


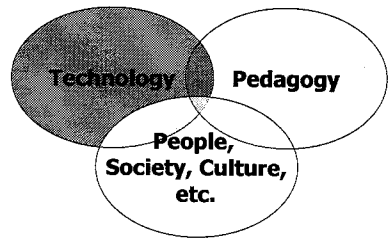


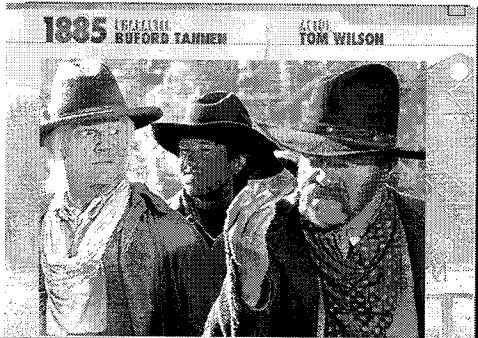
**E-Learning: It's about Nature (technology) AND Nurture (pedagogy)**  
**Curtis J. Bonk, Professor, Indiana Univ**  
 President, SurveyShare,  
 cjbonk@indiana.edu  
<http://mypage.iu.edu/~cjbonk/>


**Nature and Nurture:  
An Interactional Model**

**Technologies of 1885**



**Technologies of the 1880s?**



**Technologies of 1955**



**EXCITEMENT IN LEARNING**

**NEW...LOW COST  
Audio Visual Method  
WITH DISCUSSIONAL CONTROL**

**Dramatic NEW Teaching Aid...**

**DuKANE CORPORATION**

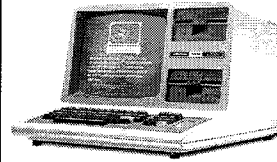
**AMERICAN OPTICAL  
OPAQUE PROJECTOR**



## Technologies of 1985



## Technologies of the 1980s



### Radio Shack TRS-80 Model III

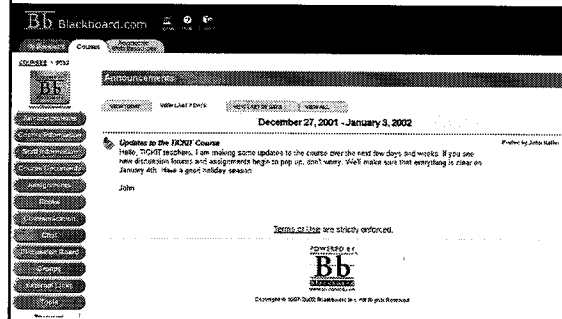
Introduced: July 1980  
**Price:** US \$699 base model  
 US \$2495 w/ 32K, dual drives.  
**CPU:** Zilog Z-80, 2.03 MHz  
**RAM:** 4K, 48K max.  
**Ports:** Cassette tape, expansion, serial  
**Display:** 12-inch BMW monitor: 64 X 16 text  
**Storage:** 0, 1, or 2 internal 176K floppy drives  
 External cassette @ 500 / 1500 baud  
**OS:** BASIC in ROM, TRS-DOS on disk



## Technologies of the 1980s



## Technologies of the late 1990s: Course Management Systems



## Technologies of the 2000's Ten Trends



## Effects of interactive multimedia in distance learning

Giti Javidi and Ehsan Sheybani, 2004, In Proceedings of the IASTED International Conference WEB-BASED EDUCATION

**"The advancement in technology is shaping every aspect of our life, including education. One decade ago, the Internet was not critical to education. However, now, it has become an integral part of learning process. Internet technology is having a dramatic effect on colleges and universities, producing what may be the most challenging period in the history of higher education."**

**Entice Students with Technology Giveaways**

**Motorola R200**, IBM® College of Digital Software and Technology at Kentville. The college gave 40 students a R200 with Prepaid Text Message in the first week.

**Gateway M275 tablet PC**, **Wisconsin State University, Mayville State University**. The schools will provide the tablet computers to full-time students who do not have laptops from previous programs.

**Blackberry 7520 PDA**, **University of Maryland**. The school has laptop banking out the wireless personal digital assistants to faculty and more than 800 incoming graduate students in the South School of Business.

