KELLEY DIRECT (KD) TOOLKIT: TOWARD THE DEVELOPMENT OF INNOVATIVE PEDAGOGICAL TOOLS FOR BUSINESS EDUCATION

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ABSTRACT

KD Toolkit shows a representative synthesis of the best practices learned by world-renowned instructors in a top ranked online MBA program in the United States. This article will share and discuss the pedagogical implications of this learning technology and the leadership and innovative effort of the program that afforded the development of KD Toolkit for an engaging learning environment.

INTRODUCTION

There has been a big movement of creating and experimenting new instructional paradigms, with advanced technologies to assure the quality of distance education. The field of business education is not exceptional. The purpose of this paper is to share and discuss best practices of a representative learning technology that has developed and implemented for online instruction: Kelley Direct (KD) Toolkit. The theories and practices along with KD Toolkit will give eLearning practitioners some valuable implications on how innovative tools can support students to create meaningful learning experiences.

KD is an online program in the Kelley School of Business (KSB), Indiana University which is responsible for the design, development, and delivery of online business education. In the 2004-2005 academic year, Kelley Direct offers MBA and MS degree programs, as well as certificate programs. The student body is approximately 1000 students. It is a diverse group geographically, attracting students from every region of North America and internationally.

Typically, tenure-track faculty teaches courses in Kelley Direct. A KD policy limits enrollment of 40 students per teaching section. Many courses offered during the year attract an enrollment greater than 40 students. In these instances, multiple sections are offered for the same course and the same instructor will teach multiple sections of a course.

KD's philosophy toward instruction is straightforward: The instructional goal of the professors when teaching a KD course is to provide an educational experience commensurate to what is learned by students enrolled in other graduate degree programs. This philosophy has exerted a profound influence on the pace and direction of KD's instructional efforts. From the inception of the program, KD's policy has been to support directly the instructional efforts of faculty and to assist them to devise personal strategies for teaching their courses online. Prior to teaching a course for KD, faculty receives a course development grant. There are few guidelines or regulations to restrict professors in their efforts to build an online course. The Faculty KD Policy Committee has declined to endorse any effort to develop a teaching template or standards for online instruction. The underlying

goal for instruction is to facilitate faculty in their attempt to transfer their knowledge effectively to teach face-to-face in the online environment. There are two important reasons for why KD has given greater support in attaining this goal: First, the Kelley School of Business faculty has gained a national reputation for the quality of their graduate instruction. In recent published rankings of MBA programs, the quality of faculty instruction has been ranked as "outstanding," and in a recent Business Week ranking, the KSB faculty were ranked as the top teaching faculty in the United States. Since the KSB faculty represents a highly effective and experienced group, and has proven how to deliver high quality teaching, KD and KSB administrators recognized that the faculty was an important asset whose role should be leveraged when developing the KD online degree programs. The second reason is when KD was launched in 1999, there had not emerged a strong consensus on a standard format for effectively delivering online business education. As a result, the decision was made when launching KD's online programs to build upon the often disparate but innovative efforts of the faculty. This strategy can be described as the "let a thousand flowers bloom" strategy for new course development, and explicitly relies on the faculty to derive innovative efforts. Moreover, this strategy complements a philosophy which suggests that most efforts at innovation are attempts to express local knowledge to address particular issues. The strategy and philosophy reflect several fundamental beliefs. First, in the early stage of KD's development there was a belief that there had not been established a common core of knowledge on how to teach business online. Second, there is a belief that whatever attempts have been made to establish standards in online teaching or course templates, all are proved to be ineffective and the results would be a significant diversity among the business disciplines. Finally, KSB administrators held an explicit belief that the KSB faculty would be more effective in their efforts to create an effective pedagogy for online teaching of business education rather than rely on the efforts of consultants and professionals in online teaching, but who's expertise would be on any other subjects than in business education.

