Part I. Collaborative and Cooperative Learning: The Basics
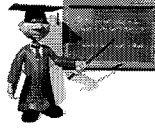
Curtis J. Bonk, Professor, Indiana University
President, SurveyShare
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/

Charles I. Gragg
(1940: Because Wisdom Can't be Told)

"A student of business with tact

Absorbed many answers he lacked.

But acquiring a job,

He said with a sob,

How does one fit answer to fact?"

Traditional Teachers

- Supposed sage, manager, conveyer
- Sets the agenda
- Learner is a sponge
- Passive learning & discrete knowledge
- Objectively assess, competitive
- Text- or teacher-centered
- Transmission model
- Lack interconnections & inert
- Squash student ideas

The Tao of Teaching

- A wise teacher lets other have the floor.
- Trying to appear brilliant does not work.
- The gift of a great teacher is creating an awareness of greatness in others.
- Facilitate what is happening, rather than what you think ought to be happening. Silence says more than words, pay attention to it.

The Tao of Teaching

- Allow time for genuine insight.
- Instead of trying hard, be easy; teach by example, and more will happen.
- If you measure success in terms of praise and criticism, your anxiety will be endless.
- Any over-determined behavior produces its opposite.

Consultative Teachers

- Co-learner, mentor, tour guide, facilitat_.
- Student and problem-centered
- Learner is a growing tree and on a journey
- Knowledge is constructed and intertwined
- Many resources (including texts & teachers)
- Authentic, collaborative, real-world tasks
- Subjective, continual, less formal assess
- Display student ideas--proud and motivated
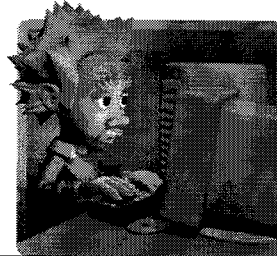- Build CT, CR, CL skills

Students are too often...

- Emotionally moody and sleepy
- Preoccupied with previous class or hour
- Expecting entertainment
- Unable to concentrate for too long
- Isolated or alienated

Theoretical Perspectives and Principles

1. Instructional Philosophy and Approaches

- Decisions about approach (behavioral, constructivistic, inquiry)
- Battle between constructivism and behaviorism
- Battle between student centered or instructor-centered

2. Robert Gagne's 9 instructional events

gaining attention	show variety of computer generated triangles
informing learners of the objective	"What is an equilateral triangle?"
stimulating recall of prior learning	review definitions of triangles
presenting the stimulus	give definition of equilateral triangle
providing learning guidance	show example of how to create equilateral
eliciting performance	ask students to create 5 different examples
providing feedback	check all examples as correct/incorrect
assessing performance	provide scores and remediation
enhancing retention and transfer	show pictures of objects and ask students to identify equilaterals

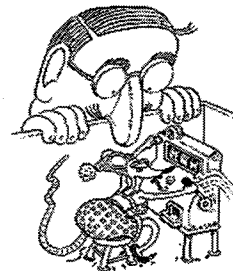*From http://tip.psychology.org/gagne.html*

3. Skinner (1904-1990) Quote.

- I did not direct my life. I didn't design it. I never made decisions. Things always came up and made them for me. That's what life is.

This image is owned and copyrighted by the B. F. Skinner Foundation, is not for commercial distribution, and is used with permission.

Behaviorist Interactivity

4. Learner-Centered Learning Principles
American Psychological Association, 1993)

Cognitive and Metacognitive Factors
1. Nature of the learning process
2. Goals of the learning process
3. Construction of knowledge
4. Strategic thinking
5. Thinking about thinking
6. Context of learning

Developmental and Social Factors
10. Developmental influences on learning
11. Social influences on 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

---

5. Active Learning Principles

1. Authentic/Raw Data
2. Student Autonomy/Inquiry
3. Relevant/Meaningful/Interests
4. Link to Prior Knowledge
5. Choice and Challenge
6. Teacher as Facilitator and Co-Learner
7. Social Interaction and Dialogue
8. Problem-Based & Student Gen Learning
9. Multiple Viewpoints/Perspectives
10. Collab, Negotiation, & Reflection

Connections New Theories

- **Constructivism**--concerned with learner's actual act of creating meaning (Brooks, 1990). The constructivist argues that the child's mind actively constructs relationships and ideas; hence, meaning is derived from negotiating, generating, and linking concepts within a community of peers (Harel & Papert, 1991).

---

6. Constructivistic Teaching Principles
(Brooks, 1990)

1. Build on student prior knowledge.
2. Make learning relevant.
3. Give students choice in learning activity.
4. Student autonomy & active lrng encouraged
5. Use of raw data sources & interactive materials
6. Encourage student dialogue
7. Seek elaboration on responses and justification
8. Pose contradictions to original hypothesis
9. Ask open-ended questions & allow wait time
10. Encourage reflection on experiences

Connections New Theories

- **Situated Learning**--asserts that learning is most effective in authentic, or real world, contexts with problems that allow students to generate their own solution paths (Brown, Collins, & Duguid, 1989).

