

Using Technology in Teaching (Book Review)

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Textbook Details:

Using Technology in Teaching

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Overview

The book "Using technology in teaching" is about using common technology to support everyday teaching activities. The authors of the book are William Clyde, dean of academic technology (finance teacher), and Andrew Delohery, director of the Learning Center (English composition teacher), both at Quinnipiac University, Hamden, Connecticut, United States. The aim of the book is to give practical ideas to instructors or teachers for enhancing their teaching with technology. The authors have divided the book into nine chapters organized around instructional goals and commonly encountered tasks and problems in teaching. Each chapter presents a different instructional activity common in many educational contexts, such as distribution of the course materials to the students, collaboration as a way to improve learning and learning through experiences. The chapters introduce several technological solutions to support the presented activities. The solutions are mainly based on technological tools that are widely used and easily available, such as emails, word processors, and Course Management Systems (CMS).

Chapter Summary

Each activity (e.g. chapter) is presented through several cases or practical scenarios which are common in everyday teaching. The following example is a scenario where students are contacting the instructor between classes (related to the communicating with students activity): "*You have a big exam coming up in your class. You expect several lastminute questions as your students prepare for the exam. Unfortunately, you must be at a conference the two days before the exam and will miss office hours both days* (p.1).". The authors then present how to use email, threaded discussion and chat in this scenario. All the chapters in the book are organized in a similar way. Each scenario within a chapter is presented separately (or in some cases two scenarios are presented together). First, the authors present a non-technological solution to the scenario's challenges. Secondly, usually several technology-based solutions with relation to the traditional solution are presented. Finally, potential pitfalls of the technological solutions are discussed.

Chapter 1 deals with the need to communicate with students during a course. The authors stress, for instance, the value of between lectures communication. Scenarios within the chapter include issues such as making changes to lectures and students submitting course work. Technological solutions based on common email programs, threaded discussions (within a CMS tool), chat and web postings are presented. Chapter 2 covers the activity of distributing course materials to students during a course. Scenarios within the chapter consist of cases such as distributing the course syllabus, providing access to extra materials and providing graphics, videos and audio materials to students. The authors present, for instance, how to send a course syllabus written with a word processor to students via email. The authors also show how to use hyperlinks to provide supplementary material. Chapter 3 includes instructions on how to support collaboration among the students. The scenarios in the chapter deal with issues such as facilitating group work and fostering peer feedback. The authors present, for instance,

how to use discussion forums to organize peer learning activities. Other solutions presented in this chapter are based on chat, annotation and change tracking features in word processors to give precise feedback.

Chapter Four of the book explores the possibilities to support learning through experience. At the beginning of the chapter, the authors give a short introduction on how a teacher can find technology tools for supporting “virtual” experiential activities. The authors present a set of tools that they have found from MERLOT (Multimedia Educational Resource for Learning and Online Teaching) database. The following tools, for instance, are presented to give an idea of what virtual environments can offer: A.D.A.M virtual learning system for learning human anatomy, Sniffy, The Virtual Rat for learning the idea of conditioning and Chemland for exploring the field of chemistry. Some of the presented tools are freely available for everyone. In Chapter 5, the authors show how to use hypertext to build and present a course with the Strategic Planning model framework. Hypertext is used, for instance, to link course activities and assessment to course objectives. The authors also show how to use hypertext to provide detailed information about different aspects of the course to the students. In Chapter 6, different solutions are discussed to improve students writing activities. The authors present, for instance, how to use commenting and highlighting functions in Word to give feedback to students. Technological solutions to detect plagiarism are also discussed. The theme in Chapter 7 is to improve students research skills. The authors acknowledge that there is a growing need for students to be able to find and evaluate information on their own. They explain, for instance, how to use search engines, online databases and virtual libraries to find relevant literature. Chapter 8 deals with technical solutions to use assessment and feedback to enhance students learning. The authors present, for instance, how teachers can use technology to provide targeted feedback and follow-up instructions to the students with word processors and CMS tools. In the final chapter, the authors show how to use hypermedia to gather course materials in the course. The authors also discuss how students can use technology (mainly web searches) to find relevant information for a project work. At the end of the book, there is an appendix that includes a short introduction to copyright laws in U.S.A. The appendix also includes a list of plagiarism detection services available in the net. The final part of the book is a glossary including all the technical terms used in the book.

