


Teaching 21st Century Technology
to 20th Century Adults
Monday September 21st 2015
1pm to 2pm - Central Time
with Pat Wagner - sieralearn.com

Outagamie Waupaca Library System (OWLS)
owlsweb.org



Key Idea

Connect
with your students' worlds first.

Learning happens
(retention and application)
when they apply what they know
in their real world.

Meet Pat

- Library trainer and consultant since 1978
- Frequent visitor to Wisconsin libraries
- ALA, ACRL, LLAMA, AALL, ARSL, MLA, SLA
- Teaching how to use computers since 1979
- Teaching printing technology since 1974
- Have tested software and written tech manuals
- However, does not believe electricity is real...

Agenda

- Big Picture Versus Details: Which Comes First?
- The Importance Of Hands-On Learning
- Patience And Repetition: No Quick Fixes
- We Learn Better From Our Peers: Students As Teachers
- Get Them Back To Work: Do They Really Need So Much Theory?

Outcomes

- Improve retention and application of tech information.
- Encourage leadership roles among participants.
- Reduce resistance to new tools and toys in the workplace.

Introduction

When Learning
is Brand-New

Assumptions About Students

- Raised before home computers and the Internet
- Did not use a computer at work or school
- Limited use of current technology
- Might have hearing and vision issues
- Might already have had technology "fails"
- Motivated for??? job-hunting, connections with family, work, personal research, leisure

Teaching Technology

- Coaching library users one at a time
- Supervising old and new employees
- Continuing education for staff and library users
- Introducing new workplace tools
- Selling library services at a public event
- Formal classes at the library

Exercise

If you were to leave something or someone important to you in the care of another person, and you had one hour to prepare them, what would you want them know?

Examples

- Your home
- Your car
- Your pet
- A family member
- Your bank account
- Your favorite book
- An heirloom
- Your job
- Your charitable work
- A sick person
- A responsibility
- An important errand
- Directions
- A legacy

Would You

- Ask them to memorize strange words?
- Devote the time to abstract history and theory?
- Talk very very loud and fast?
- Not let them touch anything until after you left?
- Not give them written instructions?
- Not give them written emergency numbers?

Or Would You Want Them

- To feel alert, confident, and prepared?
- To know and act on your priorities?
- To take appropriate risks as warranted?
- To teach someone else important tasks?
- To remember where the instructions are?
- To know when to ask for help?

Instead of "Challenging" Them

- Probably not in an academic setting.
 - No grade pressure
- Respect what they already know.
- Connect with words and concepts they know.
- Apply the information to their real world.
- Set them up for success ASAP.

Instead of Memorization

Teach from cheat sheets and instructional manuals.
Have them create their own reminder cards.
Help them prepare online and hard copy versions.
Post basic instructions.
Assume they will lose copies between classes.

Five Rules

The Big Rule:
No shaming.

Five Rules – Number One

No “Technology Police”
attitude, Trainer Person.

Five Rules – Number One

Never correct pronunciation or word usage, unless it really matters, such as the students are confusing different concepts or perpetuating wrong information.

If absolutely necessary, use a substitution word, and have them say the new word out loud.

Five Rules – Number Two

Avoid jargon.
Use simple, common words, when possible.

Five Rules – Number Two

Words we think people understand
app applet attachment auto avatar bandwidth bit
blog bluetooth boot broadband browser buffer
bug burn byte cloud correct coding cookie cpu
database driver firewire flash folder font htmp http
hung jpeg malware patch pdf pfishing pixel
platform pop-up save spam spyware toolbar
upload virus wallpaper webmail wysiwyg zip

Five Rules – Number Three

If the hardware or software fails,
it is never the student's fault.
Tell them, frequently.

Five Rules – Number Three

Unless they pour motor oil on the keyboard,
hurl the monitor against the wall,
unplug the server during back-ups,
or lean up against the <delete> key,
it is really never their fault.

So, buy hardware and software that works.

Five Rules – Number Four

Never say, "This will be easy."

Instead say,

"Some people find this hard.

Let me know what you think."

Five Rules – Number Four

It's not reassuring to tell people that a particular task is easy.

It is as if you are telling them that if they find the task difficult, there is something wrong with them, and they are the incompetent exception to the rule.

Five Rules – Number Five

Teach them to do important work offline, and really important work off the computer, period, before they enter the work online.

Five Rules – Number Five

- The “cloud” is not enough to protect precious photos, a doctoral dissertation, a love letter, a job application, or their latest fan fiction.
- Provide written instructions for back-up and recovery of data in the first items you hand out.
- Instill a healthy fear of not backing up. Tell them to back-up daily, and everything can fail.

Exercise

What are your favorite stories of personal failure?

Which ones do you share with your students?

Section One

Big Picture Versus Details:
Which Comes First?

50 Different Learning Theories

www.instructionaldesign.org/theories/
fod.msu.edu/oir/theories-learninghow-people-learn

Align Your Goal

Trainers vs students: differing goals.
Trainers: Want to teach everything
Students: Want to solve a problem
and go back to work ASAP.

Exercise

How well do you know
the goals of your students?
Partner with them to align your goals.
(But, Pat...they keep asking me
the same questions over and over again!)
Which leads us to...

Section Two

The Importance
Of Hands-On Learning

Number One Reason

All technology sucks.

Other Good Reasons

- Touching it won't break it.
 - Experiential theories: Get muscles involved.
 - Apply immediately in the real world.
 - Test "words" against what the "words" mean.
- "No one will type in those numbers there. Ever."
"I just did."

Section Three

Patience And Repetition: No Quick Fixes

How "Old Folks" Learn

- The File Folder Theory
- Older means more and thicker "brain folders"
- Less new information per session
- More time for practice and retention
- More time to "become familiar"

What is Mastery?
Feeling confident enough
to figure out it on your own,
which includes knowing
where to look it up
x

Exercise
Pick a technology task
you would like to teach.
What are three ways
you can teach it?

Section Four
We Learn Better
From Our Peers:
Students As Teachers

Each One Teach One

- Learning partners and small groups
- Delegate training in and out of class
- "In their own words"
- Put together cheat sheets
- Share successes and failures
- Input into class agenda
- Class presentations

Exercise

How can you increase the amount of time students spend teaching each other in classes and the workplace?

Section Five

Get Them Back To Work:
Do They Really Need
So Much Theory?

The Gold Standard

Learning happens
(retention and application)
when the students apply
what they know
in their real world.

Follow-Up

- Workplace Success as reported by:
 - customers and co-workers
- Personal Success as reported in:
 - conversations and surveys

Ask for Outcomes

- Not...I passed the computer test...
- Instead...
 - I got the job.
 - I got the better grade.
 - I got the promotion.
 - I send photos to my grandkids every week.
 - I taught someone else to use their computer.

Resources

- Anything by John Holt
- Peak Learning by Ronald Gross
- Association for Experiential Education:
www.aee.org

Connections

- pat@sieralearn.com
- sieralearn.com
- twitter: @pat2pattern and @SieraLearnTeach
- LinkedIn: PatWagner
- Facebook: PatWagnerDenver
- Google+
- librarything.com: patternresearch