PBL (Blumenfeld et al., 1991; Savery & Duffy, 1996)

1. Anchor in larger task or problem
2. Develop learner ownership over the problem
3. Design authentic tasks
4. Tasks should reflect real world complexity
5. Learners must own the solution path/processes
6. Support and challenge learners
7. Encourage testing against alternative views
8. Encourage reflection on learning content and process
9. Novelty, Variety, Valued problems, Choice

7. Sociocultural Ideas
(Bonk & Cunningham, 1998)

1. Shared Space and Build Intersubjectivity
2. Social Dialogue on Authentic Problems (mind is in social interactions and extends beyond skin)
3. Mentoring and Teleapprenticeships
4. Scaffolding and Electronic Assistance in ZPD
5. Group Processing and Reflection
6. Collaboration and Negotiation in ZPD
7. Choice and Challenge
8. Community of Learning with Experts & Peers
9. Portfolio Assessment and Feedback
10. Assisted Learning (e.g., task structuring)
11. Reciprocal Teaching & Peer Collaboration

8. Types of Scaffolding
(Bonk et al., 2001)

- Social Acknowledgement
- Questioning
- Direct Instruction
- Modeling/Examples
- Feedback/Praise
- Cognitive Task Structuring
- Cognitive Elaborations/Explanations
- Push to Explore
- Fostering Reflections/Self Awareness
- Encouraging Articulation/Dialogue Prompting
- General Advise/Scaffolding/Suggestions
- Management

Figure 2.5 Teaching Model Based on Vygotsky's Theory
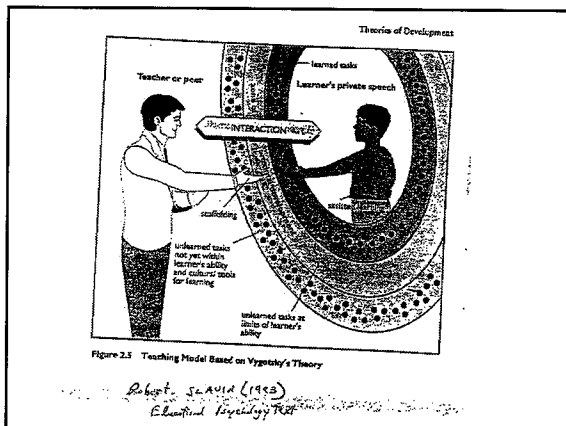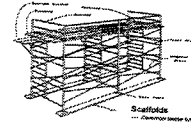
9. Resources in a Learning Environment

- Teachers
- Peers
- Curriculum/Textbooks
- Technology/Tools
- Experts/Community
- Assessment/Testing
- Self Reflection
- Parents

10. Fundamental Principles of Learning (Kahn, 1993)

1. Learning is social
2. Knowledge is integrated into life of community
3. Learning is an act of membership
4. Knowing in engagement in practice
5. Engagement & empowerment are linked
6. Failure to learn results from exclusion from practice
7. We have a society of lifelong learners

## Changes in College Campuses Today???

What *Really* Matters in College: Student Engagement

"The research is unequivocal: students who are actively involved in both academic and out-of-class activities gain more from the college experience than those who are not so involved."

Ernest T. Pascarella & Patrick T. Terenzini,
How College Affects Students

National Survey of Student Engagement
(pronounced "nessie")

Community College Survey of Student Engagement
(pronounced "sessie")
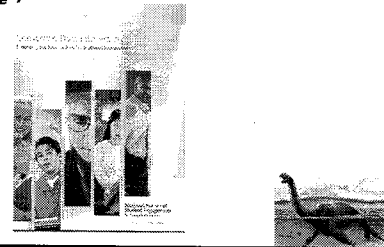
Benchmarks of Effective Educational Practice
(George Kuh, Indiana University)

NSSE Benchmarks

Level of Academic Challenge

Active & Collaborative Learning

Student Faculty Interaction

Enriching Educational Experiences

Supportive Campus Environment

Active and Collaborative Learning

Students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students to deal with the messy, unscripted problems they will encounter daily during and after college.

Active and Collaborative Learning

7 questions:
- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments

---

Active and Collaborative Learning

7 questions:
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your reading or classes with others outside of class (students, family members, co-workers, etc.)

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5

Ok, Million Dollar Question: What do you know about collaborative and cooperative learning?
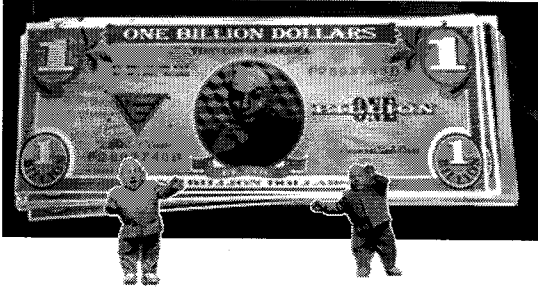
Cooperative and Collaborative Rationale

- Higher student-teacher interaction
- Increases feedback
- Links new info to prior knowledge
- Enhances perspective taking
- Utilizes resources better
- Teacher as mentor and co-learner
- Joint products and ownership
- Instills more risk taking
- Facilitates problem solving

