Part IV: Teaching and Learning with Technology
40+ (42) Hyper-Engaging Instructional Strategies (for Any Class Size)
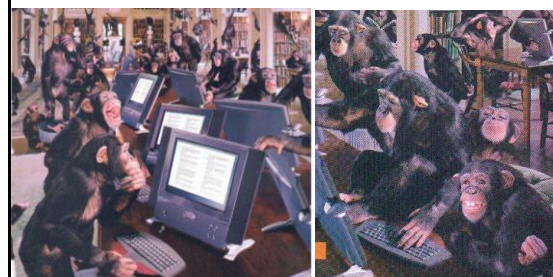
Dr. Curtis J. Bonk
Professor, Indiana University
http://php.indiana.edu/~cjbonk,
cjbonk@indiana.edu

40+ (42) Engaging Collaborative and Active Learning Ideas (note ideas that will work (+), might work (?), and will not work (cross off))
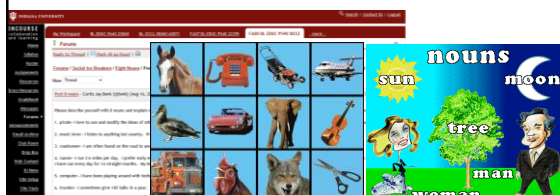

40+ (42) Hyper-Engaging Ideas

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1. Ice Breaker #1: Eight Nouns Activity

- **Please describe yourself with 8 nouns and explain why those nouns apply to you. Also, reply to 2-3 peers in this class on what you have in common with them.**

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2. Ice Breaker #2: Have You Ever...? And Accomplishment Hunts

- **Ask have your ever questions:**
  - **Swam in the ocean?**
  - **Been above Arctic circle?**
  - **Seen a rhino in a zoo?**
  - **Whitewater rafted...?**

3. Ice Breaker #3: Goals and Expectations Charts
(L = Cost, L = Risk, M = Time)

a. What do you expect from this class, lesson, workshop, etc., what are your goals, what could you contribute?

b. Write short and long terms goals down on goal cards and post to discussion forum.

c. Write 4-5 expectations for this session.

d. Expectations Flip Chart (or online forum):

e. Debrief.

4. Online Café Question Exchange

a. Have students leave you or their classmates questions online.

b. Answer as many as you can.

c. Peer to peer café for exchanging resources and sharing information.

5. Just in Time Teaching
(online warm-up activities)

• Assign a problem before class.

• Evaluate solutions.
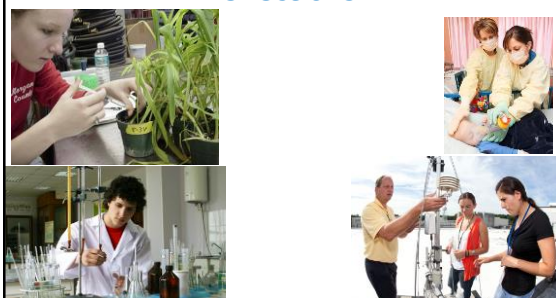
• Change class based on results.

Poll #1:
Which of these warm up and social ideas do you like best?

A. Eight nouns

B. Have you ever

C. Goals and expectations

D. Just in time teaching

E. Online café

6. Internship, Practicum, Job, Workplace Internship, and Field Reflections

7. Reuse Online Discussion and Blog Transcripts

• Have students bring in their online discussions or to class.

• Look for key concepts embedded in the transcripts.

• Share or have competitions.

Page 2

8. Structured Controversy Task

- Assign 2 to pro side and 2 to con side
- Read, research, and produce different materials
- Hold debate (present conflicting positions)
- Argue strengths and weaknesses
- Switch sides and continue debate
- Come to compromise
  - Online Option: hold multiple forums online and require to comment on other ones.

9. Pruning the Tree (i.e., 20 questions)

- Have a recently learned concept or answer in your head.
- Students can only ask yes/no types of questions.
- If guess and wrong they are out and can no longer guess.
- The winner guesses correctly.