Among many efforts KD has taken to support faculty in their efforts to develop online pedagogies for business education, KD has taken the lead in establishing advanced technology infrastructure and developing technological tools to enhance teaching and learning environment. Kelley Direct uses a Course Management System (CMS) called Angel, licensed from CyberLearning Labs. The Angel CMS is a comprehensive course management system designed to allow an instructor to perform a wide variety of pedagogical, administrative, and programmatic duties associated with the design, development, and delivery of an online course. For example, the CMS allows faculty to design an online course. Using Angel, instructors can post their syllabus and course materials for students. Instructors can register students, establish an email distribution list, and post course announcements. Once a course begins, an instructor can maintain an ongoing dialogue with students using Angel tools. There is an Angel chat room, a forum, and a bulletin board to facilitate student and instructor interaction. Finally, Angel offers an instructor several tools to support course administration. For example, students can upload course assignments into an online grade book, the instructor can download the assignment online, review and grade it, and then the student can review comments added to the assignment as well as review their assignment grade.

While the Angel CMS provides a useful platform for instruction, it is not designed specifically to foster business education. Instead, Angel is a general tool and therefore it

is not surprising that KD uses Angel as a platform upon which more finely-tuned teaching tools can be incorporated.

Innovative Technologies for Online Instruction:

KD Toolkit

The Kelley Direct Toolkit is a suite of online teaching tools that have been developed by KD programmers, instructional designers, and faculty those who have years of teaching experience. The Toolkit is comprised of a set of functions that can be incorporated easily into any Course Management System. The tools address a variety of pedagogical and administrative needs for faculty who teach courses online. Key tools include KD Evaluation System, KD Customized Forum, KD Team Builder, and KD Slideshow.

KD Evaluation System

The concept of evaluation of learning has been rigorously expanded to be proactive, weighing the same value on learning process as learning outcomes. A learning theory from the perspectives of constructivism defines the whole process of student activities as learning experiences (Driscoll, 2000). Ongoing information from tracking the data of students' learning process from various sides triggers students to reflect how much or how far they have learned. However, what usually occurs in online courses is that online instructors tend to ignore the diagnostic of the learning process partly because the most commonly used CMS lack flexibility to customize course evaluation tools.

The KD Evaluation System is designed to allow flexible customization for both formative and summative evaluation to assure the quality of the courses. KD Evaluation System pursues assessment activity by itself, as a mode of ongoing learning experiences to both evaluators and recipients. This tool allows students with the instructions to participate in the evaluation and assessment program quickly, easily, and efficiently.

Important features of this system are that the content and format of a questionnaire can be edited or locked, open to all students, or access can be restricted. All forms of evaluative items rating scales, short answer, essay, and so on can be incorporated into the evaluation system. These features allow a school of business to make available the official Kelley School of Business course evaluation questionnaire used by KSB in online, to assess faculty teaching and to ensure student privacy in completing and submitting their responses. An instructor can also add items to the questionnaire to receive a more in-depth student assessment of their course.

The KD Evaluation System can also be adapted to provide student feedback and assessment. For example, the evaluation system can provide a framework for students to provide peer evaluations and to participate in "360 degree" feedback. This type of assessment is a significant feature in learner-centered development programs. This type of feedback has the power to allow students to share multilateral perspectives or opinions on one single topic or issue, which facilitates students to elaborate or reorganize their thoughts.

In addition, this feedback mechanism is important while providing leadership training online or giving any skill-based instruction on how to work and lead virtual teams. As schools continue to design and deliver degree programs with fewer days of in-residence, importance mechanisms that provide students with the ability to participate in virtual leadership and team-building activities are also increasing. An integral piece of these activities is to develop an online mechanism for peer assessment and student leadership development such as the popular "360 degree" feedback mechanism. The pedagogical concept of formative evaluation rather than traditional summative evaluation is underlying this diagnostic "360

degree" assessment and formative feedback mechanism.

KD Customized Discussion Forums

KD Customized Discussion Forums are pedagogical tools developed to reflect the teaching philosophy of the faculty at the Kelley School of Business better. In short, KD has developed a set of forums designed to address a critical issue in online business education, namely "how to teach using the case method".