Definitions

- Cooperative Learning = work toward common goal and understanding same material
- Collaborative Learning = use different skills or expertise to complete a task

Collaborative Learning

- Get more complex later in course
- Have examples from prior semesters
- Bring in prior students to discuss how well it worked
- Print or publish the final products and celebrate success
- Think about international collaborations

Instructor Roles in Collaborative and Cooperative Learning

- Guide, assist, dialogue, clarify, feedback, question, push
- Elaborate, summarize, hint, cue, think sheets, think aloud
- Structure and restructure groups
- Mentor, friend, co-learner
- Help with group processing

Key People in Field of Cooperative learning

- Robert Slavin, Johns Hopkins University: STAD and TGT approaches (basic skills)
- David and Roger Johnson, University of Minnesota: learning together approach (problem solving)
- Spencer Kagan, Kagan Cooperative Learning: structures approach (simple and easy to use)
- Elliott Aronson: Jigsaw approach (perspective taking, problem solving))
- Sharon and Sharon: Group investigation approach (inquiry, depth, social skills)

Cooperative Learning Principles

1. Positive Interdependence
2. Individual Accountability
3. Group Processing
4. Social Skills and Trust
5. Face-to-Face Interaction

1. Building Positive Interdependence (sink or swim together)

- Goals: All have same goal: one team product or report
- Rewards: Team recognition based on all contributions
- Task: Division of labor, mini-topics, need 8 hands to complete
- Resources: 1 person has paper, another has the markers, etc.
- Roles: Question asker, recorder, checker. Taskmaster, encourager, leader

2. Building Individual Accountability

- Pick our students at random
- Everyone certifies correctness
- Assign jobs to each student
- Color code each person's work
- Teach scores based on individual scores
- Have students reflect and summarize their progress

3. Group Processing

- Need time to reflect and analyze what they have accomplished and how well working together.
- Students need feedback from instructors on their processing.
- Should pause to reflect every so often.
- Perhaps use an observation sheet for feedback.

4. Building Social Skills and Trust and Group Bonding

- Where were you born?
- Favorite movie, music group, color
- I wish I had a second change at?
- A job I would love is...
- Where born, hobbies, interests, pet
- Birthday, sign, etc.
- Proudest accomplishment, goals, etc.
- Other social ice breakers...

4 F's

- Forming: Organize and establish groups
- Functioning: Manage, implement, support, motivate, and accept
- Formulate: Understand, review, learn new strategies
- Fermenting: Disagreement, controversy, alternatives answers

Grouping Strategies

- Young: student choice, last name, food preferences, birthday, color of clothes
- Older: goals, jobs, location, experience, familiarity with task

Grading Strategies

- Grade test performance individually
- Group grades for group processes
- Avoid group competition
- Have all group members sign reports

Reaching Difficult Students

- Keep groups small (2-3 members)
- List who would work with
- Incorporate student interests into task
- Evaluate individually, but bonus pts to grp
- Give responsibility
- Give points for certain behaviors sought
- Celebrate success of that group
- Move student to spotlight
- Distract student with a question

Pedagogical Strategies: Cooperative Learning

1. Starter-Wrapper Discussions (with roles)
2. Turn to Your Partner: Quizzes, Top Tens
3. Value Line and Graphs
4. Roundrobins and Roundtables
5. Synchronous Guest Conferencing
6. Structured Controversy
7. Jigsaw, Group Investigation, PBL
8. Gallery Tours of Student Work
9. Panel Discussions/Symposia
10. Case Creation and Replies

COOPERATIVE LEARNING Generic Strategies: Well Known

- STAD, TGT, Jigsaw, Group Investigation
- Think-Pair-Share, turn to your neighbor
- Numbered Heads Together
- Gallery Tours
- Stand and Share
- Response value lines
- Group discussion with roles
- Test reviewers, homework checkers

COOPERATIVE LEARNING Generic Strategies: Quick Starters

- Simultaneous Numbered Heads with sharing
- Team concept or word webbing
- Team brainstorming
- Talking Chips
- Team Reunions
- Corners
- Interviews and sharing

COOPERATIVE LEARNING Generic Strategies: Discussion/Small Group Work Alternatives

- Group discussion: pool ideas
- Buss group: small 4-6 people & then class
- Panel discussions: 4-8 people discuss topic
- Symposium: disc in phases by series of experts
- Debates: pro& con on a controversial issue
- Reaction sheets: Group reacts on predetermined controversial idea
- Role Play: act out situation with roles

COOPERATIVE LEARNING SPECIFIC: Reading

- READER, READERS
- CIRC
- Reciprocal Teaching
- Group Reading with Different Purposes
- Structured Controversy
- Cooperative Scripts and MURDER

COOPERATIVE LEARNING SPECIFIC: Writing

- Database creation
- Peer editing and reviewers
- Publish class projects as a book
- Class critiques and thought papers
- Class Newsletters
- Class conference proceedings and journal
- Other local publishing

Recommended Introduction of a Collaborative Method

- Introduce it
- Explain the purpose
- Teacher and peer modeling
- Guided interaction and use
- Diagnose misunderstandings
- Internalization and ownership
- Instructor feedback and assistance as needed

Task Roles

- Reading: reader, materials handler, checker, summarizer, praiser, elaboration seeker, facilitator
- Writing: executive director, reporter, author, proofreader, co-author, editor
- Computer: keyboarder, recorder, reporter, praiser, checker, summarizer, encourager
- Journal Project: editor, writers, scanner, coordinator, etc.