**Students continue with laptops as educational tools**

**Trend #1: Blogging (75,000 new blogs each day, USA Today, March 27, 2006)**

Quarter	Blog Population
Q1 2000	29,500
Q2 2000	66,100
Q3 2000	116,000
Q4 2000	197,000
Q1 2001	352,000
Q2 2001	529,000
Q3 2001	951,000
Q4 2001	1,200,000
Q1 2002	1,670,000
Q2 2002	2,140,000
Q3 2002	2,670,000
Q4 2002	3,070,000
Q1 2003	3,730,000
Q2 2003	4,980,000
Q3 2003	5,780,000
Q4 2003	7,300,000
Q1 2004	9,620,000
Q2 2004	12,600,000
Q3 2004	16,200,000
Q4 2004	21,000,000
Q1 2005	27,600,000
Q2 2005	37,600,000
Q3 2005	45,200,000
Q4 2005	53,400,000

**Hosted Blog Growth**

**Growth Rate**

606%
126%
131%
105%

**Blogging Questions**

1. Who has a blog? Any for a specific class?
2. Who regularly reads other people's blogs?
3. Who assigns blogging tasks?
4. Who has created a video blog?
5. Who thinks it is an utter waste of time to blog?

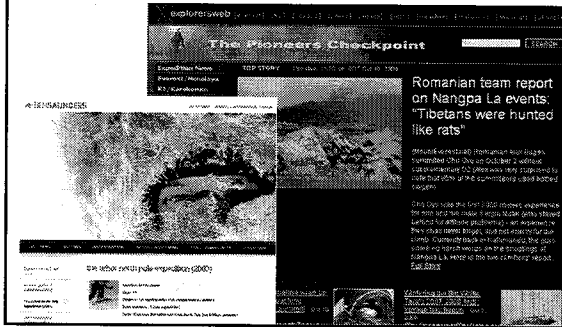
**Scholars who Blog, Chronicle of Higher Ed, (Glenn Reynolds, instapundit.com; Stephen's Web, www.downes.ca)**

**Use of Weblogs (especially English writing class)**

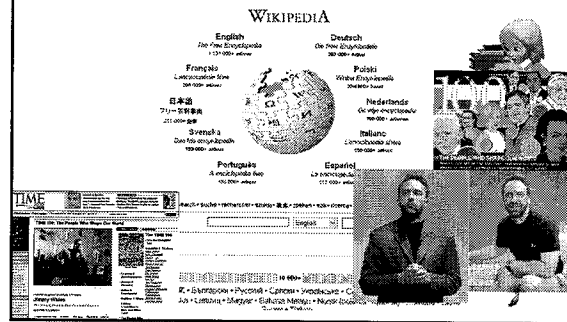
1. **Instructor or Tutor blog:** resources, information, space to chat
2. **Learner blog:** reflections, sharing links and pics, fosters ownership of learning
3. **Partner blog:** work on team projects or activities
4. **Class blog:** international exchanges, projects, PBL
5. **Revision:** review and explode sentences from previous posts, add details
6. **Nutshell:** summarize themes or comments across blogs
7. **Blog on blog:** reflections on feelings, confusions, and experiences with blogs

**Vlogging (Video Blogging)**

## Adventure Blogging (Ben Saunders, Mark Fennell)



## Trend #2. Wikis



## Wiki Questions

1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?

## How use in teaching

1. Provide space for free writing
2. Debate course topics and readings
3. Share resources (websites, conferences, writing, etc.)
4. Maintain group progress journal
5. Require group or class essay
6. Have student revise Wikipedia pages
7. Write a wikibook

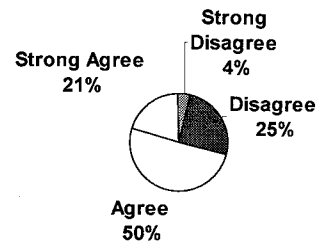
## What is a wiki?

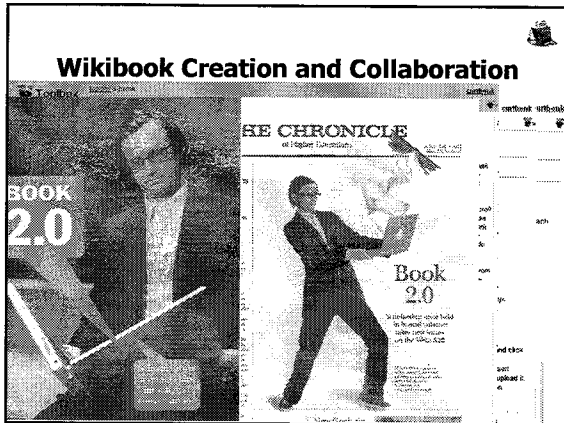
- Ward Cunningham, in 1995
- The name, wiki, is based on the Hawaiian term *wiki-wiki*, meaning "quick"
- Also for "What I Know Is"



## Wikibook Research

My recent Wikibook project was successful





### Podcast Questions

1. Who has listened to a podcast?
2. Who listens to a certain podcast on a regular basis?
3. Who has created a podcast?
4. Who has created a vodcast?
5. Who thinks podcasting is simply more talking heads?

