






## Masterclass Part Two:

**Adding Jumbo Motivation to Online Courses and Activities with the TEC-VARIETY Model**



**Dr. Curtis J. Bonk**  
**Professor, Indiana University**  
<http://php.indiana.edu/~cjbonk>  
[cjbonk@indiana.edu](mailto:cjbonk@indiana.edu)



## We are not motivating students with the technologies that they love!













## A Vision of Today's Students




**More From: mweesch**

- October 12, 2007 (last edit) a short video summarizing some of the most important characteristics of students today - how they learn, what they need to learn, their goals, hopes, dreams, what their lives will be like, and so on.

## Jumbo Motivation is Needed!

## Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?




## Motivation Research Highlights (Jere Brophy, Michigan State University)

1. **Supportive**, appropriate **challenge**, **meaningful**, moderation/optimal.
2. Teach **goal setting** and self-reinforcement.
3. Offer **rewards** for good/improved performance.
4. **Novelty**, **variety**, **choice**, adaptable to interests.
5. **Game-like**, **fun**, **fantasy**, **curiosity**, **suspense**, **active**.
6. **Higher levels**, **divergence**, **dissonance**, **peer interaction**.
7. Allow to create finished **products**.
8. Provide immediate **feedback**, advance organizers.
9. Show intensity, **enthusiasm**, **interest**, minimize anxiety.
10. Make content **personal**, **concrete**, **familiar**.



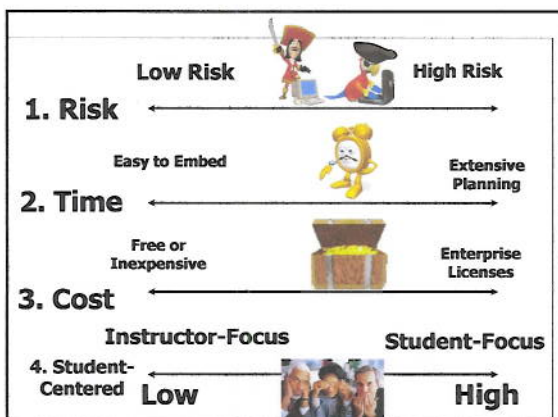
**I even reflected on this for a moment...and then something magical happened...**



**Magic #1: TEC-VARIETY Model for Online Motivation and Retention**

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

**Masterclass Part 1: TEC-VARIETY CLO, October 2011**

**1. Tone/Climate: Social Ice Breakers**

**A. Public Commitments:**  
Have students share how they will fit the coursework into their busy schedules

**B. Favorite Websites**


1. Everyone posts 1-2 of their favorite Websites and explain why.
2. Peers comment on or rate them.



**1. Tone/Climate: Social Ice Breakers**

**C. 8 nouns (adjectives, verbs)**

- List of nouns: (e.g., pirate, computer, traveler, roadrunner, wind, bookworm, musician, mentor, etc.)  
- <http://www.momswhothink.com/reading/list-of-nouns.html>
- List of adjectives: (e.g., lazy, powerful, shy, bored, exotic, cooperative, sloppy, rebel, etc.)  
- <http://www.momswhothink.com/reading/list-of-adjectives.html>
- List of verbs: (e.g., coordinate, entertain, amuse, push, unite, beg, dream, publicize, etc.)  
- <http://www.momswhothink.com/reading/list-of-verbs.html>



**1. Tone/Climate: D. Video Course Intros**  
 (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)  
 Yun Yun Chow, Open U Malaysia, Making Art Lessons Come Alive with Web 2.0  
<http://www.youtube.com/watch?v=BO9rqJD1GXo>

**2. Encouragement, Feedback, etc.:**  
**A. Online Self-Testing** (e.g., self study in vocabulary, anatomy, chemistry, dissection, etc.)

Upper Extremity Muscles

Which of the following are ANTONYMS for the word MAXIMUM?

