

## Engaging Adults Learners with Technology

Through hands-on experience and reviewing the literature, two instruction librarians explore and model best practices in incorporating technology into teaching, assessing and communicating with non-traditional adult students. Session content is applicable for face-to-face, blended, and online instructors. Attendees will walk away with a toolkit of resources, best practices, and further readings.

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## Agenda

Icebreaker

What is an Adult Learner?

A Framework for Teaching Adult Learners

Assessing Learning

Types of Instructional Technology

Reflection

Workshop Evaluation

## Notes

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## Learning Objectives

1. Recognize the characteristics of an adult learner
2. Analyze methods used to engage the adult learner in a library setting
3. Examine relevant instructional technologies
4. Incorporate adult learning theory and relevant technologies into current instructional plan

## Workshop Materials

Digital copies of our workshop materials can be found online:

### Handout

(Digital Commons @ Macalester)



<http://tinyurl.com/7u7dvxq>

### Prezi



<http://tinyurl.com/74z8upm>

# Toolkit

## Andragogy Key Points, Best Practices, & Applications

Andragogy, unlike pedagogy, focuses on adult learning. The term “andragogy” was made popular by Malcolm Knowles (though he did not invent the term). Over the years there have been a number of adult learning theory models, but Knowles’ work is the most well-known. Knowles first presented four assumptions about adult learners, and added two more in later years.

### Knowles’ Six Key Characteristics of Adult Learners Include:

- The need to know
- A responsible self-concept
- A wealth of life experience
- Readiness to learn
- Orientation to learning
- Motivation

### Best Practices to Promote an Adult’s Readiness to Learn

- a) Create a safe, welcoming learning environment
- b) Culture empathy, respect, approachability, authenticity
- c) Collaborate on the diagnosis of learning needs
- d) Collaborate on developing learning objectives and in instructional planning
- e) Ensure the practicality of all learning activities

### Group Activity:

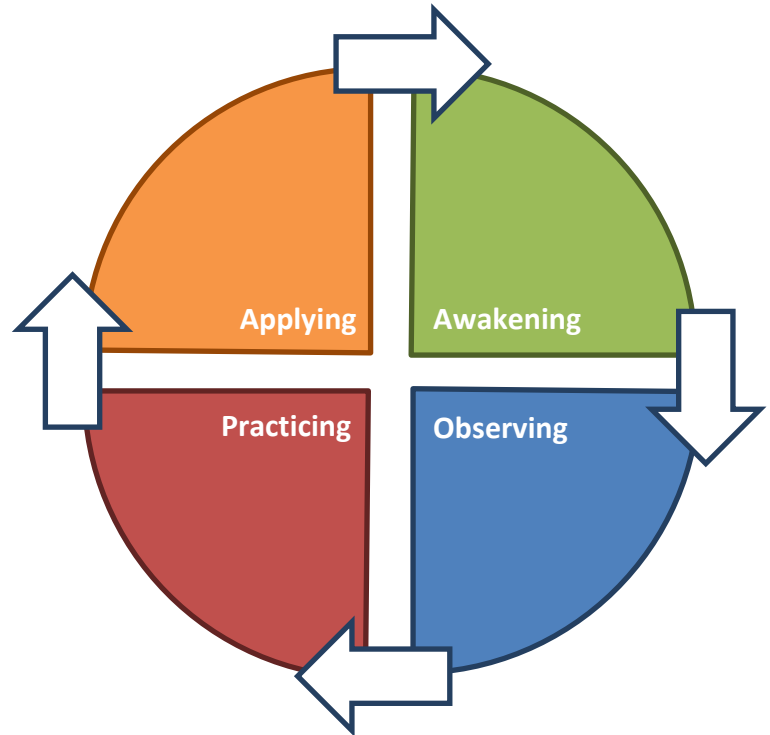
What do the best practices listed above look like in physical and online library environments?

|   | Physical Environment | Online Environment |
|---|----------------------|--------------------|
| a |                      |                    |
| b |                      |                    |
| c |                      |                    |
| d |                      |                    |
| e |                      |                    |

Another adult learning model highly regarded by the presenters is that of David Kolb. Kolb believed that four different abilities were needed for successful adult learning:

- Concrete experience (awakening)
- Reflective observation (observing)
- Abstract conceptualization (practicing)
- Active experimentation (applying)

Kolb believes that each of these abilities is part of a learning cycle that repeats itself again and again.



**Best Instructional Design Practices Based on Kolb’s Learning Model:**

| <b>Abilities:</b>          | <b>The learner:</b>  | <b>The instructor:</b>  |
|----------------------------|--|---|
| Concrete experience        | <ul style="list-style-type: none"> <li>• must be interested in adding to his or her knowledge base</li> </ul>  | <ul style="list-style-type: none"> <li>• arouses the learner’s interest</li> </ul>            |
| Reflective observation     | <ul style="list-style-type: none"> <li>• takes on new information, usually by watching or listening</li> </ul> | <ul style="list-style-type: none"> <li>• presents the new information</li> </ul>              |
| Abstract conceptualization | <ul style="list-style-type: none"> <li>• practices using the new knowledge</li> </ul>                          | <ul style="list-style-type: none"> <li>• facilitates hands-on activities</li> </ul>           |
| Active experimentation     | <ul style="list-style-type: none"> <li>• applies the new knowledge</li> </ul>                                  | <ul style="list-style-type: none"> <li>• provides a means of practical application</li> </ul> |

A key takeaway from andragogy: Adults are self-directed learners. One of the most empowering ways in which we can assist adult learners is to put the learning tools into their hands. Technology helps us to do that.