Learning TRENDS by Elliott Masie - September 18, 2006.  
 #402 - Updates on Learning, Business & Technology.  
 52,889 Readers - <http://www.masie.com> - The MASIE Center.

**Fingertip Knowledge Podcast & Transcript:**  
 One of my focus points these days is Fingertip Knowledge. You and I and most of our colleagues are increasingly using search engines, from Google to Corporate Intranets, to "walk" our way to the information or knowledge that we need.

The screenshot shows the 'LEARNING 2006' website. The main heading is 'LEARNING 2006' with the date 'November 5 - 8 • Orlando, Florida'. Below the heading, there are several logos and a navigation menu. The page is designed with a clean, professional layout.

### Podcasting and Coursecasting (Adam Curry; www.dailysourcecode.com)

"Just the word 'podcast' scares a lot of teachers away," Ms. Schrock said. "There are a lot of misconceptions."  
 "All you need is a computer, access to the Internet and a microphone that you can buy at Toys 'R' Us," Mr. Warlick said. "I listen to podcasts on my computer." (NY Times, Jan 25, 2006)



The three small images show a classroom environment. The first image shows a group of students sitting at desks. The second image shows a student at a computer workstation. The third image shows a student looking at a laptop screen.

### Language Learning (ChinesePod—learn Mandarin)

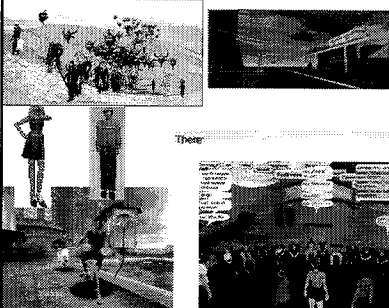
The screenshot shows the ChinesePod website. The main heading is 'Learn Mandarin on Your Terms'. Below the heading, there is a 'Podcast Archive' section with a list of episodes. A featured episode is titled '中国34 Chinese Tea'. The website has a clean, user-friendly design with a navigation menu and a search bar.

## Educational Applications

1. Recordings of lectures (Coursecasting)
2. Supplemental textbook or entire book
3. Student projects
4. Interviews
5. Language lessons
6. Oral reports
7. K-12 classroom interactions
8. Downloadable library of resources
9. Recordings of performances

## 4: Virtual Worlds/Virtual Reality/MMOG



**Virtual gaming**  
 Online games are one of the many ways the Web has changed the way young people socialize and entertain themselves.

Percentage of visitors and users to game Web sites by age, September 2005

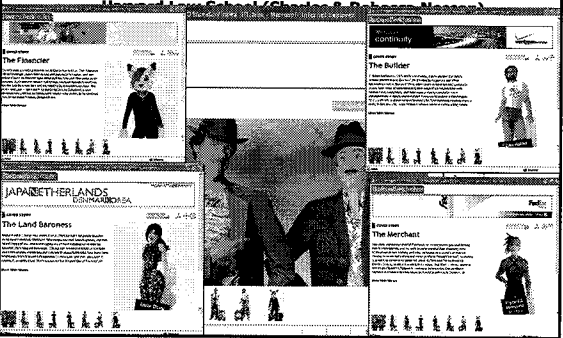
12-17	10.5%
18-24	15.3%
25-34	43.2%
35-44	17.9%
45-54	20.3%
55-64	4.9%
65+	8.4%
Other	3.9%

SOURCE: eResearchMeets.com AP

## Trend 4: Virtual Worlds/Virtual Reality/MMOG

First Course in a Virtual World (Second Life)  
 Wednesday, August 30, 2006

Hogwood Lane School (Charles & Deborah Messner)



## Trend #5: Wireless Technology



**MOST (UN)WIRED SCHOOLS?**  
 CNET and U.S. News and World Report got the top 50 universities' tech specs and asked them which computers they recommend to students and faculty.