- A. clear, understandable, foreseeable, accessible
- B. non-plucky, useful person
- C. certain, withhold, long, hold
- D. make happy, cheer, assure, please
- E. smaller, least, minimum, before

A B C D

1 / 20

**2. Encouragement, Feedback, etc.:**  
**B. Tutorials with Screen Capture**  
 (e.g., Jing, Screnr, GoView, etc.)

**2. Encouragement, Feedback, etc.:**  
**C. Vocab Sushi (\$25 for 3 months)**  
<http://www.vocabushi.com/>

**2. Encouragement, Feedback, etc.:**  
**D. Online Accounting Lessons**  
 (e.g., Lyryx; <https://lifa.lyryx.co>)

**2. Encouragement, Feedback, etc.:**  
**E. Blog and Website Polling**  
 (e.g., BlogPolls, BlogPoll, MicroPoll, etc.)

### 3. Curiosity, Fun: A. Online News (Politics, Giant jellyfish, Tiny T. rex, and Ardi)

The screenshot shows a news website with several articles. The main headline is "After mob violence, Philadelphia begins curfew". Other visible headlines include "Their final sacrifice: The men we lost", "Human origin takes a new track", "Complicated relationship", and "Ardi". There are images of a man, a dinosaur, and a jellyfish.

### 3. Curiosity, Fun: B. Online Social Networking Games (e.g., scrabble, hangman, etc.)

Google takes swing at Facebook in social games

The screenshot shows a collection of social networking games. On the left, there's an "ANGRY BIRDS" game. In the center, there's a "5 + 4 Drills" game. On the right, there are two Scrabble-like word games with boards showing words like "WOWEITIA" and "IWGOEIT".

### 3. Curiosity, Fun: C. Online Database Activities (e.g., WolframAlpha)

<http://www.wolframalpha.com/>

The screenshot shows the WolframAlpha website. The search bar contains "A Quick Introduction to Wolfram Alpha by Stephen Wolfram". The results show a document with a photo of Stephen Wolfram and a video of him speaking.

### 3. Curiosity, Fun: D. Track a Scientist, Scholar, Celebrity, Writer (e.g., Biography.com, biography online, FamousPeople.com)

The screenshot shows the Biography.com website. It features a "Welcome to Biography Online" message and a list of featured biographies, including "The Beatles" and "The Beatles' Last Days". There are also images of various celebrities and scholars.

### 4. Variety, Novelty: A. Cool Resource Provider or Tech Demos

PS40 Cool Resource Provider and Moderator Sign Up Sheet

The screenshot shows a sign-up sheet for a resource provider and moderator. The sheet has columns for "Name", "Email", "Phone", and "Address". Below the sheet is a photo of a classroom with students sitting at desks.

### 4. Variety, Novelty, Fun, Fantasy: B. Random Lists (Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

RANDOM.ORG RANDOM.O

The screenshot shows the Random.org website. It features several random number generators: "Coin Flipper" (showing 3 coins), "Dice Roller" (showing 2 dice), and "List Randomizer" (showing a list of 10 items). There are also buttons for "Roll Again" and "Go Back".

**4. Variety, Novelty, Fun, Fantasy:**  
**C. Timers (Stopwatches, Countdown Timers, Stopwatch Bombs, etc.;** <http://www.online-stopwatch.com/countdown-timer/>)

**4. Variety, Novelty, Fun, Fantasy:**  
**D. Music Videos of Content**  
 History for Music Lovers, Washington Post  
 The French Revolution ("Bad Romance" by Lady Gaga)  
 Trojan Way ("Tainted Love" by Soft Cell)  
 Charlemagne ("Call Me" by Blondie)  
<http://www.youtube.com/watch?v=7blend-64c0r-5f9p112k-JULC0sgdA>

**5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)**  
 (links to text, soundtracks, video clips, etc.)

**5. Autonomy, Choice:**  
**B. Web Exploration Assignments**

1. Complete Works of Charles Darwin Online: <http://darwin-online.org.uk/>
2. The Complete Works of William Shakespeare: <http://shakespeare.mit.edu/>
3. Edgar Allan Poe Society of Baltimore: <http://www.eapoe.org/>
4. Einstein Archives Online: <http://www.alberteinstein.info/>
5. Federal Resources for Educational Excellent project: <http://free.ed.gov/>
6. Global Text Project: <http://globaltext.org/>
7. iBerry (Open Courseware Directory): <http://iberry.com/>
8. Jane Austen: <http://www.janeausten.org/>
9. The Jane Goodall Institute: <http://www.janegoodall.org/>
10. Timeless Hemmingway: <http://www.timelesshemingway.com/>

