Captivate Your Audience by Turning PowerPoint Presentations into Interactive E-Learning Content

Abstract
Adobe® Captivate software provides educators with a tool to create interactive distance learning modules. This article describes how Adobe® Captivate was used to increase engagement of volunteer learners. An Adobe® Captivate module was created for the University of Idaho Master Gardener program to educate and test new Master Gardener volunteers on the pesticide policy of the University of Idaho. The data collected from the online course demonstrated that it was an effective and time-efficient way to educate volunteers. Hosting the course in a learning management system, such as eXtension.org Moodle campus, also provided the necessary university documentation for volunteer training.

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What Is Adobe Captivate?
Adobe® Captivate (Adobe Systems Incorporated, 2013) is a software program that can be used to author software simulations, branched scenarios, and randomized quizzes. It has a round-trip workflow with Microsoft PowerPoint (Microsoft Corporation, 2010) that makes it easy to take a previously created presentation and transform it into an e-learning course. The courses created in Adobe Captivate can be published as Adobe flash files, MP4 files, or executable files. The courses can be hosted on a Learning Management System (LMS) such as eXtension.org Moodle campus to collect data such as answers to quiz questions and time taken to complete the training. This software is easy to learn, and it can be used by subject matter experts without the need for instructional designers and lengthy development process (DeVries, 2007). High costs of development were a common limitation for Extension e-Learning courses (Williamson & Smoak, 2005; Dromgoole & Boleman, 2006), but with new more intuitive software this is no longer the case. Extension staff, the subject matter experts, can create content, which decreases the cost of development compared to involving an educational designer (Robideau & Vogel, 2014).

Need for Online Training Course
An area of growing concern in the Idaho Master Gardener program was the lack of understanding of pesticide use and the federal and state laws governing that use. Master Gardeners are often asked how to manage pests in home landscapes, which at times involves giving pesticide recommendations. Lack of accurate recommendations can lead to poor pest control, damage to desirable plants, and possible pesticide use violations. All of these items increase the liability risk to the Master Gardener and the University of Idaho. To
be sure all University of Idaho Master Gardener volunteers are equally trained and knowledgeable in the area of pesticide labeling and regulations, a Pest Management Policy for Master Gardeners was developed. Each new Master Gardener candidate must successfully complete a training module covering legal pesticide use and making recommendations, and sign the Pest Management Agreement.

An online training module was developed by Extension specialists and county educators to fulfill one of the requirements of the new pest management policy. The information presented in the pesticide policy online training course was formerly presented as a PowerPoint presentation given by Extension educators throughout the state. Depending on the educator's expertise in pesticides and the interests of the volunteers, the pesticide information taught was inconsistent throughout the state. One option considered was providing a narrated PowerPoint presentation online, but this method lacks interaction or the ability to assess understanding of the material.

The online module is available at any time and easily accessible from any location with Internet capability. Due to the large geographic area of the state of Idaho and the varying levels of pesticide expertise at the county level, the online training module provides the necessary pesticide expertise statewide without using the travel and funding commitment of the Extension specialist.

Incorporating E-Learning Best Practices

Best practices for creating online training courses include using varied interactivity and prompt feedback for student engagement (McGee & Reis, 2012). A learner's experience needs to be meaningful, engaging, and transferable to the real world in order to acquire new knowledge (Beckman & Watkins, 2012). Primary themes identified as engaging to adult users are the ability to relate, using attention-grabbing aspects, and the ability to engage multiple senses (Parker, Powell, Hermann, Phelps, & Brown, 2011). To meet these best practice recommendations in designing an online module, we chose to use Adobe Captivate as our course development tool. Navigation is made easy through clearly labeled buttons, and immediate feedback is given for practice questions. Avatars (figures representing people) were used for first person scenarios, in order to explain the pesticide policy in "real world" terms.

The course provides multiple opportunities for the students to be actively engaged in the content by analyzing these real-world scenarios. The course design allows for immediate feedback on the concepts through practice questions. The goal of the course was to make sure that the Master Gardener understood all of the components of the pesticide policy and could apply them to real-world situations.

Effectiveness of the Idaho Master Gardener Pesticide Policy Online Training Course

Resources required to develop the online course included the time of the Extension educators, the statewide pesticide coordinator, and the state integrated pest management coordinator. One educator, with experience in online course development, took the lead on purchasing and learning the software and converting the material to Adobe Captivate. The course is hosted on eXtension.org Campus Moodle site. The course is comprised of 55 slides divided into three sections. The pesticide information is presented to the student, followed by practice questions with instantaneous feedback. Graded quiz questions are asked after each section, for a total of 10 questions. Individuals must answer 75% of all quiz questions accurately, or retake the online module until they successfully achieve 75% score on their quiz.

Currently, 167 volunteers have completed the course. The average score is 89%. Each student is required to pass the online course before they are certified as a UI Master Gardener. So far, students take an average of 22 minutes to complete the course. The time spent by the educators for technical support to students has only
involved a few telephone calls and emails, and has been manageable.

**Conclusion**

The Master Gardener online pesticide policy course has proven to be an effective and efficient method to deliver information to Master Gardener students and county educators throughout the state of Idaho. It is critical that all Master Gardeners understand the UI pesticide policy and the state and federal laws that govern the use of pesticides. The online delivery was a good method to provide accurate and consistent information to all counties.

**References**

Adobe Captivate (Ver 6) (2012)[Computer Software]. San Jose, CA: Adobe Macromedia Software LCC.


