Task
- Ideas definitely Can Use (Circle or write down)
- Ideas you might use (check off or write down in a separate column)
- Ideas you cannot use (cross off or put at the bottom)

Frameworks: A Theory of Critical Inquiry in Online Distance Educ
Randy Garrison, Terry Anderson, & Walter Archer
2003, Handbook of Distance Education, Moore & Anderson (Eds.)
garrison@ucalgary.ca; terrya@athabascau.ca

Model of Teaching and Learning Through CMC (Gilly Salmon, 2000)

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
VARK learning styles (Fleming & Mills 1992a, 1992b): Four types of learners and learning styles:

1. Visual;
2. Auditory;
3. Reading/writing;
4. Kinesthetic, tactile, or exploratory.

Poll 1: Which learning style do you prefer?

- a. Read (Auditory and Verbal Learners)
- b. Reflect (Reflective Learners)
- c. Display (Visual Learners)
- d. Do (Tactile, Kinesthetic, Exploratory Learners)

VARK learning styles (Fleming & Mills 1992a, 1992b). Four types of learners and learning styles

1. Visual learners prefer diagrams, flowcharts, graphics (they do not mention video, film, Webcasts, or PowerPoint presentations).
2. Auditory learners prefer to hearing directions, lectures, or verbal information.
3. Reading and writing learners prefer text passages, words, and written explanations.
4. Tactile or kinesthetic learners learn best by connecting to reality through examples, practices, or simulations.

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

Abstract Conceptualization vs. Concrete Experiences

- (AC) - I am rational and logical.
- (CE) - I am practical and down to earth.
- (AC) - I plan events to the last detail.
- (CE) - I like realistic, but flexible plans.
- (AC) - I am difficult to get to know.
- (CE) - I am easy to get to know.
Active Experimentation vs. Reflective Observation

- (AE) - I often produce off-the-cuff ideas.
- (RO) - I am thorough and methodical.
- (AE) - I am flexible and open minded.
- (RO) - I am careful and cautious.
- (AE) - I am loud and outgoing.
- (RO) - I am quite and somewhat shy.

Index of Learning Styles Questionnaire
Barbara A. Solomon, North Carolina State Univ
http://www.engr.ncsu.edu/learningstyles/listweb.html

6. If I were a teacher, I would rather teach a course
   ○ (a) that deals with facts and real life situations.
   ○ (b) that deals with ideas and theories.

7. I prefer to get new information in
   ○ (a) pictures, diagrams, graphs, or maps.
   ○ (b) written sentences or verbal information.

The R2D2 Method

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

1a. Online Resource Libraries

Title: The Complete hats System Model

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

1a. Online Resource Libraries
1b. 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 blogs: reflections on feelings, confusions, and experiences with blogs

1c. Online Audio Cases
Audio Dramas
eCollege Wales, Univ. of Glamorgan

The Chemical Sex - Episode 1
Listen to John and Terry talking about their start-up idea. What do they need to consider before deciding to pursue their idea in starting a business? Think about their personal as well as their professional situations.
Click “Play” to begin.

1d. Online Tutorials and Help

1e. Synchronous Conferencing

1f. Library Day (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.

1g. Cool Resource Provider (Bonk, 2004)
• 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.
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.

Simplifying Integral Exponents:
Rules for Exponents (m and n positive integers):

2e. Critical/Constructive Friends, Email Pals...

2f. Web-Supported Group Reading Reactions and Peer Feedback Required
1. Give a set of articles.
2. Post reactions to 3-4 articles that intrigued them.
3. What is most imp in readings?
4. React to postings of 3-4 peers.
5. Summarize posts made to their reaction.
(Note: this could also be done in teams)

2g. Reflection and Observation: E-Portfolios
- Multimedia presentations (video, animation, voice-over testimonials)
- Examples of work
- Personal statement
- Self-reflections on that work
- Connections between experiences
- Standard biographical info
- I.e., progress, achievements, efforts...
- Large, complex, time to grade

2h. E-Reading First Ohio (reflect, share, and compare)

3. Visual Learners
- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
3a. Online Anatomy and Physiology

3b. Animations, Video Clips, Audio, Pictures, Web Resources, etc.

3c. Virtual Tour (Center for Astrophysical Research in Antarctica)

3d. Current Events: Interactive Online New Stories & Cases

3e. Video Library of Concepts, Cases, or Experts

3f. Anchoring Event (CTGV, 1990?)

- 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.
3g. Digital Libraries (LibraryShare)

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

3i. Expert Mentoring Online in Art and Design (COFA Online, Omnium Project, Creative Waves—online graphics and photomedia project)

3j. Vodcast for Medical Training (e.g., "SonoSite on the small screen: The Bothell-based company uses podcasts for its ultrasound scanner training."

Dan Bates / The Herald, Sept 25, 2006
David Levesque, vice president of global learning at SonoSite in Bothell, demonstrates the company's new podcast training for ultrasound technicians.

3k. Virtual Surgery: multisource, real-time, multimedia-based educational tool for surgery

3m. Internet2 Video Conferencing Applications
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.

4a. Educational Simulations, Scenarios, and Manipulations

4b. Electronic Seance

- Students read books from famous dead people
- Convene when dark (sync or asynchronous)
- Present present day problem for them to solve
- Participate from within those characters (e.g., read direct quotes from books or articles)
- Invite expert guests from other campuses
- Keep chat open for set time period
- Debrief

4c. Online Role Play of Scholars, Personalities, or Famous People

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

4d. 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

4e. Online Games

www.km-solutions.biz/cca/quiz.zip; Games2Train: The Challenge; Thiagi.com
4f. Structured Controversy and Instructor Generated Virtual Debates (or student generated)
1. Select controversial topic (with input from class)
2. Divide class into subtopic pairs: one critic and one defender.
3. Assign each pair a perspective or subtopic
4. Critics and defenders post initial position statements in an online thread
5. Rebut person in one's pair
6. Reply to 2+ positions with comments or q's
7. Formulate and post personal positions.

4h. Historical Documents discoverbabylon.org
• In its final form, the multiplayer game will let you march through three-dimensional recreations of the first city-states, around 3000 B.C., the first empires, around 2300 B.C., and finally, the famous Pyramids.

4i. Jigsaw
• Form home or base groups of 4-6 students.
• Student move to expert groups—discussion ideas in a chat.
• Share knowledge in expert groups and help each other master the material in an online forum.
• Come back to base group to share or teach teammates.
• Students present in group what learned.

4j. Digital Storytelling

4k: Internally Built Web Links
(Human Intelligence Homepage, Jonathan Plucker, IU)
4h. Brain Pop (movies) experiments, timelines, activity pages
(Gina Koch-Midalpe, FETC Connections, Fall

4m. Romantic Poetry Project

4n. Continuous Writing Tools and Resources (e.g., Writer’s Window)

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

- Mobile
- Auditory
- Thought-stimulating
- Reflective/Real-World
- Visually Interactive
- Extremely Hands-on

Stand and Share

- Will Work: ______________
- Might Work: ______________
- No Way: ______________

Try the R2D2 Method!!!