**6. Relevance, Meaningfulness:**  
**A. Online Cases (e.g., Mark Braun, IU)**

Slide 108, ovum with ruptured antrum.  
 Slide 131, ovum with granular membrane cells.  
 Slide 131, ovum with granular membrane cells.  
 Slide 163, bone marrow with erythrocytic inclusion.  
 Slide 166, tissue marrow with erythrocytic inclusion.

*I'd like to take the quiz now.*

Stomach, endoscopic examination and biopsy: Poorly differentiated tubular adenocarcinoma

Flow cytometry: Hematopoietic progenitor cells with surface CD34, CD38 and myeloperoxidase

**6. Relevance, Meaningfulness:**  
**B. 60 Second Recap, Jenny Sawyer**  
<http://www.60secondrecap.com/>  
 Actress to students: Lend me your earbuds!  
 English major, 24, rambunctiously recaps the classics in 60-second Web videos; By Greg Topko; USA TODAY, September 2009

**6. Relevance, Meaningfulness:**  
**C. Tour an Online Oil Drilling Site or Role Play Situations (i.e., BP)**  
<http://www.youtube.com/watch?v=ts45BkAnqTs>

Open newsroom learning

About  
 Learn. Create. Share. All for free.



The way to the future is open sharing of learning resources for an audience of learners.

► Please don't use this to host. Don't do it on Personal. Account, etc.  
 ► Don't do it on mobile.  
 ► Collaborative. The more people, the better. Because we want to see what you can do.

► Don't use it to host. Don't do it on Personal. Account, etc.  
 ► Don't do it on mobile.  
 ► Collaborative. The more people, the better. Because we want to see what you can do.








**7. Interactive, Collaborative:**  
**A. Working In Virtual Teams**  
 (e.g., Collanos, Ning, Groove, SharePoint, Google Docs)

Ning

**7. Interactive, Collaborative:**  
**B. Collaborative Video Annotation**  
 Creating-annotated discussions: An asynchronous alternative, Craig Howard and Rodney Myers, *International Journal of Designs for Learning*, 1(1)  
<http://scholarworks.iu.edu/journals/index.php/IJDL/article/view/853/912>





**8. Engagement, Effort:**  
**A. Flash, 3-D Visualization, & Laboratory Software**








**8. Engagement, Effort:**  
**B. Dr. Monica Rankin's class, UT Dallas, Cuban Revolution (April/May 2011)**  
<http://www.youtube.com/watch?v=ocQMf1kPo98>

**8. Engagement, Effort:**  
**C. Flash, 3-D Visualization, & Laboratory Software**






### TEC-VARIETY Model for Online Motivation and Retention

**Tone/Climate**  
**Encouragement, Feedback**  
**Curiosity**

**Variety**  
**Autonomy**  
**Relevance**  
**Interactive**  
**Engagement**  
**Tension**  
**Yields Products**




### Poll #1: How many ideas did you get so far?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.



### 99 seconds: Stop and Share: Top Three Things Learned!

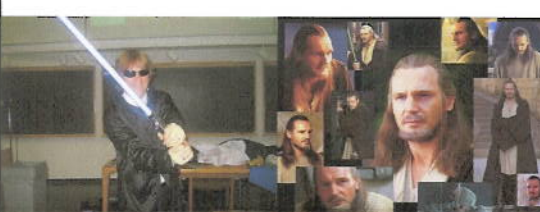


### Do you feel JUMBO MOTIVATION?

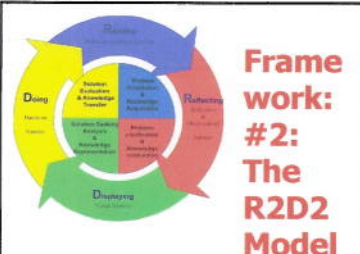
Note: Bonk papers and talks at:  
<http://www.publicationshare.com/>  
<http://www.trainingshare.com/>