### **Group Activity:**

Using your knowledge of adult learning theory (Knowles and Kolb), brainstorm best practices for approaching the learning experience in each example situation. If appropriate, what technologies could be incorporated to enhance the learning experience?

#### Hook/Arouse Student Interest

Example situations:

- Reference Desk
- Chat Reference
- Library Instruction Session
- Teaching a Class
- Advocating to Dean/Principal/Funding Body

#### Lecture/Teaching/Presentation

Example situations:

- Reference Desk
- Chat Reference
- Library Instruction Session
- Teaching a Class
- Advocating to Dean/Principal/Funding Body

#### Hands-On Practice

Example situations:

- Reference Desk
- Chat Reference
- Library Instruction Session
- Teaching a Class
- Advocating to Dean/Principal/Funding Body

#### Real Life Application

Example situations:

- Reference Desk
- Chat Reference
- Library Instruction Session
- Teaching a Class
- Advocating to Dean/Principal/Funding Body

Participants' responses from this activity will be available on a Google Doc after the session has ended:



<http://tinyurl.com/7h78hsu>

**Kolb Step:** \_\_\_\_\_

Best Practices

|   |  |
|---|--|
| Reference Desk                            |  |
| Chat Reference                            |  |
| Library Instruction Session               |  |
| Teaching a Class                          |  |
| Advocating to Dean/Principal/Funding Body |  |

## **Assessment of Student Learning**

Librarians classically have had a difficult time assessing student learning, much less the effectiveness of their teaching. Technology can help to ease that difficulty, at least in terms of formative assessment (during the learning experience).

### **Tutorial Quizzes and Tests**

When you are shopping for tutorial creation software, check on the ease with which you can quiz and, more importantly, track learners' progress. Many software products allow for surveys and quizzing (some even branched quizzing), but fewer allow for different means of tracking. Methods of tracking include SCORM reporting (tied to learning management systems and difficult to set up), emailed results, or data compiled into spreadsheets.

To get you started:

- Camtasia: Allows for quizzing and results retrieval through your learning management system (LMS).
- Articulate: Allows for quizzing and results accessible through e-mail, your LMS, or an account with Articulate Online.
- Snap!: Allows for quizzing and LMS results.

### **Audience Response Systems**

With a well-formed question, you can use audience response systems to assess learning in real-time, and, if the learning isn't happening, address those concerns immediately.

### **Google Forms**

Embedding a Google form into a tutorial gives you the chance to check student progress as a whole and use those results to revise your tutorial, if necessary. (Google Forms is a type of Google Doc.)

### **Survey Monkey**

An oldie but goodie, SurveyMonkey offers free accounts for those wishing to make assessments with 10 questions or fewer. Librarians can provide links to surveys for instruction, reference interactions, and other services. Surveys can also be embedded on your library's website. SurveyMonkey caps each survey at 100 users, however, so you may need to create multiple surveys for some events or categories.



## **Annotated List of Current Technology Tools**

These technology tools have been used or reviewed by the presenters. This is not a comprehensive list, but is a good start when choosing tools to engage the adult learner. Note that some of the tools must be purchased or subscribed to; when possible, the presenters have listed a free alternative.

### **Prezi**

[www.prezi.com](http://www.prezi.com) (*free*)

Prezi is a zooming visual presentation software alternative to PowerPoint. Prezi allows for collaboration between authors, supports idea organization by topic, promotes presenting in a flexible (not necessarily linear) manner, and is graphically refreshing!

### **TurningPoint**

[www.turningtechnologies.com](http://www.turningtechnologies.com) (\$\$\$)

TurningPoint is an audience response system that functions as an add-on to PowerPoint presentations. It lets you poll and engage your audience with games, assess learning, and collect data (if you want).

### **Poll Everywhere**

[www.polleverywhere.com](http://www.polleverywhere.com) (*free*)

Poll Everywhere (free for groups of forty or fewer) allows you to poll audiences in real time. This tool works with PowerPoint, Twitter, and text messaging. Students without cell phones (or free texting) can also use computers. This is a great alternative to TurningPoint!

### **PollDaddy**

<http://polldaddy.com/> (*free*)

This is a good tool if you want to poll your students asynchronously and anonymously. You can embed a widget on your website and solicit up to 200 responses per month. We've used it for both serious and fun purposes—from finding out what our students preferred to see on our mobile website to naming our library mascot beta fish.

### **Meebo (chat)**

<https://www.meebo.com/> (*free*)

This is a customizable chat widget that can be embedded on webpages, in content management systems, and in databases. Meebo allows for multiple administrators to be logged in, making monitoring and quickly responding to chat reference easier. Also allows for text reference.

