Enhancing Interactivity and Providing Rich Instruction with Lectora

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Introduction

A major concern the authors have observed in the process of converting face-to-face courses into online courses is that many instructors simply post the PowerPoint slides they used in their face-to-face course to the course management system (Blackboard, WebCT, Desire2Learn, etc.) of their new online course and consider the PowerPoint slides alone to be adequate instruction. Often, the class discussion, interaction, and elaboration from the instructor that would normally accompany the PowerPoint slides in a face-to-face course are neglected in an online course. The authors see this common omission in the conversion process as a major concern and problem with many online courses. These online courses are often missing those key instructional strategies and content that made the face-to-face course so effective and successful.

Many instructors would like to include those key instructional strategies and content from the face-to-face course that are usually not included in their PowerPoint slides in their online course, but find it very difficult and frustrating. Course management systems for delivering online courses like Blackboard or WebCT do not provide effective tools for developing rich, interactive instructional modules (Piña & Eggers, 2006). Most high-end authoring tools, such as Authorware, Director and Flash, have steep learning curves that severely limit their adoption by faculty (Harris & Piña, 2005). Easy-to-use multimedia authoring tools, such as Hypercard and HyperStudio have either been discontinued or have disappeared from the market (Piña, 2006).

The authors have found an effective solution to this problem. Lectora Professional Publishing Suite can be used to develop interactive instructional modules that can be easily integrated into online courses using Blackboard and WebCT (Harris & Piña, 2004). Lectora can be used to supplement PowerPoint presentations or it can be used to convert PowerPoint presentations to Lectora files and then allow the instructor to elaborate on the content in their PowerPoint slides and add interactivity and richer instruction.

Lectora Professional Publishing Suite is an easy-to-use multimedia-authoring tool that has a very low learning curve and features simple drag and drop features that enable the non-programmer to easily build interactive multimedia content (Harris & Piña, 2005). It uses a book metaphor for organizing the content into chapters, sections, and pages. The application provides single-click publishing to web-ready dynamic HTML, CD, single file .exe, and SCORM<AICC, and LRN learning standards. Several automated tools are included such as the Title Wizard, HTML error check, spell check, variable manager, etc. Lectora supports several types of media types such as text, images, audio, video, animation, and Internet technologies such as Shockwave, HTML, Java, and JavaScript (Trivantis, 2006).
The basic interface of Lectora (see Figure 1) is designed to capitalize on the user’s prior knowledge of other software applications—particularly Microsoft Office.

- The toolbars and buttons (A) resemble those used in Microsoft Word and PowerPoint. The few buttons that may be new to the user utilize intuitive icons and text helps.
- The left side task pane navigation (B) will be familiar to users of Microsoft Outlook and other windows programs with tree-style file management. The book metaphor used by Lectora is a nice compromise between the user friendly card/stack metaphor of HyperCard and HyperStudio and the more complex flowchart metaphor of Authorware. Content is Lectora is entered into a page, as illustrated in the main window of Figure 1. Pages can be grouped into sections and chapters, to keep the navigation from becoming too long and cluttered. The entire project is considered to be a “book.”
- The drawing toolbar (C) provides a similar, array of vector drawing tools as those found in Word and PowerPoint.
- Content can be entered into a Lectora page using simple drag-and-drop functionality (D).
- Users can develop their own navigation links or buttons or they can utilize Lectora’s menu building feature to select from several pre-designed menus (E).
- Users can add text hyperlinks (F), which can link to external websites, e-mail clients or external files, such as word processing documents, spreadsheet, PowerPoint presentations or Adobe Acrobat (PDF) documents.
- Lectora supports a wide range of video, audio, animation and text formats, including Flash, Real Player, and HTML.
The tutorials shown below demonstrate how instruction can be developed using Lectora for online courses. We have found Lectora to be a very easy to use and effective tool for developing interactive online instruction that provides more options than PowerPoint. For example, student interaction can be easily developed in Lectora and the student data from the interaction can be stored in the grade book section of a course management system, such as WebCT or Blackboard. Lectora also provides more navigation and branching options for learners than PowerPoint. Figure 2 is a screen shot of one of the pages of a tutorial that was developed to promote better lifestyles for a healthy heart. This tutorial included a several types of multimedia, such as audio, video, photos, etc. It also includes a quiz at the end of the tutorial to assess the learners’ recall of information.

Figure 2: Screen shot from “Lifestyles of a Healthy Heart” developed by Kristin Middleton.

Figure 3 below is a screen shot of one of the pages of a tutorial that was developed to teach basic information about baseball. It also includes several types of multimedia, such as audio, video, photos, etc. Interactive quizzes are included after each section in the tutorial.
Conclusion

Many faculty wish to take the “next step” beyond PowerPoint, but have neither the time nor the inclination to tackle a high-end, high-learning curve authoring system, such as Macromedia Authorware or Director. Lectora Publishing Suite provides a viable way for these faculty to incorporate rich, interactive multimedia into their instruction.

References


Biographical Sketches

Dr. Anthony Piña is President-Elect of the Division of Distance Learning of the Association for Educational Communications and Technology (AECT) and serves currently as Coordinator of Learning Technologies at Northeastern Illinois University (NEIU), where he also teaches in the Department of Educational Leadership and Development. Anthony also serves as adjunct professor of Educational Technology and Distance Learning at La Sierra University. He has delivered over 75 invited presentations on instructional technology and distance learning at professional conferences and has developed and taught over 150 technology workshops.

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