UTILIZING OUR SMART CLASSROOMS



A DART (Discuss-Apply-Reflect Tools) Workshop

brought to you by the Teaching & Learning Center

Session I Agenda:

- 1. Why the Smart Classroom?
- 2. How-to basics
- 3. Helpful hints
- 4. Techniques
- 5. Plan application

Why the Smart Classroom?

Like any other tool, this equipment doesn't magically improve teaching and learning, but it can make it easier to implement several critical research-based practices, because it uses a visual medium and connects the classroom to the past, future, and outside world:

In general:

- Using "cognitive models based on the teachers' and learners' abilities to connect new learning with prior knowledge and understanding" (Basic Skills as a Foundation for Student Success in California Community Colleges Part I: Review of Literature and Effective Practices, 52): Using the computer/viewer to connect to the world outside the classroom, to project work that students have prepared prior to class, and to save teacher and student contributions so they can be reviewed later, at the students' own pace, all contribute to connections between prior knowledge and new learning.
- Using "active learning methods...characterized by the fact that they are designed to elicit students' active participation in the learning process" (Boylan, 2002, 102): Similarly, using the computer/viewer makes it easy to organize cooperative work, and to display and save student contributions so that they are less transitory then only having students speak or write on the board.

In specific disciplines:

• ESL:

Recently, effective practices for ESL instruction among adult learners were the focus of a major national study, "What Works" (Condelli and Wrigley, 2004). Findings included

- 1. Varied practice and interaction strategy, in which the faculty member teaches the concept in a variety of modalities and allows student interaction.
- 2. Open communication, in which faculty members were flexible and responded to student questions as they arose; in addition, teachers' questions to students were open-ended.
- 3. Connection to the outside, in which faculty members link what is being learned to life outside the classroom, utilizing a variety of authentic, real-world items and experiences.

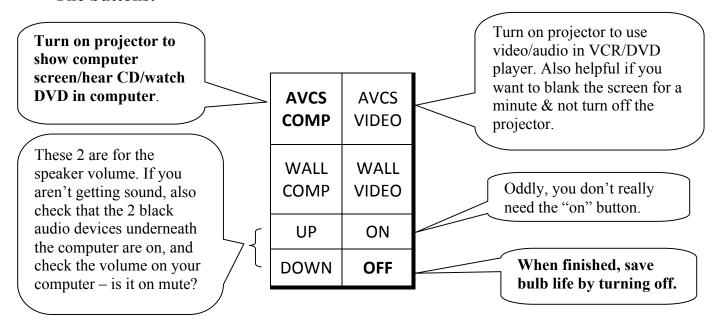
English:

According to Torgerson et al. (2004, 15), "Providing explicit instruction in reading comprehension strategies may lead to increased reading comprehension achievement." Simultaneous reading and writing development is also recommended.

• Mathematics:

A set of standards conveyed by the American Mathematical Association of Two Year Colleges (AMATYC, 2006) recommends that two-year college mathematics programs focus on eight standards of intellectual development: Problem Solving, Modeling, Reasoning, Connecting with Other Disciplines, Communicating, Using Technology, Developing Mathematical Power, and Linking Multiple Representations.

The buttons:



Helpful Hints:

- 1. **Close shades** (if any), **turn off the front light**, and if it's OK with students, dim the next one or even turn it off to improve visibility
- 2. Use **enlarge shortcut** at bottom right or increase font size to at least 18. Picture the size of chalkboard/whiteboard letters.
- 3. **Move table full of junk** out of the way, or students can't see the bottom of the screen.
- 4. The remotes don't have batteries or work (?)
- 5. Turn on computer (& if it doesn't come on automatically, monitor) Computer login: instructor/bcc
- 6. If it does something weird, try holding the power button on the CPU for 30 seconds, then restart.

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Things you can do with a smart classroom using Word and email:

- 1. Use the **document viewer like an OHP** to write notes, draw pictures, or do math.
- 2. Use the **document viewer to show a book or other text, or to show objects** or photos too small for the class to see.
- 3. Have **students show on the viewer** whatever you might have them write on the board: written questions, answers, products of group/partner work, objects, pictures, etc.
- 4. Use **capture image** to save whatever you have on the viewer as a jpg., and post it on your moodle.
- 5. Open a **Word document to use in lieu of board**. Open a new document every so often. Then you can move them around/minimize it's like having an unlimited number of clean chalkboards you can hide behind each other & whip back out at will.
- 6. If you have a moodle shell or another class website, **save your "boards" together in a document & post**. Even if you don't, have students type their real emails into a list so you can send out class notes easily.

- 7. Display a **homework assignment, model** the first part of it together in class, save and post/send so they start at home with the directions and an example they participated in.
- 8. Prepare a lesson or group project directions in advance. **Email yourself the document** (or just use a flash drive). In class, open your email & display. Web links in Word magically connect to websites.
- 9. **Demonstrate editing/manuscript formatting -** make mistakes & have students correct you.
- 10. **Email yourself any handouts, quizzes, etc.** In class, display when using the paper handout so you can easily point students to the part they are supposed to look at, fill in examples, correct errors, etc. You can drag a transparent shape around to highlight parts, or an opaque one to cover parts.
- 11. Raise the screen and **project onto the white board**. Write on it or have students write on it with a marker. Fill in blanks, annotate text, label diagrams, etc.
- 12. Have **students email you work** for extra or regular credit. Excerpt and display for demonstrating model/non-model writing elements or target grammar structures. Use the highlighter or change the font or text color to show them parts of text (it's a little harder to see on the screen).
- 13. Have **students email you questions** about readings the night before class. Select their best questions, copy to a word document, & display for discussion/writing.
- 14. Play with the **Insert Shapes** feature. It's easy to make arrows, stars, callouts, etc. They are great for illustrating tenses, pointing out writing features, etc. You can put some premade ones on a separate document, open it next to a piece of writing, and drag the shapes over to label things.
- 15. Check out the **Smart Art** under Insert on MW2007 & later. It has graphic organizers you can fill in on the spot. You type your stuff in on an outline, and it pops it into the boxes/changes the layout to match your outline.
- 16. **Insert Table** got way better in Microsoft 2007 & later it's easy to make one on the spot to record student brainstorming or show differences between 2 concepts or even record quick poll results.
- 17. Have students send a representative up from groups to record results, questions, or whatever their group product is supposed to be if it's short enough.18.19.

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What will I try with the equipment in the next 2 weeks?

The Viewer (AKA Document Camera):



1. Take off cover



2. Tilt up



3. Face down



4. Turn on power & lamp



5. Adjust lamp



6. Click on icon (if not on desktop, *UF-80 Viewer* under Programs/ Applications): It opens automatically.



FULL SCREEN (pink) = it's a window as big as your screen, but you can move it out of the way if you have other windows open. SCREEN FULL (blue) = it's maximized to the whole screen – use it if you're only using the viewer. Use ESC to exit to the view shown here.

Use CAPTURE & SAVE to turn any image on the screen into a picture file. Save as jpg. works best. RELEASE lets the viewer go back to whatever you have on the platen. After you save the image, you can paste it into a word file, post it on a website, email it to students...