### **Camtasia**

<http://www.techsmith.com/camtasia.html> (\$\$\$)

Camtasia is one of many types of screencasting software. It allows you to record from PowerPoint presentations, the web, or webcam. You can also import audio tracks (or record your own), photos, and video clips. It is easy to edit audio and video tracks to create professional and effective video. Videos can be posted on your library website or uploaded to YouTube.

### **Jing**

<http://www.techsmith.com/jing.html> (*free*)

Use Jing to record up to five minutes of onscreen video and audio (if you have a microphone). Videos made with Jing can be placed on your library's website, Facebook page, or Twitter account, but not on YouTube.

### **Google Apps**

<http://www.google.com> (*free*)

<http://www.google.com/apps/intl/en/edu/university.html> (\$\$\$)

Google Apps offers tools that promote ways for your library to interact with and engage your adult learners. From arousing the learner's interest (Google+, Blogger, Picasa) or presenting information (YouTube, Calendar, Sites) to facilitating hands-on activities (quizzing using Forms, reference through GChat) and providing a means of practical application (collaborating using Docs), there is seemingly a Google App for everything.

### **Articulate**

<http://www.articulate.com/products/studio.php> (\$\$\$)

The Articulate suite (we've explored Presenter, Engage, and Quizmaker) is a flash-based e-learning software that allows for learner interactivity. The suite functions as PowerPoint plug-in that transforms PowerPoints into flash presentations complete with branching learning objects, learning games, surveys, and quizzes. (We are unaware a free alternative.)

### **Snap! and Snap! Empower**

<http://rapid-e-learning.trivantis.com> (\$\$\$)

The Snap! suite (Snap and Snap! Empower) is an alternative flash-based e-learning software that also allows for learner interactivity. It is less expensive and allows for greater customization than Articulate does. This suite also functions as PowerPoint plug-in that transforms PowerPoints into flash presentations complete with branching learning objects, learning games, surveys, and quizzes. (We are unaware a free alternative.)

**Piazza**

<https://piazza.com/> (*free*)

Piazza creates a space where students (and librarians) can form a community to collaborate, ask for help, and share information. Librarians can track participation and moderate content. If you don't have access to your students' course management system, Piazza is a nice alternative for embedded librarians. It can also be used for follow-up support after an instruction session.

**GoToMeeting**

[www.gotomeeting.com/](http://www.gotomeeting.com/) (\$\$\$)

GoToMeeting is one of many video conferencing/screensharing options out there. We use this to have live instruction sessions with distance students, conduct lunchtime webinars for faculty members, and have online meetings with colleagues. Sessions can be recorded, you can choose to use a webcam or easily mute participants, and multiple sessions can be held simultaneously in different online classrooms.

**Skype**

<http://www.skype.com/intl/en/features/allfeatures/screen-sharing/> (*free*)

Skype allows you to share your screen for free on one-to-one calls (for multiple callers, you need Skype Premium). Skype has multiple other educational uses including one-to-one video calls and instant messaging.

## Further Reading

### Books

Bain, K. (2004). *What the best college teachers do*. Cambridge, MA: Harvard University Press.



Conrad, R. & Donaldson, J. A. (2004). *Engaging the online learner: Activities and resources for creative instruction*. San Francisco: Jossey-Bass.



Merriam, S. B. (2001). *The new update on adult learning theory*. San Francisco: Jossey-Bass.



Merriam, S. B., Baumgartner, L., & Caffarella, R. S. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco: Jossey-Bass.



Rudestam, K. E., & Schoenholtz-Read, J. (2010). *Handbook of online learning* (2nd ed.). Thousand Oaks, CA: SAGE Publications.



Wlodkowski, R. J. (2008). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults* (3rd ed.). San Francisco: Jossey-Bass.



Wlodkowski, R. J., & Ginsberg, M. B. (2010). *Teaching intensive and accelerated courses: instruction that motivates learning*. San Francisco: Jossey-Bass.



### Articles

Cooke, N. A. (2010). Becoming an andragogical librarian: Using library instruction as a tool to combat library anxiety and empower adult learners. *New Review of Academic Librarianship*, 16(2), 208-227. doi:10.1080/13614533.2010.507388



Curriea, C. L. (2000). Facilitating adult learning: The role of the academic librarian. *The Reference Librarian*. 33(69-70), 219-231.



Ingram, D. S. (2001). The andragogical librarian. *The Reference Librarian*, 33(69), 141-150. doi:10.1300/J120v33n69\_14



Stern, C., & Kaur, T. (2010). Developing theory-based, practical information literacy training for adults. *International Information & Library Review*, 42(2), 69-74. doi:10.1016/j.iilr.2010.04.011



# Reflective Activity

Jot down how you will incorporate one new piece of information from today’s workshop into your instructional planning.

Consider when you were most engaged with today’s presentation. When was that moment, and why do you think you were so engaged?

Spend five minutes making a “To Do” and a “Never Again” list of instructional or technological strategies and activities in light of your new knowledge about adult learners.

| To Do: | Never Again: |
|--------|--------------|
|        |              |