10. One minute papers or muddiest point papers (L = Cost, M = Risk, M = Time)

- Have students write for 3-5 minutes what was the most difficult concept from a class, presentation, or chapter. What could the instructor clarify better.
- Send to the instructor via email or online forum.
- Optional: Share with a peer before sharing with instructor or a class.

11. Reflection Papers: Job Application and Trend Papers (3-4 page)

- Have students write papers about emerging trends in the field.
- Have them select topics from a list or suggest topics. Give sample papers.
- Perhaps have them present their trend and job applications papers to class.

12. Value Lines

- Pose question or issue
- Students mark down their feelings or votes
- Share votes and rationale with class
- Recast votes

Caveat Emptor	Industry Practice	Ethics Codes	Consumer Sovereignty	Caveat Venditor
* Profit Maximisation	*General Business Practice (Average across all firms)	* Codes of individual firms	* Capability	*Consumer Satisfaction

13. Best 3 Activity (Thiagi, personal conversation, 2003)

- After a lecture, have students decide on the best 3 ideas that they heard (perhaps comparing to a handout).
- Work with another who has 3 as well and decide on best 3 (or 4).
- Those pairs work with another dyad and decide on best 3 (or 4).
- Report back to class.

Page 3

14. PMI (Plus, Minus, Interesting)
(L = Cost, L = Risk, M = Time)

- After completing a lecture, unit, video, expert presentation, etc. ask students what where the pluses, minuses, and interesting aspects of that activity.

What's good +	What's bad -	What's interesting ?

Cool Stuff

15. K-W-L or K-W-H-L
(L = Cost, L/M = Risk, M = Time)

At the end of a unit, student presentation, videotape, expert presentation, etc., have student write down:
- What did you know?
- What do you want to know?
- What did you learn?
- H = How will we learn it?

K W H L

What do I know? | What do I want to know? | How do I find out? | What have I learned?

16. Force Field Analysis on Problem
(L = Cost, M = Risk, M = Time)

- **Driving Forces:** list on left side of a paper, the forces that might help them solve a problem (the allies!).
- **Restraining Forced:** list on the right, the forces that are working against them. What are the forces operating against the solution of the problem?
- Perhaps assign some value related to difficulty or importance and compare columns and make decisions (e.g., 0 (low) to 5 (high).

17. Visual Thinking Exercises: Semantic Feature Analysis
### (L = Cost, L = Risk, L/M = Time)

- Have students note if an element or feature is present or absent. (evaluate with a + or – or ? on a grid)

  (e.g., different laptop computers, color/black white options, USB ports, Webcam, wireless, wireless mouse, carrying handle, 4 gig Ram, etc.)

- Share with class.

SOURCES OF ENERGY

|	meat-eaters	plant-eaters	fly	swim	walks on 2 legs	walks on 4 legs
t-rex						
stegosaurus		✓				
apatosaurus						
triceratops						

18. Venn Diagram

1. Draw two or more circles with overlapping parts to represent different topics, theories, or concepts.
2. Name features, components, principles, or ideas that make each concept or topic unique and put in parts that do not overlap.
3. Name overlapping features, principles, or ideas that link each concept or topic and put in parts that do overlap.
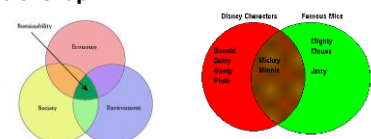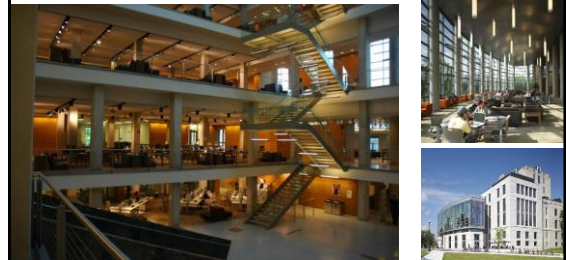
19. Two Heads vs. One
(Thiagi, 1988)

- Everyone posts a 100 word summary of an article.
- Students pair up and produce a better 100 word summary.
- Their 3 summaries are read and rated by other groups.
- Groups rank them for 1 for best, 2 for 2nd best, and 3 for third.
- Pass back to original team.
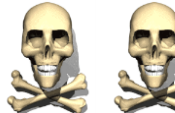
20. Online Resource Library (ORL) or Library Day
(e.g., The Thompson Library at Ohio State Univ.)

