February 16 Session: Introduction to Low Threshold Applications (LTAs)

Summary: This session will be an introduction to the concept of LTAs and their specific educational benefits. Much of the following materials and concepts have been developed from Steve Gilbert and the Technology, Learning, and Technology (TLT) Group ([http://www.tltgroup.org/ltas.htm](http://www.tltgroup.org/ltas.htm)).

A specific focus for this section will be to present LTAs that are:

- Commonly available in applications most (or at least many) people already use (Microsoft, Firefox, iTunes)
- Readily available on campus (video check out equipment, iMovie, etc.).
- Available online (such as wikis and Flickr).

1. Introduction: What are LTAs?

   a. **TLT Definition:** “A Low Threshold Application (LTA) is a teaching/learning application of information technology that is reliable, accessible, easy to learn, non-intimidating and (incrementally) inexpensive. Each LTA has observable positive consequences, and contributes to important long term changes in teaching and/or learning…. the potential user (teacher or learner) perceives an LTA as NOT challenging, not intimidating, not requiring a lot of additional work or new thinking. LTAs… are also 'low-threshold' in the sense of having low INCREMENTAL costs for purchase, training, support, and maintenance.’ - Steve Gilbert, President, TLT Group”

   b. **Common components of LTAs:**

      i. **Low Cost** – Not only weighed as financial consideration, but also weighing general need of use. Examples of components to consider in coming up with the cost benefits include: already using the application for other applications, essential for the academic discipline, and inexpensive

      ii. **Easy to learn and use** – The applications are both accessible to faculty and students. Consider also the level of comfort you have with applications (personally I am comfortable with a Web design application such as Dreamweaver, but have no experience/comfort level with statistical software packages).

      iii. **Not [too] intimidating** – Faculty and students don’t view the LTA as creating a large learning curve/readjustment in how they work.
iv. **Observable Positive Consequences** – Before using an application, can you find anecdotal testimonial from peers and/or formal studies that promote the use of the LTA?

v. **Reliable** – The LTA takes a low level of maintenance on the user side, or coming back to the comfort level you are okay with supporting the application.

vi. **Creates an environment for long-term change** – One example is the LTA saves instructor time and increases student learning over the long term.

2. **How can I use them for instruction?**
   
a. **Some ideas:**
      
i. Assess student writing using Microsoft Word’s ‘Track Changes’ feature, which allows the instructor to give highlighted feedback and edits directly within the Word document.
      
ii. Incorporate RSS feeds to consolidate your news sources into one easy to reference area and provide your students RSS subscriptions to highlight current headlines in the field (Blackboard has a RSS feed option available).
      
iii. Developing an online course student journals and collaborative projects by utilizing blog and wiki resources.
      
iv. Create video supplements to lectures and labs using iMovie, or create a “Welcome” video for an online or hybrid course.
      
v. Using digital recordings for instructor feedback.
      

b. **Considerations:**
   
i. Fear of use – How comfortable are you in using the applications?
   
ii. What resources do you have to assist you in trying something new?

   1. Center for Educational Technologies: Web site: http://libweb.uoregon.edu/cet/, email: cet@uoregon.edu, phone: 346-1942, drop in hours 9am – 6 pm M-F
   
2. Teaching Effectiveness Program: Contact Robert Voelker-Morris, rmorris1@uoregon.edu, 346-1934, Web site: http://tep.uoregon.edu/technology/index.html
   
3. UO Computing Center: Web site: http://cc.uoregon.edu/, phone: 346-4403
4. Media Services (equipment checkout): Web site: http://libweb.uoregon.edu/med_svc/, email: mediasvc@uoregon.edu, phone: 346-3091

5. Departmental computer resources (Does your department/program have computer support?)

   iii. Accessible – How easy are the applications to use by the instructor and students? An example would be do you need to install other programs to make the main one work? Is this easy to do? Is it worth your time?

3. Resources:


The following resources are not particular software applications, but are resources where you can access course materials made available to the public through the MIT OpenCourseWare initiative:


"OpenCourseWare expresses in an immediate and far-reaching way MIT's goal of advancing education around the world. Through MIT OCW, educators and students everywhere can benefit from the academic activities of our faculty and join a global learning community in which knowledge and ideas are shared openly and freely for the benefit of all." - Susan Hockfield, President of MIT