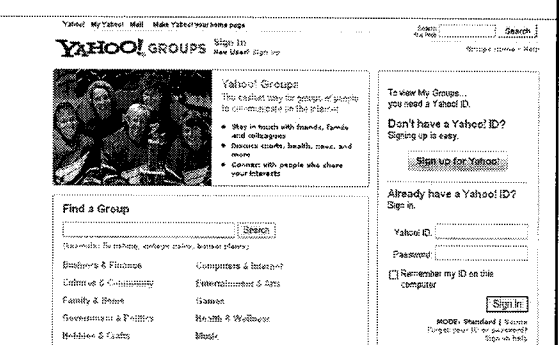
*Creating the Next-Gen Enterprise*

Handheld Computing

## Trend #6: Mobile Technology



## Trend #7. Collaborative Tools



## Trend #8. Open CourseWare

The Open CourseWare Project

OPEN COURSEWARE OPPORTUNITY

Learn Open CourseWare in technical education and workforce training worldwide through open courseware. (2002) 2003

OPEN SHARING GLOBAL BENEFITS

NEWS

4th Sep 2004: OpenCourseWare.org launches OpenCourseWare.org

27 Sep 2004: OpenCourseWare.org launches OpenCourseWare.org

## Trend #9. Open Source Software Interoperability Standards, Nov. 24, 2003

Moodle

Moodle 1.2 Beta

Moodle is a course management system (CMS) - a software package designed to help educators create quality online courses. Each releasing system also provides a rich learning management system (LMS) or Virtual Learning Environment (VLE). One of the main advantages of Moodle over other systems is its open source nature and its interoperability standards.

Moodle 1.2 Beta

After months of work we have announced the Moodle 1.2 beta release. It is a last release to test out any last problems before the final release which we expect to be ready in 2 weeks.

As usual, it's available from the Moodle download page and from our release page.

And here's another new feature - automatic embedded audio (using RealPlayer).

Moodle 1.1.3 Released

Thanks to some great collaborative working around the globe we have released Moodle 1.1.3 with features and bug fixes that support interoperability standards. It's a step to making Moodle the standard software for Moodle, Canvas, Blackboard, WebCT, and more, on any browser.

moodle.com

## Trends #10. Synchronous Conferencing

Effective Online Training with Web Conferencing

GoToMeeting™

Now with GoToWebinar™

GoToMeeting™, GoToWebinar™, and GoToAssist™

**WEBINAR**

Struggling to keep up with the demands of training a global workforce or customer base? Many companies have implemented remote training programs to address this problem. Can't get full training - find out how you can stay competitive by using real-time opportunities for remote instruction. GoToAssist™ instantly saves productivity and directly impacts the bottom line.

**TOPIC:** Collaborative Learning, and Web Conferencing

**The "Webinar" is powered by GoToMeeting™ Corporate, the market's most cost-effective and secure online training solution. GoToMeeting Corporate now includes the new GoToWebinar™ for large web events and GoToAssist™ for smaller, more interactive meetings.**

**At the Webinar you will learn how to:**

- Use interactive Web collaboration tools for training
- Make it easy for trainees to attend and enjoy online training sessions
- Optimize your return on investment in an online training solution

## Nature and Nurture: An Interactional Model

Technology

Pedagogy

People, Society, Culture, etc.

	Low Risk	High Risk
1. Risk	←	→
	Easy to Embed	Extensive Planning
2. Time	←	→
	Free or Inexpensive	Enterprise Licenses
3. Cost	←	→
	Instructor-Focus	Student-Focus
4. Student-Centered	←	→
	Low	High

## Part I: Five Learning Centered Synchronous and Asynchronous Ideas

(See Bobweb class: <http://www.indiana.edu/~bobweb/>)

Experience. The difference.

## 1. Learner-Centered Learning Principles (American Psychological Association, 1993)

### Cognitive and Metacognitive Factors    Developmental and Social Factors

- |                                   |  |
|-----------------------------------|--|
| 1. Nature of the learning process | 10. Developmental influences on learning |
| 2. Goals of the learning process  | 11. Social influences on learning        |
| 3. Construction of knowledge      |  |
| 4. Strategic thinking             |  |
| 5. Thinking about thinking        |  |
| 6. Context of learning            |  |