21. Nominate Quotes
(e.g., Shakespeare)

- Students can explore online quotes (Wikiquote).
- Suggest best ones.
- Respond to other suggestions.

22. Just Suppose and What If?
(L = Cost, L = Risk, M = Time)

- Imagine a situation or scenario and reflect on the consequences.
- "Just suppose that the entire world will get access to the Web?"

Poll #3:
Which of these exploration and creativity activities did you like best?

A. K-W-L or K-W-H-L
B. Online Resource Library (ORL)
C. Just Suppose or What If
D. Nominate quotes
E. Force Field Analysis
F. Two Heads vs. One

23. Wet Ink or Freewriting
(L = Cost, M = Risk, M = Time)

Writing without reflecting or lifting your pen for a set period of time.

- Just imagine: imagine you have created a highly active teaching situation...What do you see? Can students wonder, question, speculate, take risks, active listening??? How is creativity fostered here? Describe environment. Physically, mentally, emotionally, etc...

Page 5

24. Metaphorical thinking
(L = Cost, M = Risk, M = Time)

- **how is my class like:**
  - a prison, a beehive, an orchestra, ghetto,
  - expedition, garden, family, herd, artist's palette,
  - machine, military camp, Olympic games, hospital, theater, etc.

25. Reverse Brainstorming
(L = Cost, L = Risk, M = Time)

- **Generating ideas to solve the reverse of a particular problem, issue, or concern.**
- **More is better and the wilder the better.**
- **Hitchhiking or piggybacking as well as combining ideas is encouraged. However, there is no evaluation of ideas allowed.**
- **For example, How can we decrease the use of active learning ideas in college settings?**

Poll #4: Almost Half-Way… Please Share the Best Two Ideas so Far (Think: which can you use?)

26. Online Scholar Debate Panel or Symposium

- **Instead of role play, form online debate panels or symposia on particular topics.**
- **Set the time for each debate or open it up for an entire week.**
- **Or bring in expert guests for the debate or panel.**

27. Online Role Play Personalities

- **List possible roles or personalities**
  (e.g., coach, questioner, optimist, devil's advocate, etc.)
- **Sign up for different role every week**
  (or for 5-6 key roles during semester)
- **Perform within roles—try to refer to different personalities**

## 28. Six Hats (Role Play)
(De Bono, 1985; Karen Belfer, 2001, Ed Media)

- **White Hat:** Data, facts, figures, info (neutral)
- **Red Hat:** Feelings, emotions, intuition, rage…
- **Yellow Hat:** Positive, sunshine, optimistic
- **Black Hat:** Logical, negative, judgmental, gloomy
- **Green Hat:** New ideas, creativity, growth
- **Blue Hat:** Controls thinking process & organization

Page 6

29. Morphological Synthesis
### (L = Cost, M = Risk, M = Time)

- Write features of one item down the horizontal column.
- Write features of another item down the vertical.
- Look at intersection for new item or concept.
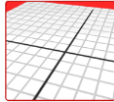
30. Numbered Heads Together

a. Assign a task and divide into groups (perhaps 4-6/group and count off 1-4).
b. Perhaps assign group names or hold competition between them.
c. Discuss problem or issue assigned.
d. Instructor calls on groups & numbers.

(Online Option: assign numbers and ask certain one to do different things.)
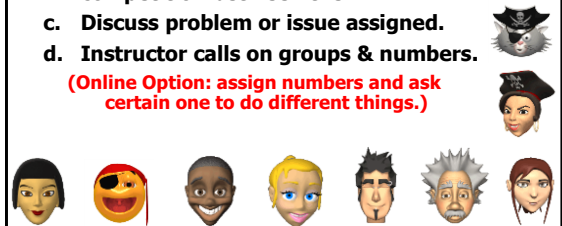
Poll #5:
Which of these creative and collaboration activities did you like best?