Role Play...

Role 1: Starter/Mediator Reporter/Commentator

- Summarizes the key terms, ideas, and issues in the chapters, supplemental instructor notes, journal articles, and other assigned readings and asks thought provoking questions typically before one's peers read or discuss the concepts and ideas. In effect, he/she points out what to expect in the upcoming readings or activities. Once the "start" is posted, this student acts as a mediator or facilitator of discussion for the week.

Role 2: Wrapper/Summarizer Synthesizer/Connector/Reviewer

- Connects ideas, synthesizes discussion interrelates comments, and links both explicit and implicit ideas posed in online discussion or other activities. The learner looks for themes in online coursework while weaving information together. The wrapping or summarizing is done at least at the end of the week or unit, but preferably two or more times depending on the length of activity.

Role 3: Conqueror or Debater/Arguer/Bloodletter

- Takes ideas into action, debates with others, persists in arguments and never surrenders or compromises nomatter what the casualties are when addressing any problem or issue.

Role 4: Devil's Advocate or Critic/Censor/Confederate

- Takes opposite points of view for the sake of an argument and is an antagonist when addressing any problem posed. This might be a weekly role that is secretly assigned.

Role 5: Idea Squelcher/Biased/Preconceiver

- Squelches good and bad ideas of others and submits your own prejudiced or biased ideas during online discussions and other situations. Forces others to think. Is that person you really hate to work with.

Role 6: Optimist/Open-minded/Idealist

- In this role, the student notes what appears to be feasible, profitable, ideal, and "sunny" ideas when addressing this problem. Always sees the bright or positive side of the situation.

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Role 7:
Emotional/Sensitive/Intuitive

- Comments with the fire and warmth of emotions, feelings, hunches, and intuitions when interacting with others, posting comments, or addressing problems.

Role 8: Idea Generator
Creative Energy/Inventor

- Brings endless energy to online conversations and generates lots of fresh ideas and new perspectives to the conference when addressing issues and problems.
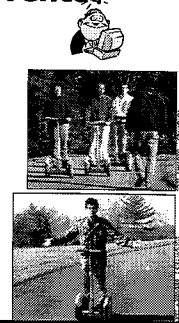
Role 9:
Questioner/Ponderer/Protester

- Role is to question, ponder, and protest the ideas of others and the problem presented itself. Might assume a radical or ultra-liberal tone.

Role 10: Coach
Facilitator/Inspirer/Trainer

- Offers hints, clues, supports, and highly motivational speeches to get everyone fired-up or at least one lost individual back on track when addressing a problem or situation.
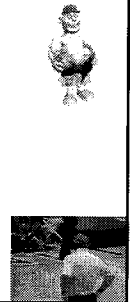
Role 11: Controller/Executive Director/CEO/Leader

- In this role, the student oversees the process, reports overall findings and opinions, and attempts to control the flow of information, findings, suggestions, and general problem solving.

Role 12:
Slacker/Slough/Slug/Surfer Dude

- In this role, the student does little or nothing to help him/herself or his/her peers learn. Here, one can only sit back quietly and listen, make others do all the work for you, and generally have a laid back attitude (i.e., go to the beach) when addressing this problem.

Page 11
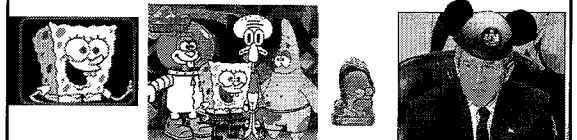
Getting Started; Restructuring; Caveats and Barriers

- Start small
- Group size of 2-3
- Think of 1/5 rule: competitive, cooperative, whole group discussion, individual exploration, lecture, etc.
- Work with a colleague to create
- Evaluate use and redesign

Planning Advice

- Think low risk to high risk and low time to time intensive
- Engage admin in study groups
- Build relationships with people in other disciplines (look for curricular overlap)
- Bring in outside guests and lecturers
- Share, write a paper on what did

Think Outside the Box!

