2. The ability to use multiple media in case presentations, and
3. The ability to use hyperlink/hypertext navigation features.

Presenting case studies on the worldwide web (WWW) offers additional educational benefits, including incentives to learn, and new and flexible learning methods (Hayden & Ley, 1997). The Internet provides a unique environment for presenting case studies that allows users to gather information, identify issues, create solutions, receive feedback, and gain experience through problem solving. The interactive nature of the WWW and e-mail encourages students to consider various perspectives and possible solutions and to develop a rationale for decision making while enabling worldwide discussions.

Case events allow students to construct knowledge in authentic environments, assume personal responsibility for learning, and work cooperatively to produce something of real value (Grainger, 1996). Case experiences also provide students with genuine opportunities to experience the risks and consequences associated within a defined context, allowing students to explore professional issues while they are still learning about design. Kinzie et al. stated, “cases should offer enough depth and complexity to provide realistic challenges” (1998, p.55). More specifically, case based competition is beneficial to learners because knowledge and skills are best learned in contexts that reflect the way they will be useful in various realities. Learning in case-based environment allow teams to analyze a case, while experts in the field pose questions, evaluate case responses, and contribute their own perspectives. Online case-based events are student-centered, active learning experiences where students can reflect on relevant theories and techniques in attempting to understand a genuine problem, develop a response, and consider a variety of acceptable responses to a given situation.

Learning Instructional Design from a Case Experience

Instructional design is often learned informally on-the-job or as an isolated, stand alone college course. However, recent evidence suggests an action learning approach as an effective strategy for becoming proficient in the practice of instructional design (Bannan-Ritland, 1999). The principles of an action learning approach provide a framework for re-examining methods of teaching of instructional design. Components of action learning correlate closely with the specific challenges involved in teaching the ill-structured, complex problem solving processes of the practice of instructional design. An action learning approach provides instructional design practice in businesses, schools, and government as a part of their respective training and academic preparation prior to assuming employment as an instructional designer.

Action learning is an instructional strategy used in training and education to increase the fidelity between learning performance and job performance. The problem is that many training tasks are de-contextualized and incongruent with workplace realities, thus having a low fidelity between what occurs during classroom preparation and what is expected on the job.

Action learning is a performance-oriented, learner-centered, instructional strategy. The purpose of action learning is to promote immediate and long-term learning transfer. Action learning is facilitated

through a coaching model approach where an experienced person is partnered with an individual or team and the coach is available to answer process questions during the training and for a designated period after completion of the training. While action learning incorporates several learning theories, five attributes are necessary for an instructional strategy to be considered as an Action Learning Approach:

1. Active
2. Interactive
3. Situated
4. Authentic
5. Case-based

Authentic instructional design should emphasize learning objectives that represent the training context while on-the-job objectives represent the actual performance context. Learning objectives describe what the learners will be able to demonstrate with the learning environment. However, the learner's performance in the classroom or at the computer in a computer-based training environment is not necessarily the same as the on-the-job performance. Learning on simulators, models, through hands-on practice, role-play scenarios, and actual equipment and tools, provides more effective training than learning exclusively from lectures, demonstrations and other passive techniques.

We have explored aspects of this educational approach during the past year, by constructing an online case event (<http://www.itcaseevent.com/>), at the Educational Psychology and Instructional Technology Department, University of Georgia. We believe such an online case event will provide an opportunity for participants to practice instructional design in an authentic, team-oriented, online learning environment. The process is a rewarding, challenging and complex endeavor. A case needs to be created that illustrates an authentic problem requiring an instructional design solution. While developing a case for an event, consideration should be given to the fact that novice instructional designers require a genuine problem to reflect the situations that they would encounter in the workplace, or approximate this environment as closely as possible. The intended audience for the event needs to be determined. The rationale for authentic learning is that learners can only realize the utility of the concept being taught by focusing on an authentic problem and hence, providing an authentic solution

Recommendations

This discussion has focused on ways in which online case events provide opportunities for learning service professionals to engage intellectually in solving authentic instructional design problems. We presented ways case methods provide an opportunity for the case event participants to discuss professional issues about instructional design in an online learning environment. We discussed about how online case events provided an opportunity for participants to use instructional design in an authentic, team-oriented, web-based learning environment.

We believe case-method teaching and provided learning strategies promotes discussion of complex educational dilemmas, reflection on successful learning strategies, and ways to evaluate, summarize, and communicate perspectives about the shared case experiences of online case event participants. Based on our experiences thus far, we offer the following recommendations:

1. The case event should illustrate a genuine and authentic problem that requires an instructional design solution.
2. The case event should be designed to challenge participants to demonstrate knowledge of instructional design principles and this exercise should incorporate the problem that was presented.
3. The project manager for the online case event should be chosen based upon ability to generate a plan for communication between all stakeholders and excellent time management skills.
4. Careful preparation allows design teams to anticipate obstacles and potential barriers to accomplishing their goal.
5. The support of the design team and client are important. Sufficient aid from outside sources is imperative, including technical support staff and colleagues in the field.

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