A. Six hats role play
B. Online scholar debate
C. Role play personalities
D. Metaphorical Thinking
E. Reverse Brainstorming
F. Wet Inking or Freewriting

31. Jigsaw

- Form home/base groups of 4-6 students.
- Student move to expert groups in forums.
- Share knowledge in expert groups and help each other master the material.
- Come back to base group to share or teach teammates.
- Students present ideas FTF or in a synchronous webinar or are individually tested; there are no group grades.

32. Phillips 66 (Buzz Groups)

- Assign topic (e.g., review readings for this week).
- Students work in groups of 6 for 6 minutes on a particular problem.
- After 6 minutes, stop discussion.
- Share with class.
  - Online Option: assign teams to discuss articles for 1-2 days before an online lecture. Warm up activities!

33. Human Graph

- Class lines up: (1-5)
1 = Strongly agree,
3 = neutral,
5 = strongly disagree
- e.g., this workshop is great!
- In a videoconference or synchronous session, have students line up on a scale (e.g., 1 is low and 5 is high) on camera according to how they feel about something (e.g., topic, the book, class).

34. Different Strokes
(Thiagi, 1988)

- **Have students create a summary of the readings: 1 page, 2 page, 10 question, an outline, a visual, a list of key points, a flowchart, a mind map, a slogan, a bumper sticker.**
- **Share and compare.**
- **Discuss.**

35. One Visual Exercises

- **Tell students to bring in one visual representing their outside readings.**
- **Have students become the instructors using that visual.**

36. 99 Second Quotes and Set Time Presentations
(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**
- **Options**
  - **Discussion wrapped around each quote**
  - **Link or debate quotes online**

37. 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.**

38. Just-In-Time Syllabus
(Raman, Shackelford, & Sosin)
http://ecedweb.unomaha.edu/jits.htm

Syllabus is created as a "shell" which is thematically organized and contains print, video, and web references as well as assignments. (Goals = critical thinking, collab, develop interests)

e.g., To teach or expand the discussion of supply or elasticity, an instructor might add new links in the Just-in-Time Syllabus to breaking news about rising gasoline prices.

39. Volunteer Technology Demos
(Bonk, 1996)

- **Take students to a computer lab.**
- **Have students conduct a technology demonstration that relates to something from the class (replaces an assignment).**
- **Include handout**
- **Debrief**

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40. Poster Sessions and Gallery Tours

- **Have students create something--flowchart, timeline, taxonomy, concept map.**
- **Have half of the students present for 15-20 minutes and then reverse roles.**
- **Post these in the course management system.**
- **Discuss, rate, evaluate, etc.**

Poll #6:
Which of these learner-centerd activities did you like best?

A. **Human Graph**
B. **Phillips 66**
C. **Volunteer technology demos**
D. **Cool resource provider**
E. **99 Second quotes**
F. **One Visual**
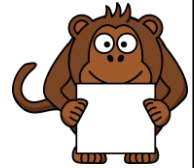
A Ten Item Bonus

41. Critical Friend, Think-Pair-Share, or Turn To Your Partner and Share

- **Pose a question, issue, activity, etc.**
- **Students reflect or write on it.**
- **Then they share views with assigned partner and share with class.**
  - **Online Option: assign email pals, Web buddies, or critical friends.**

42. Planted Questions
(Active Learning, Silberman)

- **Choose questions that will help guide my lesson and write them out on note cards sequentially with a cue on them.**
- **Prior to the lesson pass the cards and explain to the students who you gave cards to about the cues.**
- **Then during the implementation of the lesson perform cues to get students to ask questions which guide lesson.**
- **Debrief at end.**

43. Index Match Cards
(Active Learning, Silberman)

- **Make an equal amount of note cards, half with questions and the other half with the answers to the questions.**
- **Mix up and give each student a card.**
- **The exercise is to find you match.**
- **After they find their match, go around the class and go through questions and answers.**

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44. Talking Chips

- Pass out poker chips to students; perhaps give each 2 red ones, 2 blues ones, and 2 while ones.
- Students use a red chip when they ask a question; a blue chip when they make a statement; and a white chip when they answer a question someone has raised.
- When out of chips, they can no longer talk.
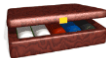
45. Cooperative Teaching Scripts

- Read different passages
- Put out of sight
- One person summarizes the content of first passage and the other asks clarifying questions
- Work together to develop analogies, images, etc. to learn
- Repeat steps for other article
- Read passage that did not read

46. One Stray-Three Stay

- Give a task to small groups of students.
- Assign one person as spy or pirate to see the answers of other students (one stray-three stay method) and share with group.