### Individual Differences

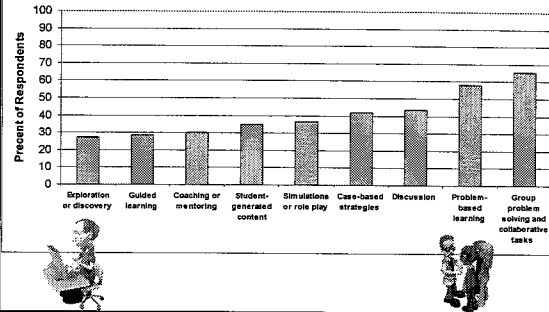
- |  |
|--|
| 12. Individual differences in learning |
| 13. Learning and diversity             |
| 14. Standards and assessment           |

### Motivational and Affective Factors

- |  |
|--|
| 7. Motivational and emotional influences |
| 8. Intrinsic motivation to learn         |
| 9. Effects of motivation on effort       |



Instructional Approaches that Selected by Respondents as Among the Four Strategies Likely to Become More Widely Used



## 1. Anchored Instruction (find anchoring event (CTGV, 1990?) (L/M = Cost, M = Risk, M = Time)

- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.



## 2. Cool Resource Provider (Bonk, 2004) (L = Cost, M = Risk, M = Time)

- Have students sign up to be a cool resource provider once during the semester.
- Have them find additional paper, people, electronic resources, etc.
- Share and explain what found with class via synchronous meeting or asynchronous discussion post.



## 3. ORL or Library Day (L = Cost, M = Risk, M/H = Time) (Bonk, 1999)

- Have students spend a day in the library or online finding and summarizing a set number of articles.
- Have them bring to class or post abstracts to an online forum.
- Share in small groups interested in similar topics.
- Perhaps give each student 1-2 minutes to describe what found in a chat.



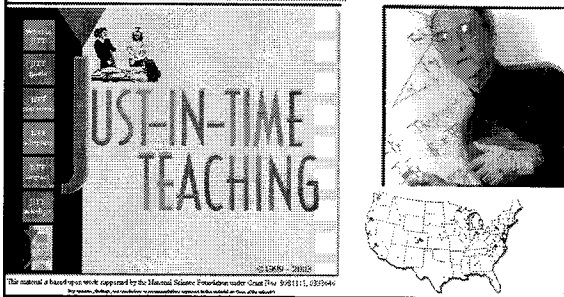
## 4. 99 Second Quotes (L = Cost, M = Risk, M = Time)

- Everyone brings in a quote that they like from the readings
- You get 99 seconds to share it and explain why you choose it in a sync chat or videoconference
- Options
  - Discussion wrapped around each quote
  - Small group linkages—force small groups to link quotes and present them
  - Debate value of each quote in an online forum





**5: Online Warm-ups Activities  
Just-In-Time-Teaching (JiTT)**  
<http://webphysics.iupui.edu/jitt/jitt.html>



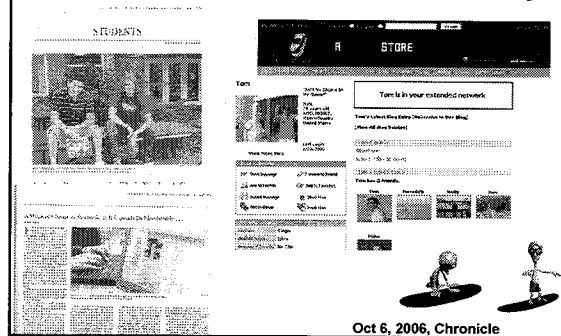
**Part II.  
Mucho Motivation**



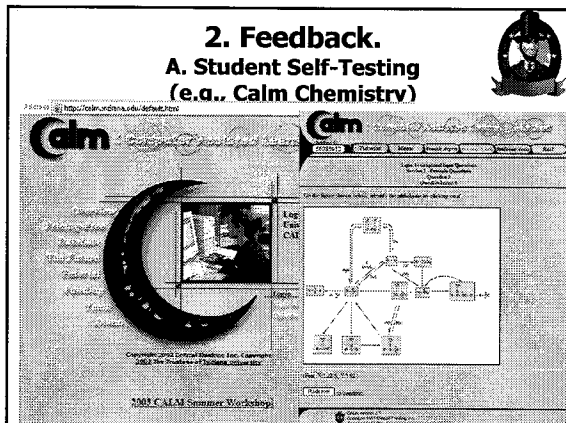
**Intrinsic Motivational Terms**

1. **Tone/Climate:** Psych Safety, Comfort, Belonging
2. **Feedback:** Responsive, Supports, Encouragement
3. **Engagement:** Effort, Involvement, Excitement
4. **Meaningfulness:** Interesting, Relevant, Authentic
5. **Choice:** Flexibility, Opportunities, Autonomy
6. **Variety:** Novelty, Intrigue, Unknowns
7. **Curiosity:** Fun, Fantasy, Control
8. **Tension:** Challenge, Dissonance, Controversy
9. **Interactive:** Collaborative, Team-Based, Community
10. **Goal Driven:** Product-Based, Success, Ownership

