**H5P: Creating Interactive and Engaging Online Content**

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**Abstract:**

This session will introduce a free, web-based software that allows you to create and edit virtual classroom activities such as interactive presentations with assessments built into the recording as well as the gamification of course content. The software allows you to customize course material and edit videos to provide greater engagement in the course. We will demonstrate how to create interactive lectures that incorporate questions to assess student comprehension and provide opportunities to enhance participation, particularly in online and hybrid courses.

**Keywords:** Virtual Work, Training, Online / Hybrid

**Introduction**

The purpose of this session is to show educators how to utilize H5P software in an online environment or as a supplement to face-to-face content. The software will allow students to become more engaged in course instruction using interactive activities that can be built into recorded presentations. With the prevalence of online and hybrid courses, this type of technology will increase the quality and thoroughness of the student experience. This technology can be used in any course and for any student (graduate or undergraduate). It integrates well into most learning management systems such as Brightspace or Blackboard and will take ordinary lectures to the next level.

The software we will demonstrate (h5p.org) provides a variety of interactive activities that can be incorporated into virtual training, online classes, or as a supplement to face-to-face classes. We will focus on the utilization of a feature called ‘interactive video’, which takes recorded presentations and allows additions such as multiple choice questions, fill-in-the blank, or pop up text to enhance the video and incorporate elements to increase student engagement. We will walk through the process of recording presentation videos, transforming them to online content, incorporating interactive elements, and integrating into learning merging systems.

**Theoretical Foundation/Teaching Implications**

Students may prefer live lectures (Taplin et al., 2011), yet online and hybrid courses offer flexibility for working students and those with other commitments. Recorded presentations provide an alternative and have several benefits. According to the cognitive theory of multimedia learning, students’ have an enhanced learning experience and are more likely to retain and transfer information when it is presented in multiple modes, including visual and auditory cues, and can be viewed multiple times (Leadbeater et al., 2013; Woo et al., 2008). Recorded presentations are particularly effective for content related to interpersonal or social skills, such as organizational behavior and management skills courses, and when paired with live class sessions as they allow more time for in-class activities and exercises (Davis et al., 2009). Yet recorded presentations can have challenges in that they tend to lack participation, lose student interest, and can be distracting. We discuss how the H5P technology described in this session can provide the benefits of recorded presentations without the costs by incorporating interaction and engaging students in course content.

Online courses are most effective when students are required to actively participate in the virtual classroom. According to Brown et al (2017), active learners are more engaged, which leads to higher levels of motivation in completing assignments as well as deeper learning of the material. We believe that H5P can help create differentiation in online or hybrid classes and provide a more engaging experience for the students. Today’s students can sometimes lack focus and the notion that presentations exist as a sound bite rather than an important part of the course needs to be addressed.

One criticism from students regarding the use of recorded lectures is that they find them boring. The lack of interaction from the professor can lead to students feeling disconnected from the course, the professor, and the learning objectives (Cilesiz, 2014). To prevent students from becoming disillusioned and remain focused on the learning objectives, H5P provides an opportunity to emphasize important concepts by pausing the lecture and asking the students about what was presented without navigating away from the presentation. The software allows comprehension questions to be embedded into the presentation, keeping students engaged in the material and testing their understanding of the topic as it is being presented.

Another issue that sometimes arises with online learning that stems from unengaged students is how easily they become distracted by other websites during the learning process. Aagaard (2017) refers to this as students moving inside-out of the classroom through engagement with irrelevant websites on their digital devices. Research has demonstrated that quizzes and interactions introduced during recorded presentations can reduce distractions and wandering, and increase task behaviors such as note taking, which enhance student learning and performance (Schacter & Szpunar, 2014). Again, the H5P lectures can be embedded into the learning management software (such as Brightspace or Blackboard) as to keep students focused on the lecture so that there are less opportunities to move outside the virtual classroom, and incorporates quizzes and interaction to minimize distraction. This learner-centered approach to online course design can be aided by software like H5P.

**Learning Objectives**

Participants in this session will have the opportunity to:

1. Create a free H5P account and utilize technology to engage students.
2. Learn how to transform a presentation into an interactive video.
3. Build understanding of student use and assessment of interactive presentations

**Exercise Overview**

The exercise will focus on the use of technology in an online environment. We will demonstrate how to transform a presentation into an interactive video. The H5P technology requires a video file (mp4) to be uploaded into the software to edit and add interactive activities. The exercise will show participants how to do this, as well as provide examples that we’ve used in our classes. We will also share an assignment we gave to students to prepare presentations for an online class using this software. We plan to incorporate discussion, Q&A, and an activity to let participants try out the software for themselves. Thus, this session will not only be interactive, but will also provide participants tools to make online and hybrid classes more engaging.

**Session Description and Plan**

A 60-minute session is requested but more or less time could be utilized if necessary. Specifically, the timeline for the session will be as follows:

1. Introduce presenters and topics (5 minutes)
2. Demonstrate how to create base presentation (10 minutes)
   1. Using existing presentations
   2. Creating recorded PowerPoint presentations
   3. Developing presentations via Panapto
3. Transforming presentations into videos (5 minutes)
   1. Creating a free personal YouTube channel.
   2. Uploading and saving content as videos
4. Integrating video into H5P to create interactions (15 minutes)
   1. Demonstrating content types including drag and drop, multiple choice, true/false, and image sequencing.
   2. Incorporating interactive content into videos
5. Posting interactive content in learning management systems for students (5 minutes)
   1. Demonstration using Brightspace
   2. Statistics and information available on student use of content
6. Activity (15 minutes)
   1. Form small groups and create an interactive presentation using H5P
   2. Find your favorite youtube video and incorporate interactions
7. Discussion with participants on other uses of H5P and making online content more interactive (5 minutes)
   1. Sharing of best practices
   2. Questions and conversation of issues and challenges
   3. Discussion of time to plan and create

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