47. One Stay-Three Stray

- Group assigns one person from their group to stay behind and share product or ideas with others who visit their poster or station (one stay-three stray method).

48. Talking String
(L = Cost, L = Risk, L = Time)

- State what hope to gain from this workshop (or discuss some other issue) as wrap string around finger; next state the names of previous people and then state their reasons.

49. Psychic Massage (a closer activity)
(L = Cost, M = Risk, L = Time)

a. Divide in teams of 3-5.
b. In alphabetical order of first names have someone turn his or back to the group
c. Team members must make positive, uplifting statements about that person behind his or her back but loud enough for others to hear them.
d. One minute per person.

50. Stand and Share

1. Present a question.
2. When know the answer, stand up to indicate to the instructor that you have an answer.
3. Wait until all are standing.
4. Call on one at a time.
5. When you give an answer or hear you answer given, you can sit down (unless you have an additional answer).

Poll #7: Stop and Share:
**Top Three Things Learned!**

Ten More Bonus Items

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51. Snow White and the Seven Dwarfs Activity

https://www.youtube.com/watch?v=QhrCA1pA3jw (Video: 0.27)
Which Dwarf are you today?
http://www.playbuzz.com/rebeccam16/which-of-the-7-dwarfs-are-you

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52. Student Created Documentaries

R678 Final Projects, April 2016
The Making of an Adventurer (video), Troy Cockrum
https://www.youtube.com/watch?v=ew6e7Chd9I8

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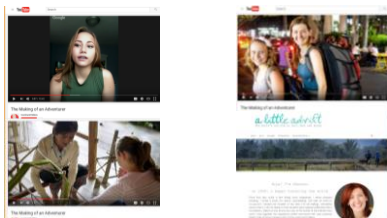
53. Little Known Fact Activity

- Write on notecard a little known fact.
- Instructor collects and passes out.
- Students put card on forehead without reading it and finds the person with it (yes/no questions: is this you?).
- When find match, interrogator asked questions of the confessor and finally guesses it.
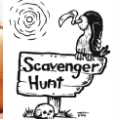 - Could do this online.

Page 11

54. Scavenger Hunt

1. Create a 20-30 item scavenger hunt (perhaps to find resources that will later need).
2. Engage in activity.
3. Collect work.
4. Post scores.

55. Virtual Conference Attendance and Reflection Papers
(e.g., free online philosophy class summer 2014 in a virtual world, May 2014, UW Whitewater; see: http://www.uww.edu/news/archive/2014-05-second-life)

• Have students attend an online conference.
• Ask them to write a reflection paper on the keynotes or other sessions.
• Share in online drop box or discussion forum.

56. Inside and Outside or Fishbowl

1. Situate students in two circles--outer & inner.
2. Present a problem, situation, or topic.
3. Have students immediately behind each other discuss their solutions, ideas, or answers.
4. Only those on the inner circle can talk or discuss. Those behind have to listen.
5. After 5-10-15 minutes, share with the person behind and switch seats.
6. Now discussion resumes on inside circle.
7. After 5-10-15 minutes rotate or come to compromise.

57. Peer Mentoring Sessions
(Bonk, 1996)

1. Have students sign up for a chapter wherein they feel comfortable and one that they do not.
2. Have a couple of mentoring sessions in class.
3. Debrief on how it went.

58. Issue Cards and Discussion Questions
(L = Cost, L = Risk, M = Time)

• Everyone brings in question and issue cards on the articles or readings.
• Partner off and create a list and then collect question cards, and,
• Pass out to different groups to solve.

