TEACHx

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Courses: Leadership 481 & Predict 480, SPS
Students: 25 per course
bit.ly/tx16cla

Using Technology to Support Micro-Learning Inside and Outside the Classroom

Context

In my courses, students engage in micro-learning to build new soft skills and create lasting behavior change. Micro-content (a small think-do experiment) is authored as a 3x5 knowledge card. Students learn to write, share, and use knowledge cards during the course and have access to an online community so they can continue the practice after the course ends. Over 2,000 knowledge cards are available for student use. To enable micro-learning, students assemble cards into decks containing five to fifteen cards and use them throughout the day. While I have the technology in place to support individual cards, I don't have a way to make it easy for students to create and share decks.

The purpose of my project is to use educational technology to make it easier for students to create and share decks of knowledge cards that support their micro-learning both inside and outside the classroom.

Project

Key project results include:

- Reframed the problem as creating and sharing a "playlist" of knowledge cards. This metaphor to online music provides a useful interaction model that helps to quickly explain many facets of the knowledge card approach to micro-learning.
- Reviewed how students have solved this problem in the past and found a variety of innovative approaches to creating playlists but not sharing them.
- Conducted tests to determine how well Yellowdig, Quizlet, and Pinterest support implementing playlists in an easy, secure, and reusable way. Pinterest appears to work the best but further testing is required.

Objectives & Outcomes

Approximately 50% of students report a strong likelihood that they will continue to use the knowledge card method after class. About 20% actually do. The most frequently cited reason for dropping out is difficultly in creating decks that match a specific learning goal.

Playlists should address this problem and increase the percentage of students who continue to use knowledge cards after class. Specific project outcomes will be measured by change in:

- Percentage of playlists that are reused.
- Number of playlists that are created post-course.

Measuring the improved learning outcomes associated with the use of knowledge cards is outside the scope of this project.

Results

Project work is under way. Students are willing to engage in experimentation, and solution ideas are being tested and refined.

I expect to see a significant improvement in soft-skill learning outcomes. The model turns on running many small improvement experiments on a regular basis and even habitually. Playing cards in a one-off fashion, or even a deck or two, as the majority of students currently do, stimulates learning and insights, but falls far short of doing enough micro-learning to amass new soft skills.

Lessons Learned

1. Studentsource the educational technology innovation process! A lesson learned (actually relearned) is to engage students in the innovation process as much as possible. Indeed students have solved aspects of this problem on their own and without being asked.
2. A key requirement is embeddability. A review of student solutions to the playlist problem revealed that technology choices were being made to make it easy to embed the knowledge card in their everyday routines (e.g., calendar, vision board, or mobile phone save screen or reminder).