The case methodology is prominent for teaching graduate business education. Instructors at many schools use the business case as the foundation of their teaching. In fact, there are several top schools of business that make teaching via business cases of their core instructional tool across the entire curriculum.

The KD Customized Discussion Forums builds on the collective teaching experience of the KD faculty in their efforts to lead online case discussions. At its core, business case studies follow a simple plot line: the reader is presented with much data and information on a business situation, there a character is identified in the case and is described as the character is confronted with a situation in which a decision or set of decisions must be made, and then once the protagonist announces the initial decision, a chain of events is unleashed. Good cases create tension among learners. Several possible scenarios are presented and each is fraught with potentially negative outcomes. Then the main character must select a course of action and implement it. Effective case teachers encourage their students and force them to identify themselves with the characters and their problems. A key piece of any case teaching strategy is to devise pedagogical techniques that ensure the students to participate in the case discussion and actively explore the implications of the path they endorse with other students and the instructor. Dialogue and interactivity are key components that lie at the heart of effective case discussion. KD faculty require the staff support to develop tools that will allow faculty to get the students engaged in an ongoing discussion over a business case and to effectively create an environment for case discussion that is similar to what occurs when faculty leads case discussions in the classroom. In response to these needs, KD drew upon faculty experience and created course tools that allow faculty to teach business cases online. The KD Customized Discussion Forums is the outcome of collaboration between KSB faculty and the KD instructional support team.

In the KD Discussion Forums, an instructor can select from four different discussion forums. Each forum is designed to support case discussion. Each forum establishes a different environment for a class discussion. The forums are called Q&A Forum, Round Robin Forum, Simple Forum, and Role Play. An instructor can combine forums and then string them together over time to structure a business case analysis online that meets an instructor's learning goals and aspirations. For instance, in Q&A Forum, students cannot see any posts of peer students until they post their own opinions on bulletin boards. This allows enough time and opportunity for students to articulate what they have in mind and how they express their perspectives. This function helps student to reflect on their learning and facilitate their own knowledge construction, independent of others' thoughts. Round Robin Forum provides opportunity for students to respond to a series of multi-phase case scenarios and thus develop problem solving skills under a sophisticated problem context. Role Play forum also is the place where a student can take an active role in case discussions or debates relevant to a particular topic. For example, a business law professor uses role-based discussion forum to designate the roles of "judge", "plaintiff" and "defendant." Each party places arguments

in a simulated court forum (Figure 1). Role play provides an authentic learning environment where learning is situated in real world context (Herrington & Oliver, 2000). With Role Play forum, students experience the same or at least similar conflicts and confrontations they could face up in the real business worlds. Throughout this activity, students would become familiar with how to lead arguments, make decisions, and negotiate others for better solutions.

Figure 1. KD Customized Forums

KD Experiential Learning Tool

KD created a tool that structures patterns of communication. The tool creates nodes in a communication network and allows dyadic and triadic patterns of communication. With this tool, a node can be created for individuals or teams. In addition, communication flow can be established within the network to be symmetrical or asymmetrical within any dyad or triad. The identities of the participants in each node can be revealed or hidden. Finally, the number of nodes and the direction of information flow. As a result, an instructor can use this tool to structure dynamic, experiential learning activities.

The Experiential Learning tool can be used to build role playing simulations, to create "living cases," or to provide greater realism in a case discussion. Unlike many existing role play programs which can only assign fixed roles, the tool allows instructors to have flexibility to design multiple presentations of case realities (Jonasson, as cited in Mergel, 1998), or to structure cases progressively from simple to increasingly complex communication patterns to meet learner needs in different stages of an online course. This tool has already been adopted for use in a wide variety of business disciplines: supply chain and operations management, business law, strategic management and project management. The tool is extremely robust and areas of application are limited with the imagination and creativity of the faculty alone.