**1. Tone: a. Scavenger Hunt (Find Fellow Students Social Networking Software)**



**2. Feedback.  
A. Student Self-Testing  
(e.a., Calm Chemistry)**

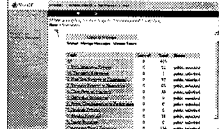


**2. Feedback: b. Clickers;  
Innovation is but one click away...**



## 5. Choice: A. Multiple Topics

- Generate multiple discussion prompts and ask students to participate in 2 out of 3
- Provide different discussion "tracks" (much like conference tracks) for students with different interests to choose among
- List possible topics and have students vote (students sign up for lead diff weeks)
- Have students list and vote.



Topic	1	2	3	4	5
1. The Role of the Teacher					
2. The Role of the Student					
3. The Role of the Parent					
4. The Role of the Community					
5. The Role of the Government					
6. The Role of the Media					
7. The Role of the Religion					
8. The Role of the Arts					
9. The Role of the Science					
10. The Role of the Technology					

## 8. Tension: A. Online Role Play of Scholars, Personalities, or Famous People

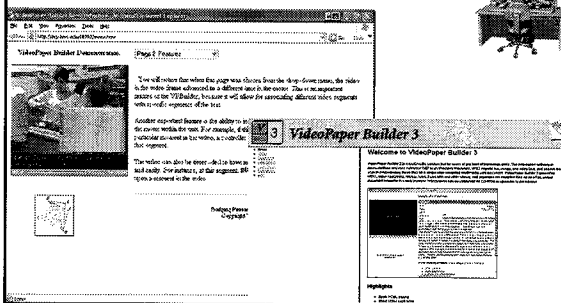
- Enroll famous people in your course
- Students assume voice of that person for one or more sessions



© 24 3 I am a... as a... Acquire: 11/25/03 05:49 PM  
Training Magazine might have a little bit of a... Also, it's being...  
© 24 3 I am a... as a... Acquire: 11/25/03 05:49 PM  
I am a... as a... Acquire: 11/25/03 05:49 PM



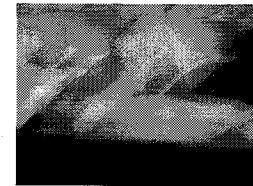
## 10. Product-Based: A. Video Papers. Grounded Research and Production. Video Paper Builder (<http://vpb.concord.org/>)



The video player shows a video of a person speaking. The text input fields are for the video title and the video description. The interface includes a 'Video Paper Builder' header and a 'Page 1' section with a 'Video Paper Builder' sub-section.

## 99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four



## Addressing Learning Styles



## Why Address Learning Styles?

- Promotes reflection on teaching
- Move from just one mode of delivery
- View from different viewpoints
- Offer variety in the class
- Might lower drop-out rates
- Fosters experimentation



## Poll 1: Which learning style do you prefer?

- Read (Auditory and Verbal Learners)
- Reflect (Reflective Learners)
- Display (Visual Learners)
- Do (Tactile, Kinesthetic, Exploratory Learners)



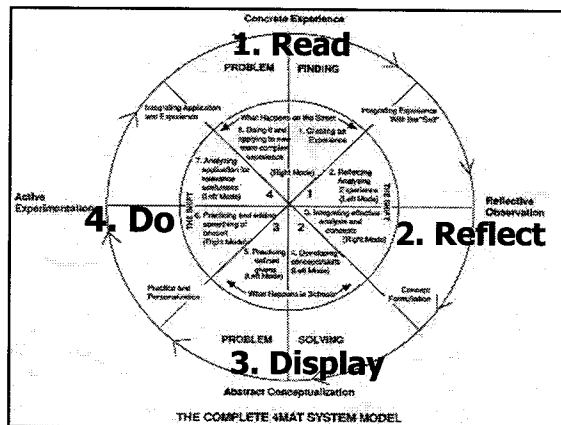
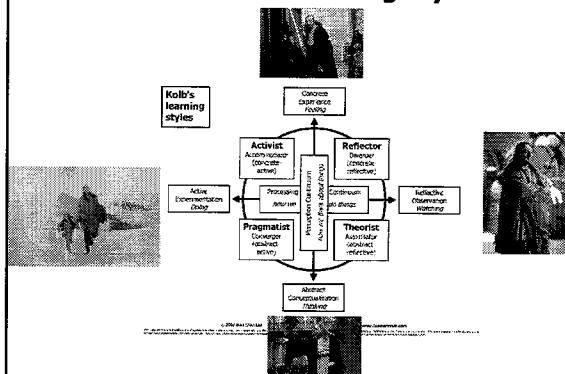
## Kolb (1984)