59. Three Step Interviews

1. After complete lecture, assign pairs of students who interview each other about what they learned.
2. Pairs introduce each other to another group based on what they learned.
3. Groups introduce each other to class based on what they learned.

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60. Creative Dramatics
(Gary Davis, Creativity is Forever, 1998)

- Stretch, relax, loosen up, etc...
- Biggest/smallest thing; Holding up the roof; Favorite animal; Mirror effect; Imagine taste/smell...
- Imagine taste/smell... Ice Cubes, Puppets, Mirror effect, Ridiculous Poses, Favorite animal, People Machines, Invisible Balls.
- Imagine hear, touch, smell, tastes, stiffest/most rubbery, Angriest/happiest.

How About Ten More?

IQ TEST
10 MORE QUESTIONS

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61. Mock Trials with Occupational Roles
(L = Cost, H = Risk, M/H = Time)

a. Create a scenario (e.g., school reform, gov't protest).
b. Get volunteers for diff roles (everyone must have role).
c. Perhaps consider having one key person on the pro and con side of the issue make a statement.
d. Discuss issues from role (instructor is moderator or one to make opening statement; he/she collects ideas on document camera or board). Come to compromise.
   a. Online Option: volunteer for roles or assign roles to each team member or have them sign up for different roles.

62. Online Book Reviews

- **Have students read different books online and post reviews on forum or to Amazon or send to the author.**
- **Give each other feedback.**

Book Reviews

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63. Rapid Data Collection

- **Before, during, or after a lecture, assign students to go outside for 15-20 minutes to collect data on certain questions.**
- **Give handout.**
- **Come back to class to discuss.**
- **Perhaps assign to teams with competitions.**

64. Brainstorming
(L = Cost, L = Risk, M = Time)

- **Generating ideas to solve a particular problem, issue, situation, or concern.**
- **More is better and the wilder the better.**
- **Hitchhiking or piggybacking as well as combining ideas is encouraged. However, there is no evaluation of ideas allowed.**
- **For example, How can we increase the use of active learning ideas in college settings?**

65. Reciprocal Teaching Scripts

- **Instructor gives purpose of the method (e.g., summarization, prediction, clarification, and questioning skills)**
- **He/she models the method**
- **Student takes over as the teacher**
- **Student teacher models skills requested**
  - **Online Option: Sign up to start or wrap discussion or to mentor each other.**

66. Nominal Group Process

1. Give statement of the problem.
2. Silent generation of ideas to solve it.
3. Round robin sharing of ideas and piggy backing of them.
4. Classification & grouping of ideas.
5. Straw vote ranking of ideas. Secret ballots.
6. Further clarification of ideas and emerging concepts. Can change wording.
7. Final priority weighting. Public vote.

67. Tests and Bells (Bonk, 2004)

- **After or during a lecture, have students form into interest groups and make summaries of pts.**
- **Have the students take a class quiz.**
- **Each group gets a bell to answer pts from the lecture.**
- **Give pts for first group (or 2) that rings their bell and has correct answer. (take off pts for wrong answers.)**
- **Total pts and give prizes.**
- **Discuss and debrief**

68. The Envelope Game (Thiagi, 1988)

- **Tell class they will be tested on ability to apply their learning.**
- **Have teams write a problem on a large envelope.**
- **Pass to next team to solve (they place solution in envelope).**
- **Pass to next team to solve and so on.**
- **Original team ranks solutions.**
- **Have teams retrieve ranked solutions.**

69. Surface and Deep Facts and Questions (Bonk, 2011)

- **Students write a major fact from the prior week on a notecard and a minor one on the reverse.**
- **Under that, they note a surface question on a notecard and a deep question on the back.**
- **Pass card to the right and read new card (2 times).**
- **Now answer questions on card you have.**
- **Pass to right and read twice.**
- **Now apportion pts to each question and fact.**
- **Read aloud the questions and answers you like best.**

70. Summary Judgment (Thiagi, 1988)

- **Collect summaries and distribute 2 to each group of 2 people.**
- **Have them put a smiley face by the best summary.**
- **Post summaries on wall and have students read them.**

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Do we have time for 14 more?