Innovate
or die
trying

Thinking outside the box is inside the scope of these companies' plans
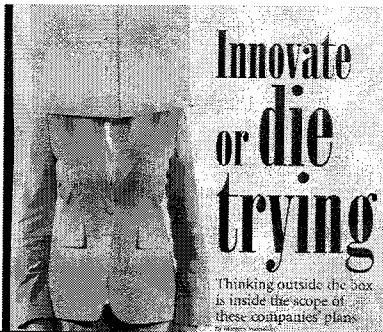
99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four
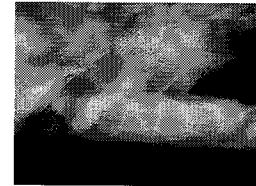
Part I: Collaborative Learning: Activities and Strategies

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

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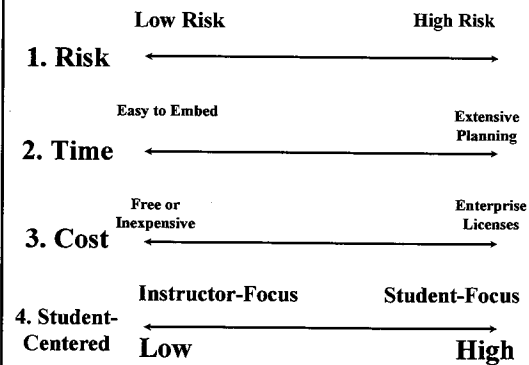
100 Engaging Collaborative and Active Learning Ideas

Ok, who is falling asleep and needs a little chocolate?
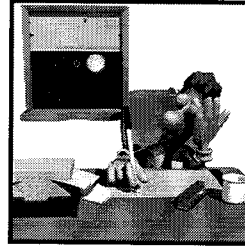
Did he say chocolate?

Who wants some chocolate???

1. 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

2. 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

3. Cooperative Learning Scripts

- Read same passage
- Put out of sight
- One person is summarizes and the other tries to correct any errors
- Both work together to learn the information
- Read 2nd passage and change roles

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4. 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

5. READER/READERS
(Clark & Bonk, 1992)

- Review why you are about to read.
- Explore passage for main ideas.
- Ask questions about the main ideas.
- Draw conclusions.
- Evaluate your responses.
- Read for answers and summarize main ideas.

  - Other similar strategies include paired repeated reading, paired reading, Cooperative Integrated Reading and Composition (CIRC) Program, reciprocal teaching, cooperative scripts.

6. Numbered Heads Together

- Count off 1, 2, 3, 4 in each group.
- Instructor can call on a number within a group to respond or all people with a certain number to respond.
- Increases accountability.

7. Human Graph

- Class lines up:
(1-5)
1 = Strongly agree,
3 = neutral,
5 = strongly disagree

- e.g., this workshop is great!

8. Value Lines

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

9. Think-Pair-Share or Turn To Your Partner and Share

- Pose a question, issue, activity, etc.
- Students reflect on it.
- Then they share views with assigned partner.
- Share with class.

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10. Phillips 66

- 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.

11. Buzz Groups

- Meet in small groups for a set period of time followed by group discussion.
  - (perhaps discuss assigned readings)

12. 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).

13. Inside and Outside or Fishbowl

- Situate students in two circles; an outer & inner circle.
- Present a problem, situation, or discussion topic.
- Have students immediately behind each other discuss their solutions, ideas, or answers.

13. Inside and Outside or Fishbowl Continued...

- Only those on the inner circle can talk or discuss. Those behind have to listen.
- After 5-10-15 minutes, have them share with person behind them what they did not get a chance to say and discuss the conversation so far.

13. Inside and Outside or Fishbowl Continued...

- Change seats between inner and outer circles.
- Now discussion resumes with those on the inside.
- After 5-10-15 minutes, continue with rotation or come to compromise.
- Alternative version: Outer circle people can tap inner circle person on shoulder as replacement.

14. Role Play or Debate Panel or Symposia

- Find controversial topic(s) in the readings.
- Hand students slips of paper with different persona or roles (i.e., authors) that form into 2-3 different groups or factions.
- Have students meet in their respective groups to form a plan of action.

14. Role Play or Debate Panel or Symposia Continued

- Role play perhaps with alternating views being presented with 4-6 students.
- Tap students in the audience on the shoulder to take the place of someone on panel or have them decide when to replace someone.

15a. 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.

15b. 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).

16. 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.
- Integration is made of all the material in each group.
- Presentation is made to the class.
- Evaluation is made of team as well as individual efforts.

17. Student Teams Achievement Divisions (STAD)

- Students are divided up into heterogeneous groups of four-5 student groups.
- Lesson is presented by instructor.
- Students help each other learn the material.

17. Student Teams Achievement Divisions (STAD) Continued

- Students take a test or quiz or perform some other task.
- Team scores are determined based on improvement scores of all students.
- Teams with highest scores are recognized.

18. Teams-Games Tournaments Divisions (TGT)

- Same basic idea as STAD except that quizzes or tests are replaced by competitions between groups.

19a. Jigsaw I

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

19b. Jigsaw II

- Same as Jigsaw I except that total team scores on the quizzes or assignments are published or used in grading purposes.

20. Problem-Based Learning (Savery & Duffy, 1996)

- Instructor lays out the problem situation.
- Students work on a major problem for a unit, semester, or year.
- Presentation is made at the end of the unit or semester.
- Evaluation is made by experts and/or the instructor

21. Open Space Technology (Harrison Owen, 1997)

- Create a matrix of time and spaces
- Bring markers and paper.
- Hold big meeting & explain rules.
- Individuals announce topic of interest or invitation.
- Place in time slot.
- Hold discussion forum.

21. Open Space Technology (Harrison Owen, 1997)

The Four Principles:
- Whoever comes is the right people.
- Whatever happens is the only thing that could have.
- Whenever it starts is the right time.
- When it's over, it's over.