- According to Kolb, effective learning involves four phases:
  - from getting involved (Concrete Experience) to
  - listening/observing (Reflective Observation) to
  - creating an idea (Abstract Conceptualization) to
  - making decisions (Active Experimentation).
- A person may become better at some of these learning skills than others; as a result, a learning style develops.

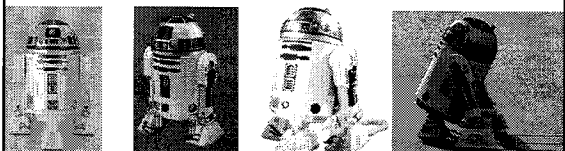


## One View of Learning Styles



## The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)



## 1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.



### 1a. Art and History Exhibits

**1a. Art and History Exhibits**

CNN.com

**TECHNOLOGY**

**Modern media meets Colonial Williamsburg**

Modern media meets Colonial Williamsburg

Williamsburg, Virginia (AP) — Thomas Jefferson first started to start listening to an iPod, with his wife and three children, as he walked the streets of Colonial Williamsburg.

It's possible that from the restored 18th-century capital of Virginia can also see modern media streams to their modern counterparts. Bill Egan talks about putting Jefferson up in history of the town of July 17th, and the Declaration of Independence.

The world's largest living history museum says its staff members intend to share the same with audiences for years to come. The museum says it's looking for ways to make it possible for educational sites for schools.

### 1b. Basic Acoustics of Musical Instruments

**1b. Basic Acoustics of Musical Instruments**

PHYSICS

**Music Acoustics**

Physics and music have been closely related for thousands of years. The site provides, in musician-friendly terms, some of our research on music acoustics, and the science of music generally. It begins around our site using the desk of a bar at all, there are sections on various types of musical instruments and on speech. In each case, there is a simple introduction suitable for non-factorial students, as well as sections on our research. The 'Basic' section gives a simple introduction to general topics in acoustics (sound, waves and so on).

**Eccellence in Acoustics**

Our Laboratory and its staff have won a number of awards from the acoustical societies of Australia, France, US and from other institutions and companies.

**Volume changes with age and playing**, an interview report on a long term study.

**Link of Harmonic**, including **Own Harmonic Resonance Curve** using 100 interactive web devices.

**Form for Appearance** - an interesting effect is the waveform path range of the form.

**Recently asked questions about music acoustics.**

**More to learn acoustics**. This web page, with points of background and sound files, contains the 'Production' series, currently including **gargophones**, **clashes** and

### 1c. Online Tutorials and Help

**1c. Online Tutorials and Help**

NCBI PubMed

To register for a My NCBI account, click on the Register link at the top right of the screen.

- To get started, enter one or
- Search terms may be helpful.

Target your results using the improved Limits page!

- Click the Limits tab to easily:
- Add an author or journal to your search
- Limit to citations with links to free full text
- Select multiple languages, publication types, and

Read the [PubMed Help](#) to explore other features as well as

### 1d. Online Literature and Free Books

**1d. Online Literature and Free Books**

Google

the COMPLETE WORKS of Shakespeare

THE COMPLETE WORKS OF SHAKESPEARE

EDITED FROM THE ORIGINAL TEXTS BY HARRY CURRIE WALL

A MEMOIR AND ESSAY ON HIS GENIUS BY A. N. WOOD, M.A.

REPRINTED AND INTRODUCED BY THE EDITOR

The complete plays of Shakespeare. Now at your fingertips.

Shakespeare's plays, poems and sonnets are now available for free on the internet. This is a great opportunity to read the works of the greatest writer in the English language. The complete works of Shakespeare are available in a variety of formats, including HTML, PDF, and audio. You can also find many of Shakespeare's plays and poems in the public domain.