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71. Cage Matches or Debates
(with audience topical sugggestions)
Cage Match on MOOCs at SXSWedu 2013
(Curt Bonk & Chuck Severance)
http://chronicle.com/blogs/wiredcampus/at-south-by-southwest-education-event-tensions-divide-entrepreneurs-and-educators/42777
https://soundcloud.com/sxswedu/cage-match-the-massive-open

Bonk   Severance

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72. 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
Arbaugh, J.B. (2007). *Does the Community of Inquiry Framework Predict Outcomes in Online MBA Courses?*	Stephen Moses	Larraine Ryan
	Carolyn Pawelko	Karen Leppard
	Lin Yu	Flora Liu
	Alex Brierley	Lori Atkinson
Meyer, K.A. (2003), *Face-to-Face versus Threaded Discussions: The Role of Time and Higher-Order Thinking.*	Larraine Ryan	Paul Anderson
	Harjit Dhanjal	Yvonne Toney
	Neera Arora	Carolyn Pawelko
	Karen Leppard	Lin Yu
	Fransica Wilkinson	Alex Brierley
Shea, P., Li, C.S. and Pickett, A. (2006). *A study of teaching presence and student sense*	Heather Burnett	Stefan Rasporich
	Daryl Wilson	Neera Arora

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73. Group Investigation or Coop-Coop

- **Divide a general topic into sub-topics.**
- **Groups divide sub-topics into mini-topics.**
- **Each student investigates their mini-topic.**
- **Students present findings within groups (perhaps in drop boxes and in online discussion forums).**
- **Integration is made of all the material in each group and presented to the clas.**
- **Evaluation is made of team as well as individual efforts.**

TOPICS

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74. Bells and Whistles
(Frederick, College Teaching)
(L = Cost, M = Risk, L/M = Time)

- **Add media to a presentation (audio, music, animations, pictures, etc.)**
- **Try to play off emotions and capture mood or tone of an event, era, or issue.**

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75. Peer Feedback and Reviews of Student Galleries, Exhibits, and Other Products

- **Have students review and evaluate each other's work in an online gallery, exhibit hall, and website.**

project GALLERY COMING TO DESIGNS IN DIGITAL Sept 9th
Let your creativity run wild!
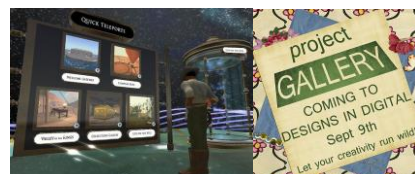
76. Class Voting and Polling
Blog and Website Polling
(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)
http://www.polleverywhere.com/
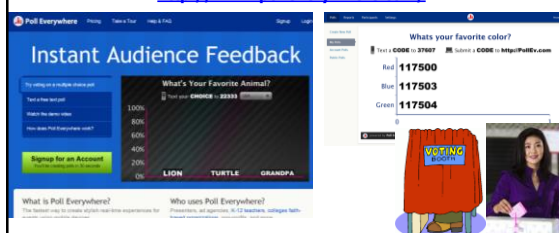
77. 321
3 = Takeaways
2 = Things you knew already
1 = Question you have

78. 333
3 = Good things
3 = Bad things
3 = Questions

79. Cutie (QTI)
Q= Questions and Queries
T = Topics and Themes
I = Issues and Insights

80. Phillips 66
- **Groups of 6 people discuss any topic for 6 minutes. When 6 minutes ends, stop talking.**

81. Phillips 66 + 3T: Table Top Talking (3T) (e.g., Lord of the Rings Tables)
- **Order the class pizza or learners meet at a local pizza or restaurant place to discuss class concepts for 6 minutes (or not discuss them).**

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82. Consultative Services and Contracted Tasks

- **Establish work arrangement with a client which is evaluated by the client and the instructor.**

Poll #8:
Which topic are you most interested in fostering or learning about?

A. Creative thinking online
B. Critical thinking online
C. Collaborative learning and teamwork online
D. Motivation

Poll #9: Three Words from this Session…?
e.g., "I am happy!" and… "minions are happy!"

Questions and Comments?

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