TPACK Instructional Design & Analysis Part 2

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Lesson Description:
Creating a Faculty Video Introduction

- My target learner population is, once again, comprised of faculty at my employing institution being trained to teach online courses. The online lesson I am currently developing for this second assignment is part of a larger online course, which in turn is part of a larger certification curriculum program which, upon completion, will ensure faculty are well-prepared for developing and facilitating their own quality online courses. This particular lesson involves creating a step-by-step tutorial with video demonstration teaching faculty how to create and post their own video introduction to their students, and then providing opportunity for hands-on practice producing and posting their own to their development course site.
- The main **Content (C)** of this lesson is knowledge of the process of creating, hosting, and embedding a faculty introduction video into an online course.
- The main **Pedagogy (P)** of this lesson is visual narrated demonstration with step-by-step instructions, followed by hands-on practice.
- The main **Technology (T)** of this lesson is narrated screen-capture recording with printed job aid attachment.

TPACK-Specific Questions

Pedagogical Content Knowledge (PCK)

- **Define**: *What is the PCK of the lesson?*
  Providing visual demonstration of a task along with step-by-step instructions, followed by opportunity to put skill to immediate practice increases retention of said skill.
- **Describe**: *How and why does the particular pedagogy use in this lesson "fit" the teaching of the lesson content/subject domain? In other words, how do you know that this particular pedagogy is applicable to the content you are teaching?*
  Written step-by-step instructions are necessary to guide learners through the video recording, posting, and embedding process. An electronic written guide becomes easy reference for learners, who can review repeated and at their own pace. It also becomes the basis for making such learning universally accessible. The visual demonstration provides learners confirmation of the written instructions along with visual cues and landmarks to revisit and mimic as they practice, matching their actions with the ones shown in the demonstration.

- **Support**: *Do you have any research-based evidence to support your decision?*
  - "[E]xperiential methods positively impact upon student learning" (Fish, 2012).
  - Experiments included in classic research have shown that practice couples with audio-visual demonstration facilitates learning (Ball, 1964).

Technological Content Knowledge (TCK)

- **Define**: *What is the TCK of the lesson?*
  The TCK of this lesson includes an electronic job aid guide document, a narrated video screen motion capture demonstrating the steps noted in the job aid document, and a development "practice" site in the LMS for each faculty learner to practice what they learn through the job aid and video tutorials.
- **Describe**: *How and why does the particular technology use in this lesson "fit" the content goals? In other words, how do you know that this particular technology is best suited for addressing the content learned and taught?*
  The knowledge learners need to obtain in this lesson of creating electronic instructions, online video, and embedding such content in their LMS pages is of a task-oriented process that they will be accountable for accomplishing in each of their own real-world online courses. This task requires each faculty to use the very same technologies to provide their own learners a video self-introduction in the LMS, and provides them with knowledge of how to use and apply this task-based knowledge elsewhere in their online courses.
- **Support**: *Do you have any research-based evidence to support your decision?*
  - "Instructional simulations have the potential to engage students in "deep learning" that empowers understanding as opposed to "surface learning" that requires only memorization" (Why Teach with Simulations? 2016).
  - "...[T]he best simulations allow students to experiment with ideas and outcomes and ultimately master the application of concepts to real situations" (Harvard Business Publishing, 2016).

Technological Pedagogical Knowledge (TPK)

- **Define**: *What is the TPK of the lesson?*
  The electronic job aid document provides illustrated step-by-step instruction that can referenced at the learner's own pace. The video demonstration provides auditory and visual learners with a process they can watch and rewatch at their own pace, and mimic as they practice (akin to the use and effect of simulation.)
- **Describe**: *How and why does the particular technology use in this lesson "fit" the instructional strategies you use? In other words, how will this particular technology change the teaching and learning process when it's used in the classroom?*
  Teaching this lesson using electronic job aid, video demonstration, and hands-on practice via the LMS will differ from learning this in a face-to-face class environment in that:

- ○ Students will be able to review the job aid instructions, the video demonstration, and practice in the LMS all at their own pace and according to their own schedules
  - ○ With the lack of in-person guidance, written and video instruction will have to be very semantic and clear so as not to further confuse the learner
  - ○ Questions the learner has about the process or the instructions will be handled more often that not virtually, via email, online discussion, and chat. If absolutely necessary, an in-person session can be scheduled.
  - ○ The use of these technologies provides the affordance of offering instruction in multiple universally accessible ways to suit multiple learner abilities and preferences, as recommended by the practice of Universal Design for Learning.
- **Support**: *Do you have any research-based evidence to support your decision?*
  - ○ *"Ten Steps Toward Universal Design of Online Courses: Home Page", 2016*

Technological Pedagogical Content Knowledge (TPACK)

- **Define**: *What is the TPACK in the lesson?*
  Learning in this lesson lies in the intersection of *the knowledge* of the process of creating and posting a self-introduction video, *the value* of step-by-step instructions accompanied by visual demonstration related to the process, and *the effectiveness* of using these same methods to teach this process via written job aid document and narrated screen-capture video, with the addition of the opportunity for hands-on practice.
- **Describe**: *How and why do the content goal, instructional strategy, and technology use all fit together in this lesson? In other words, what is your basis of teaching this particular content through this particular pedagogy where you use this particular technology?*
  The lesson I've planned ideally leverages the content (how to create the video introduction), the pedagogical approach (the providing of written instructions, demonstration, and practice), and technology (electronic job aid, narrated screen-capture video demonstration, and hands-on practice within the video and LMS platforms). The fit of this approach is ideal because it leverages mock-simulation and observational learning; the lesson shows my faculty learners exactly what and how they need to step through this process using the exact same platform and tools that they will be expected to use in creating their own lesson content, and models the way in which they will be expected to complete this task. The fit is also ideal because:
  - ○ It provides students the needed instructions in a way that they can consume in multiple forms at their own pace
  - ○ It makes use of tools that are already easily accessible to them at no expense

- ○ It makes for easy evaluation of learner progress and success for me as the instructor since I will be able to discern readily whether learners have been able to post the video properly into their practice course or not.
- **Support**: *Do you have any research-based evidence to support your decisions?*
  - ○ "Recent research indicates that the most effective training techniques known to date are those based on behavior modeling, which employs computer skill demonstration and hands-on practice" (Yi,1998).

References

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