Evaluation

The authors take an interesting approach by presenting technological solutions through practical cases and scenarios. This gives a contextual nature to the theme of the book; how to apply technology to support teaching activities. The authors have very positive attitude throughout the book. One can sense that they really appreciate the possibilities of technological solutions. The book includes lots of practical examples and solution alternatives to show that technology can be applied by teachers who master the basic technology. The technology does not exist on its own right, but it is applied to overcome real problems and challenges in teaching. The real need and meaningful use of technology is emphasized throughout the book. All the concepts and terms are explained carefully. All new terms are underlined like links in webpages and there is a separate explanation box for the term in the same page. Furthermore, the authors have gathered a comprehensive glossary of relevant technological terms at the end of the book. The text was also easy to read and follow. The authors use nontechnical style avoiding confusing ICT jargon. Various snapshots taken from different applications and tools clarify the authors message. The structure of the book is clear because all the chapters follow the similar structure as explained earlier. However, because same technology is applied in several scenarios there is some repetition. In my opinion, Chapter 9 does not include any new perspectives. The authors could have distributed the content of the chapter to other chapters.

The main shortcoming of the book (to a person working in educational technology with computer science background) is that it does not progress from commonly used tools, such as word processors, emails and CMSs, to more advanced technologies. This is, however, acknowledged by the authors already in the introduction part of the book. *“This book is not for the technology innovators, nor it is for the skeptics. It is for the 75 to 80 percent in the middle: the mainstream faculty who are using some technology..”*, authors point out in the very first page of the book. For me, the most interesting part of the book was Chapter 4. It included several examples of more advanced technologies, such as tools for experimental learning (e.g. virtual reality), role playing via the net, and problem solving (for instance Mike's Bikes – Advanced; simulator for experiencing the creation of business strategies). The chapter also includes a short introduction to the content of MERLOT database for searching meaningful tools within different disciplines.

I also found some minor problems and improvement areas in the book. First, the amount of figures is even too high. Although the figures support the text nicely, the authors could have decreased the amount of snapshots at some parts of the book. This would have given the opportunity to deepen the discussion to more advanced use of

the technology. I also found that the authors explained some basic functions of the tools too carefully, such as saving a picture from a website. Some figures are also blurred (e.g. Figure 4.11, Figure 4.2a-b), it was difficult to see the content of the figure clearly. Furthermore, in some figures the authors use annotation to clarify the meaning of some functions. The black text inside the annotations is placed in a dark background making it hard to read (e.g. Figure 6.2, Figure 6.3). Although every technological solution includes a short discussion on potential pitfalls, the authors could have deepened the discussion in this section. In many cases, they mention that the main problem is that students are not able use or do not know how to use the presented technology. For instance, in Chapter 8 the authors explain that the main pitfall with online surveys is that students do not know how to access or use the available survey tool (p.192). I would have expected more discussion about technology per se. For instance, in my experience the discussion forums in many CMS tools are often limited. They do not support, for example, graph-like presentation of the discussion threads. In some cases, it is also difficult to give precise feedback using the discussion forum. We have found, for instance, that commenting a piece of programming code with a common discussion forum can be a problem. It would have been useful to know, for instance, how the authors would develop these tools to make them even more useful or what needs cannot be fully met with available technology. The supplementary CD-ROM was aimed to improve the understanding of technology presented in the book. It included video snapshots of tools discussed with audio explanation. In the CD-ROM, the authors present, for instance, how to set up discussion threads in the Blackboard CMS tool. In my opinion, the CD-ROM does not provide much extra value to the content of the book.

I would recommend this book to a teacher who has not been working with the technology, but would like to enhance his/her teaching through the technology. Furthermore, the book might be used in teacher training to show how to apply technology in everyday teaching context. The aim of the book is to give readers ideas of possible technological solutions, and to encourage them to look for appropriate tools in one's own discipline. In my opinion, the book succeeds in this goal. If you already master the basic technology or work with educational technology, this book is not for you. At least for me, the book did not provide much new ideas or knowledge. The authors also take a constructivist teaching perspective, there is no discussion about possible problems and challenges in distance learning (although many of the presented solutions can be easily applied in the distance learning context). The book also serves a good reference in basic educational technology courses as an example of utilizing common technology in everyday teaching.