21. Open Space Technology (Harrison Owen, 1997)

- The law of 2 feet.
- Bumblebees: they cross pollinate ideas and move from room to room.
- Butterflies: they do not attend mtgs but attract attention and additional discussions.

21. Open Space Technology

Supplies:
- Masking tape—5 rolls
- Ink Markers—50/100 participants, primarily dark ones
- Flip Charts—1/breakout room plus 5 more
- Post-its (3 X5)—2 packages of 100 per package
- Microphone—cordless preferred

21. Open Space Technology

Authentic Presence:
- ✓Show up
- ✓Be Present
- ✓Tell the Truth
- ✓Let It All Go

Think-Pair-Share...
What have you learned so far?

- If no partner, stray to another group.
- Next set more motivational and collaborative!!!!
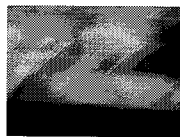
21. Expectations Charts
(L = Cost, L = Risk, M = Time)

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

a. Write short and long terms goals down on goal cards that can be referenced later on.

b. Write 4-5 expectations for this session

c. Expectations Flip Chart: share of 1-2 of these...

d. Debrief is met them.

22. Accomplishment Hunt
(L = Cost, M = Risk, M = Time)

a. Turn in 2-3 accomplishments (e.g., past summer, during college, during life);

b. Teacher lists 1-2 of those for each student on a sheet without names.

c. Participants have to ask "Is this you?" If yes, get a signature.

23. 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.

24. Discussion Questions
(L = Cost, L = Risk, M = Time)

a. Make a list of issues people would like to discuss.

b. Perhaps everyone brings 2-3 questions or issues to the meeting.

c. Partner off and create a list and then collect question cards, and,

d. Then distribute and your group must answer questions of the other groups.

25. 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.

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

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

27. Just Suppose or What If
(L = Cost, L = Risk, M = Time)

- Imagine a situation or scenario and reflect on the consequences.
- "Just suppose you have six weeks of paid professional development each summer for workshops or classes like this, what would teaching be like? What would learning be like?"

28. 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, respect for ideas, withhold judgment, seek justification??? How is creativity fostered here? Describe environment. Physically, mentally, emotionally, etc...

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

- Generating ideas to solve the reverse of a particular problem, issue, situation, or concern. Once again, more is better and the wilder the better. The hitchhiking or piggybacking as well as combination of 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?

30. 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.

31. One minute papers or muddiest point papers with peer sharing
(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.
- Perhaps send to the instructor via email.
- Optional: Share with a peer before sharing with instructor or a class.

Reflection #1: What is the Muddiest Point so far...

- Write without lifting your pen:

_____
_____
_____
_____
_____
_____
_____
_____

32. 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.

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33. Role Play or Mock Trial
(L = Cost, H = Risk, M/H = Time)

- Assign roles after a lecture.
- Perhaps have students read more about roles.
- Come back dressed in costume.
- Act out scene.

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

a. Create a scenario (e.g., school reform in the community) and hand out to students to read.

a. Ask for volunteers for different roles (everyone must have a role).

b. Perhaps consider having one key person on the pro and con side of the issue make a statement.

c. Discuss issues from within role (instructor is the hired moderator or one to make opening statement; he/she collects ideas on document camera or board).

d. Come to compromise.

35. Participatory Lectures
(Frederick, College Teaching)
(L = Cost, M = Risk, M = Time)

- Orderly brainstorming in which the students generate ideas which are organized in some rationale coherent pattern on the chalkboard.
- Write down everything you know about...

36. 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

37. 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).

38. 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?

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39. 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)
- Share with class.

40. Outlines (Thiagi, 1988)
(L = Cost, M = Risk, M = Time)

- Give students choice in the assigned readings.
- Have them bring an outline of the best 1 article he/she read.
- Have them mentor another student who did not read that article.

41. Reciprocal Questioning (Allison King)
(L = Cost, M = Risk, M = Time)

- Have students bring in question cards from the readings
- Perhaps add a question sheet or scaffold from the instructor
- Pair them off
- After or during lecture, have them ask those questions of each other.

42. 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, etc., resources.
- Share and explain what found with class.

43. Text-Based Bingo Cards (Bonk, 2002)

- Hand out Bingo cards with categories of key ideas on the horizontal (e.g., (instructor techniques) and vertical (e.g., different age groups).
- As you go through each category, students look at the connection and indicate how they would use that idea.
- First one with Bingo gets a prize.

So who has Bingo?

BINGO

clock	pen	book	blackboard
eraser	door	desk	light
notebook	bag	window	chair
table	chalk	pencil	window

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44. Visual Bingo Cards (Bonk, 2003)

- Hand out Bingo cards of pics of people from the field.
- Have a PowerPoint presentation of key points and include a picture of someone in the field associated with each slide.
- If have matching pic on Bingo card, they must do something (e.g., explain how they would use the idea)
- First one with Bingo gets a prize.

Time to Play Celebrity Bingo...