### Masterclass Part 3: Where Are You R2D2?: Introducing Read, Reflect, Display, and Do Model




### Frame work: #2: The R2D2 Model



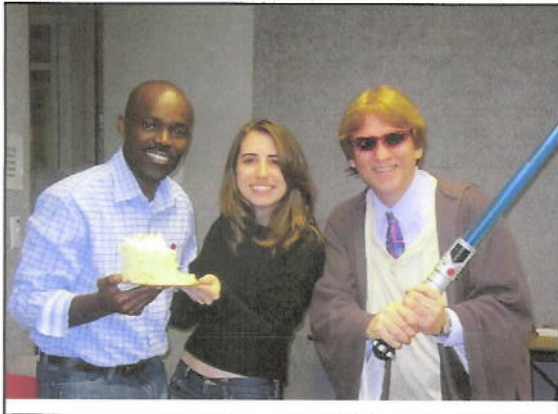
Curis J. Bonk | Fe Zhang

**Empowering Online Learning**

100+ Activities for Reading, Reflecting, Displaying & Doing







## 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.

### Read 1a. Wikibook or Wikipedia Editing or Critiques

- Ask students to critique a wikibook or page from Wikipedia

### Read 1b. Reading from Open Access Journals (e.g., PLOS)

**The International Review of Research in Open and Distance Learning**  
 A refereed e-journal to advance research, theory and best practice in open and distance learning worldwide  
 Alabama University

### Read 1c. Course Announcements (e.g., Teaching with Twitter; Course announcements and following people (e.g., microblogging))

### Read 1d. Listen to Open Access Podcast Shows (and write papers)

This collage features several digital resources: a screenshot of a website with a search bar, a 'nature REVIEWS CANCER' logo, a 'Military History Podcast' cover with a question mark, a 'NursingShow.com' logo with a nurse, and a 'weekly podcasts' logo with a sun icon.

### 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

The diagram shows Kolb's learning cycle with four stages: 'Active Experimentation' (top), 'Reflective Observation' (right), 'Abstract Conceptualization' (bottom), and 'Active Experimentation' (left). Below the diagram are three photographs of individuals.

### Reflect 2a. Individual Blogging Reflections

A photograph showing a person in a military uniform sitting at a desk and typing on a laptop. The laptop screen displays a website with text and images.

### Reflect 2b. Critical Friend Blog Postings (Kristen and Susan)

This block contains two screenshots of blog posts. The left one is titled 'R685: The Web 2.0' and features a woman's photo. The right one is titled 'My Personal Reflection on Web 2.0' and includes a landscape photo.

### Reflect 2c. Expert and Domain Specific Blog Reflections (English, Health, Business, etc. blogs)

This block shows two screenshots of domain-specific blogs. The left one is 'The Walrus Journal' with a 'HEALTH BLOG' section. The right one is 'The English Blog' featuring a 'Plan of the Week: This is It' article with a person's photo.

### Reflect 2d. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; <http://comeandseeafrica.blogspot.com/>)

This block features two screenshots. The left one is 'Come and See Africa (CASA)' with a map of Africa. The right one is a collage of photos from the 'Come and See Africa' blog, showing groups of people in various settings.

### Reflect 2e. Workplace and Field Reflections

### 3. Visual Learners

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

### Display 3a. Videos for clinical education

(Sungkyunkwan University School of Medicine, [www.mededu.or.kr](http://www.mededu.or.kr))

### Display 3b. Visual presentations (e.g., Prezi)

<http://prezi.com/lhmhh159xd46/is-the-world-open/>  
<http://prezi.com/8h7grxyaymv/the-world-is-open/>

### Display 3c. Radical Cartography

<http://www.radicalcartography.net/index.html?chicagodots>

**Boston City Limits annexations and landfill, 1804-1912**

- 1795 South Boston
- 1804 East Boston
- 1836 Washington Village
- 1855 Roxbury
- 1867 Breed's Island
- 1869 Deduision
- 1873 West Roxbury Brighton Chelsea
- 1912 Hyde Park

### Display 3d. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Glify, Mindmeister, or Mindomo)

### Display 3e. World Trends and Indices (e.g. Worldmapper)

**Worldmapper** The world as you've never seen it before

Home | Map Categories | Thematic Index | A-Z Map Index | About Worldmapper | Help

Previous Page | Science Growth | Map No. 255 | Open PDF poster | Next Page >

The map shows the growth in scientific research of territories between 1990 and 2005. If there was no increase in scientific publications that territory has not been shown.