KD Team Builder

KD Team Builder (Figure 2)is a novel solution to a difficult problem in an online environment: How to form student teams in an online environment without requiring substantial effort by faculty. Student teams are an important component in online education. Many of previous studies stressed that the use of teamwork in an online environment can assist co-knowledge generation and prepare students for the real world (Duarte & Snyder, 1999; Palloff & Pratt, 2005). It is fundamental to understand how collaborating in online is possible at a distance and what would be the preparation taken for virtual teaming. In this sense, the initial question raised from online instructional designers and instructors is how to form student groups. KD Team Builder was developed to facilitate students to be aware of a sense of belonging to a particular team with empowerment of team choice. An instructor will explain about the sound pedagogical

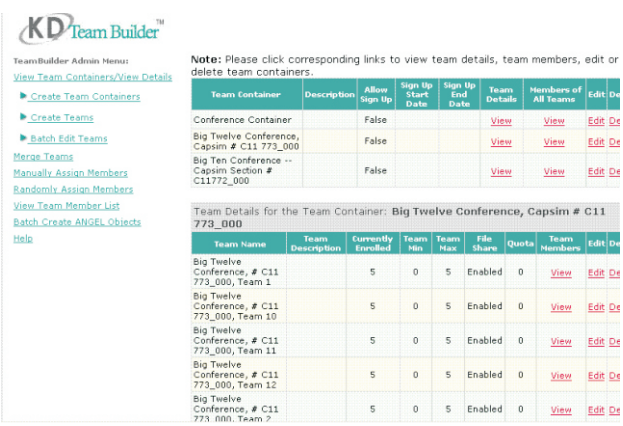

Figure 2. KD Team Builder

reasons and for why students can be assigned to a team, students can be allowed to form their own team or students can be assigned teams but then be afforded the flexibility to switch from one team to another. Ideally, an instructor would like to create a platform for establishing teams that won't require the instructor to be in the middle of the process.

KD Team Builder provides a single, integrated platform that allows an instructor to specify the conditions under which students will participate in a virtual team. Then, the instructor does not have to be involved. For example, an instructor can specify that students can form their own teams, that there must be four to six students in a team, and that students cannot form more than six teams for one project. The KD Team Builder can establish an online sign-up sheet for students to build their own teams. While a team is being built, team members and potential team members can exchange emails to assess their compatibility and willingness to collaborate. Once a team has the maximum number of students in the team, access to the team will automatically close and students will no longer be able to attempt to join the team. This function of team building could allow students to have the sense of ownership for their online collaborative work as well as reduce the administrative workload of instructors.

KD Presentation Tool

KD Presentation Tool (Figure 3) is a tool that enables students either individually or in teams to develop a single, shared PowerPoint slide show, to develop it collaboratively

Figure 3. KD Team Presentation Tool

in a private work space and then to make it available for other students or teams to review it online and to comment on it.

The presentation tool allows students to make online presentations in a manner that closely resembles the time-honored in-class presentation by student groups. This tool provides an experiential learning experience that allows students to collaboratively construct and transform a learning product in a knowledge sharing community (Jonassen & Rorer-Murphy, 1999). This tool mediates a collaborative learning process that enforces meaning-making and knowledge internalization of online learners. Such pedagogical tool is lacking in existing commercial course management systems provided by most vendors. In addition, by providing a single platform that includes private and public working spaces and allowing every student to view the same PowerPoint file, this practice is made easy and efficient for online learning.

Conclusion

The role of technologies and tools are central to online teaching and learning considering that technologies can support instructors to deliver information and lectures. However, online educational practitioners should be aware of the fact that technology itself cannot support students to communicate and collaborate for all instructional activities for building meaningful knowledge, unless the development and use of the technologies are not based on pedagogical considerations.

In this sense, the KD Toolkit shows a representative synthesis of the best practices learned by KD's world-famous instructors on how to effectively teach in an online environment. Based on the expertise in teaching business cases in a traditional classroom setting, the KD Toolkit has focused on developing tools to facilitate online case analysis. However, the tools have been developed in a manner that enables them to be applied in a variety of

teaching areas and are not limited to business education. The tools are easily scalable and can accommodate large enrollments. Finally, the tools are built to be used by faculty, not by an instructional support team. This ensures that the Toolkit will be an efficient method for delivering online instruction and that the design of the tools will evolve as the teaching goals and competencies of the faculty evolve.

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