### 2. Reflective and Observational Learners

**2. Reflective and Observational Learners**

- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives

### 2a. Post Model Answers

**2a. Post Model Answers**

Employment Law and Ethics Project

**Question 1**

Would it be illegal for Laura to recommend Billings instead of Lewis? Explain, being specific about the legal doctrines that would apply?

**Answer 1**

Under both Title VII of the 1964 Civil Rights Act and Section 1981 it is illegal to discriminate on the basis of race or color, and Lewis would likely win a lawsuit using the claim of disparate treatment if he were not recommended for the promotion. If Laura does not recommend Lewis, she is guilty of violating the law. None of the three prime defenses—seniority, merit, or bona fide occupational qualification—apply to this situation, since Lewis has high

## 2b. Reuse Chat Transcripts

**SiteScape Forum**  
Every Track Matters

**47. Week 9: Chat 4MAT with Bernice McCarthy March 10th from 5-6 pm**

Chat Book  
Posted on 02/25/04 11:24 PM  
Modified by Chat Book on 03/10/04 06:51 PM

Total Artviews: 50 [View summary of users who have accessed this content...](#)

OK, it is time to be DEACTIVATED. This is a chat with Bernice McCarthy!

- Open this transcript on-line here
- View the chat transcripts ordered by date
- View the chat transcripts ordered by frequency

Attachments:

- Chat\_4MATtranscript.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm
- http://www.abdo.com/education.com/4mat/bernice/bmccarthy.htm

## 2c. Reflection Sheets and Scaffolds online (E-Reading First Ohio) (reflect, share, and compare)

Reflection Sheet

1. Adjust in the

2. Hearings in the

3. Hearings in the

4. Adjust systems

5. Perform

Final Questions

1. What problems do you have in reading with this student?
2. How does this student start when reading?
3. What does this student do when he/she is stuck?
4. How does this student use his/her strategies?

## 3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Death Star 8

Diagram of Earth's layers: Crust, Mantle, Core.

Photograph of a person in a space helmet.

## 3a. Online Anatomy and Physiology

Grid of buttons: 1, 2, 3, 4, 5, 6, 7, 8

Buttons: How to Use this site, Site History

INTERACTIVE CADAVER

CARDIOVASCULAR SYSTEM

Virtual Anatomy

Return to history

## 3b. Online Modeling: Watch Expert Performances (Music, Cyber Fashion Shows, etc.)

INFORMATION TECHNOLOGY

Internet and Cyberspace

Images: A person at a computer, a person in a futuristic setting, a person in a futuristic setting.

## 4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

Images: A person in a futuristic setting, a person in a futuristic setting, a person in a futuristic setting.

#### 4a. Videoconferencing with Hearing Impaired Students Online

- College students tutoring high schools on their homework
- Instructors observing how teacher education students are doing in field placements (practice presentation and communication skills)
- Interpret speaker via Web cam



#### 4b. Romantic Poetry Project

Romantic Audience Project  
(Website 247: The Romantic Audience)



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Welcome to RAP  
 The Romantic Audience Project is a collaborative study between the University of North Carolina, Chapel Hill and the University of North Carolina at Greensboro. In 2005, it replaced a similar project, the Romantic Audience Project.

For personal information on RAP - including contact information, email addresses, a view of the site, and press coverage - please visit [the website](#).

If you would like to join the project, please visit [the website](#).

Project members:

**THE LIFE AND WORK OF JOHN KEATS  
 1795-1821**

A COLLECTION OF RESOURCES  
 DEDICATED TO THE SECOND  
 GENERATION ROMANTIC POET

ENTER THE WEBSITE

#### 4c.

#### Survey Research and Market Analysis (e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)

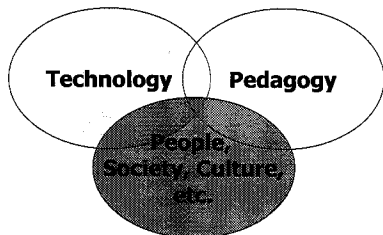


#### Next up: The MATRIX!!!!!!!!!!!!!!

- Mobile
- Auditory
- Thought-stimulating
- Reflective/Real-World
- vIsually Interactive
- eXtremely Hands-on



#### Nature and Nurture: An Interactional Model



#### Technology is Part of the Equation (Podcasts and Wikis and Blogs! Oh, My!)