In 1990, 67 scientific papers were published per million people living in the world; this increased to 206 per million by 2005. This increase was exponential primarily in territories with strong existing scientific research; however, the United States, with the highest total publications in 2005, experienced a smaller increase since 1990. Other high-growth countries include the Republic of Korea. Singapore had the greatest per person increase in scientific publications.

Singapore is engaged actively in the materials science research, as we indicate elsewhere for the glass, knowledge-driven economy, and for our next phase of development as a society. - Thomas H. Dunningham, 2005

Territory size shows the proportion of the number of **scientific** papers that were published by 2005 compared with 1990, where authors work there.

Open PDF poster, **download** for printing. You need Acrobat Reader.

- Open detailed territory map for population map, for comparison
- Data Sheet: Excel (open with excel), Excel (open in excel), OpenTable Normal Data view
- Technical notes for this data
- All of the data we use is **assumed**; see data page

Open Population Plot for comparison

### Display 3f. Medical Animations and Videos (e.g., YouTube, CNN, BBC)

**Virtual Medical Simulator**

YouTube Home News

Health Matters: Cesarean Bypass Surgery

Simulator

2:42 / 3:55

### Display 3g. Download and Use Online 3D Sketches (Google SketchUp; download <http://sketchup.google.com/3dwarehouse>)

Google 3D Warehouse

Search for models | Search

Roosevelt Island Bridge & Motorgate Parking

Image | Map

Made with Google

This model was made with SketchUp, a 3D modeling tool from Google. [Learn more](#)

Collections containing this model

Related items

More models by [Isaac](#)

Download Model

### Display 3h. Weather-Related Visuals and Animations

HURRICANE IKE

### Display 3i. Interactive Biology

<http://www.interactive-biology.com/2659/062-pressure-changes-during-breathing/>

Struggling with Biology?

The Respiratory System

- 001 How ATP is used in the lungs
- 002 Pressure Changes During Breathing
- 003 The Role of the Diaphragm
- 004 Inspiration and the Pressure Relationship
- 005 The Introduction to the Respiratory System

The Circulatory System

- 006 How Hemoglobin Pressure and Oxygen Pressure
- 007 Pressure Difference and Blood Flow
- 008 Regulating Peripheral Resistance - Part 2
- 009 Regulating Peripheral Resistance - Part 1
- 010 Blood Pressure and Mean Arterial Pressure
- 011 Cardiac Output

### 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.

Doing: Active Learning Strategies: Role Play, Dramatization, Cooperative Games, Simulations, Creative Movement and Dance, Multi-sensory Activities, Manipulatives and Hands-on Projects.

Thinking

Feeling


Learning

### Do 4a. Podcast Productions and Shows






### Do 4b. Paired Article Critiques in Blogs



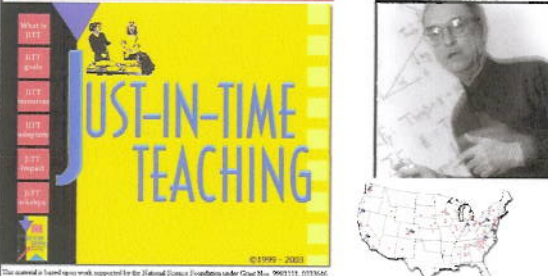
- Students sign up to give feedback on each other's article reviews posted to their blogs.