Online Teaching Skills
The Online Teacher, TAFE, Guy Kemshal-Bell (April, 2001)
guykb@iprimus.com.au

- Technical: email, chat, Web development
- Facilitation: engaging, questioning, listening, feedback, providing support, managing discussion, team building, relationship building, motivating, positive attitude, innovative, risk taking
- Managerial: planning, reviewing, monitoring, time management

Bonk's Bingo Board #1
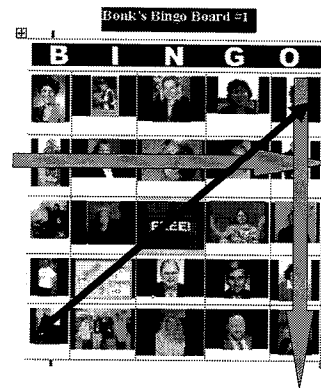
45. Bingo Quizzes (V)

- Have questions with answers that complete a Bingo card. Put course related questions or statements on a slip of paper with each #.
- Pull numbers from a hat.
- Read question and number and students have to put answer in that box if their Bingo card has it.
- First one to think she has Bingo reads her card. If anything is incorrect, keep going.

Note: Jeopardy style tests are similar...

46. Beginning a Lecture (Derek Bok, Harvard, 1992)

- Begin course or lecture with a question or series of questions to capture interest; e.g., "what image do you have of people who have HIV or AIDS?"
- Begin course or lecture by posing a problem and eliciting answers or ideas; "why would people want to attend this talk?"

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47. During a Lecture
(Derek Bok, Harvard, 1992)

- Invite challenges or debates on your lectures, perhaps by presenting differing views.
- Instead of answering questions, throw it back on the students.
- Ask questions throughout the lecture.
- Utilize handouts, maps, and visuals from which to pose issues or questions.
- Stop lecture suddenly and have students write a response to a question

48. After a Lecture
(Derek Bok, Harvard, 1992)

- After a lecture, give students a one questions quiz based on the material just covered. Leave the room for 10-15 minutes so that they can discuss. When return, have them report answer.
- Do one minute reflections or mini-activities at the end.

49. Anchoring Event (CTGV, 1990?)

- Begin or interrupt a lecture 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.

50. 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

Half-Way...Brief Intermission Please Share Best Idea so far with neighbor
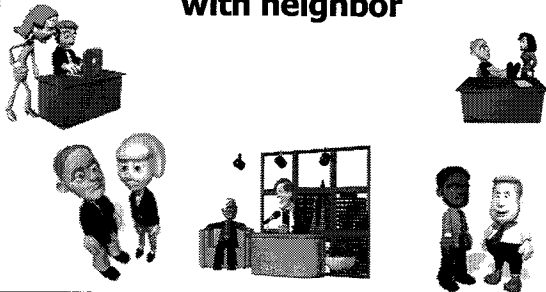
51. Questioning Options
(Morten Flate Pausen, 1995; morten@nki.no)

- Shot Gun: Post many questions or articles to discuss and answer any— student choice.
- Hot Seat: One student is selected to answer many questions from everyone in the class.

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52. Pruning the Tree (i.e., 20 questions) (V)

- **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.**

52. Séance or Roundtable

- Students read books from famous dead people
- Have a student be a medium
- Bring in some new age music and candles
- Call out to the spirits. (if online, convene when dark (sync or asynchronous) and invite guest from other campuses)
- Present present day problem for them to solve
- Participate from within those characters (e.g., read direct quotes from books or articles)
- Debrief

53. Field Reflections

1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts

54. Problem-Based Learning (PBL)
(Blumenfeld, Soloway, et al. 1991; Duffy & Savery, 1996; George Lucas Educational Foundation, 2003)

1. Pursue nontrivial (complex) problems with multiple solutions
2. Context for collaboration
3. Debate, ask questions, refine questions, make predictions
4. Collect and analyze data
5. Draw conclusions
6. Communicate ideas and findings
7. Ask new questions
8. Create artifacts

55. Case-Based Learning: Student Cases

1. Model how to write a case and practice answering.
2. Generate 2-3 cases during semester based on field experiences.
3. Link to the text material—relate to how how text author or instructor might solve.
4. Respond to 6-8 peer cases.
5. Summarize the discussion in their case.
6. Summarize discussion in a peer case.
   (Note: method akin to storytelling)

56. 99 Second Quotes

- Everyone brings in a quote that they like from the readings
- You get 99 seconds to share it and explain why you choose it
- Options
  - Discussion
  - Small group linkages
  - Share online and discuss or debate

57. Swami Questions (V)

a. Have students leave you with questions during break time.
b. At end of session go thru as many of them as you can in last 5-10 minutes.

Alternative Swami Questions (V)

a. Take questions home and come up with creative answers (put in sealed envelopes)
b. Next time start class dressed as a swami and put answers and answer questions before opening envelopes.

58. 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.

59. Six Hats (Role Play):
(from De Bono, 1985; adopted for online learning by 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

Note: technique was used in a business info systems class where discussion got too predictable!

60. Think-Pair-Share (V)

• Assign a topic for reflection or writing.
• Have share their responses with someone next to them.
• Ask to share with class.
• Alternatively, ask students to volunteer something they heard from a peer.