| Article  | Student Critique  | Student Peer Review   |
|--|---|---|
| Airtooth, J.D. (2007). Does the Community of Inquiry Framework Predict Outcomes in Online MBA Courses?   | <a href="#">Sandra Moore</a><br><a href="#">Carole Paraska</a><br><a href="#">Lin Yu</a><br><a href="#">Ains Bentley</a>      | <a href="#">Lorraine Ryan</a><br><a href="#">Karna Leonard</a><br><a href="#">Flora Lin</a><br><a href="#">Lori Addison</a> |
| Meyer, K.A. (2003). Face-to-Face versus Threaded Discussions: The Role of Time and Higher-Order Thinking | <a href="#">Lorraine Ryan</a><br><a href="#">Harli Daniel</a><br><a href="#">Neera Anesa</a><br><a href="#">Karna Leonard</a> | <a href="#">Paul Anderson</a><br><a href="#">Yvonne Torres</a><br><a href="#">Carole Paraska</a><br><a href="#">Lin Yu</a>  |
| Izba, P., Li, C.S. and Pickert, A. (2006). A study of teaching presence and student sense                | <a href="#">Francine Whitson</a><br><a href="#">Heather Tharrett</a><br><a href="#">David Wilson</a>                          | <a href="#">Sofia Rasputich</a><br><a href="#">Neera Anesa</a>  |

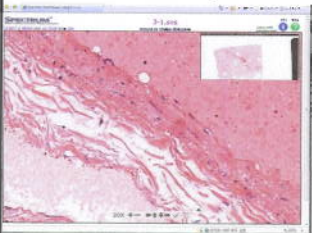
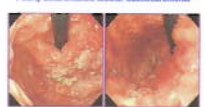


### Do 4c. Online Warm-ups Activities Just-In-Time-Teaching (JiTT)

<http://webphysics.iupui.edu/jitt/jitt.html>



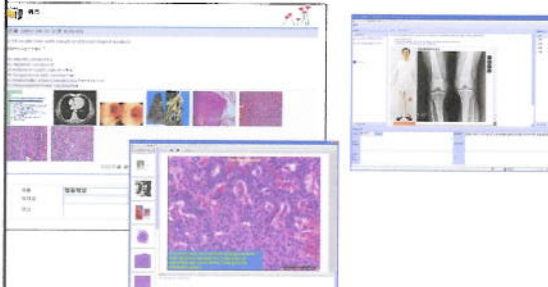
### Do 4d. Virtual Microscopes (Sungkyunkwan University School of Medicine, www.mededu.or.kr)


Stomach, endoscopic examination and biopsy: Poorly differentiated tubular adenocarcinomas

Final conclusion: Adenocarcinoma with multiple lung metastases with hemorrhagic growth


### Do 4e. Virtual Quizzes (Sungkyunkwan University School of Medicine, www.mededu.or.kr)



### Do 4f. Virtual Worlds (e.g., Second Life)



**Do 4g. Virtual Worlds with Video Archive**  
 (e.g., Dr. Monica Rankin's class, UT Dallas, Cuban Revolution)  
<http://www.youtube.com/watch?v=D4u8hZN9Qos>



The image shows a screenshot of a YouTube video player. The video title is "Castro Salvado" and it is from the channel "Castro Salvado". The video content shows a virtual world environment with a large ship in the water and a person standing on a balcony in the foreground. The video has 27 views.


**Do 4h. Simulation Games**



The image is a collage of various simulation game screenshots. It includes a soldier in a virtual environment, a person in a virtual world, and a person in a virtual world. There are also some text boxes and icons related to the simulation games.

**Poll #2: Is your brain mush?**

1. Yes.
2. No.
3. Not sure yet...



The image contains a cartoon illustration of a person's head with a ladder leaning against it. The person is saying "HELLO HELLO". Next to the head is a thought bubble that says "Ahh... my brain is becoming into mush. Guys, take some time OFF". There is also a green apple with a face next to the thought bubble.

**Any Questions?  
 Try the R2D2 and TEC-VARIETY!**

 Slides at: [TrainingShare.com](http://TrainingShare.com)  
 Papers: [PublicationShare.com](http://PublicationShare.com)  
 Book: <http://worldisopen.com/>  
 Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)



The image is a collage of three photos. The first photo shows a person in a virtual environment holding a sword. The second photo shows a person in a virtual environment holding a sword. The third photo shows a person in a virtual environment holding a sword.