61. Think-Pair-Share-Partner

• Assign a topic for reflection or writing.
• Have share their responses with someone next to them.
• Share with another team.
• Ask to share 1-2 ideas with class.
• Alternatively, ask students to volunteer something they heard from a peer.

62. Roundrobins (V)

• Select a topic
• Respond to it
• Pass answer(s) to next person in group
• Keep passing until everyone contributes or ideas are exhausted
• Summarize and/or report or findings

63. Reflection Papers: #1 Individual Reflections (3-4 page)

- Learning journeys: Have students reflect on their learning journeys in a course. Have them reflect and compare the concepts that they have learned to others. Perhaps compare to sample papers from previous semesters.

64. Reflection Papers: Group Reflections (3-4 page)

- Team reflection papers: have team members reflect on their learning in a course. Compare their learning to each other. Everyone writes a section and then synthesizes across.
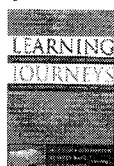
65. Reflection Papers Trend Papers (3-4 page)

- Have students write papers about emerging trends in the field. Have them select topics from a list or suggest topics. What did they learn? Perhaps have them present their trend papers to the class.

66. Reflection Papers: Chat with Expert Reflection Papers (3-4 page)

- Have students reflect on guest expert talks. Have them perhaps post and compare their papers online. Also, consider having papers be written across various guest speakers.

67. Reflection Papers: Job Application Papers (3-4 page)

- Students write reflection papers on how different concepts in class link or connect (or perhaps later might connect) to their present or future jobs. Perhaps provide them with sample papers from prior semesters.
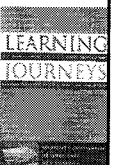
68. Reflection Papers: Personal Learning Theory (3-4 page)

- Students write papers related to their personal learning theory or overriding personal philosophy. If appropriate, their ideas are related to their course or field of study or to certain key concepts within it. Perhaps create discussion groups based on certain types of learning theories or perspectives and have students from each group present their unique ideas.

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69. Summary or Reflection Writing
(David Brown, Syllabus, January 2002, p. 23; October 2001, p. 18)

- Nutshell, Abstract, Summing Up
- Pros and Cons, K-W-L,
- Muddiest Pt Papers, Minute Papers
- PMI (Plus, Minus, Interesting)
- Wet Ink, Diaries, Freewriting, Blogs
- Roundrobin, Forced Wrap Arounds
- Email instructor after class on what learned or failed to learn...

70. 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.

71. Reuse Online Discussion Transcripts

- Have students bring in their online discussions or to class.
- Look for key concepts embedded in the transcripts.
- Share or have competitions

72. Reuse Blog Transcripts

- Have students bring in their blogs on the readings for the week for a reflection or sharing.
- Summarize key points by group.
- Present in 2-3 minute summaries.

73. 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.

74. Giving Questions and Getting Answers (Silberman)

- Give each student two index cards. Ask the students to complete the following sentences:
- Card 1: I still have a question about....
- Card 2: I can answer a question about....
- Break class into groups; ask each group to select the most pertinent questions to ask, and the most interesting question to answer from the cards of their group members. Then go around the class and have the groups give their responses. (This is a good review activity.)

75. Planted Questions
(Active Learning, Silberman)

- I will 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.

76. Issue Cards

- Everyone brings in question and issue cards on the articles. Collect and pass out to different groups to solve.

77. Group Grope
(Thiagi, 1988)

- Each student writes 4 impt pts
- Instructor pts impt and less impt on cards
- Collect cards
- Distribute 3 to each student and arrange according to importance
- Spread rest on table (can exchange and trade)
- Compare cards and form coalitions
- Each team prepares poster that nonverbally reflects their ideas

78. Priority Plus
(Thiagi, 1988)

- Ask to read while noting key pts
- Divide into teams of 4-6 people
- Prepare list of key pts
- Class creates a list of 12 key pts
- Ask each team to select most impt item
- Give pts for selecting same item
- After figure out item with most votes, cross it off and ask groups to select next most impt item.
- Do not cross off items that tie—make groups defend and debate.

79. 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.

80. Two Heads vs. One
(Thiagi, 1988)

- Everyone brings 100 word summary.
- Pair up and produce a better 100 word summary.
- Collect all 3 and pass to different group
- Groups rank them for 1 for best, 2 for 2nd best, and 3 for third.
- Pass back to original team.

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81. Third Degree
(Thiagi, 1988)

- Everyone brings questions. Divide into groups of 5. For 3 minutes, four inquisitors in the group pounce on the hapless victim and pile up various questions on him or her. No logic is required; instead the goal is to confound the victim. After 3 minutes, ask the current victim to select a new one and repeat process. At end you might ask students to apportion 100 pts among the other 4 players to determine a winner.

82. Press Conference
(Thiagi, 1988)

- Divide class into 3 teams and assign different articles or readings
- Next time announce a team to get for a press conference
- Others write down 3 questions each on index cards
- Mix and redistribute 3/student
- Identify particular people and ask questions of them
- Other 2 groups decide on most impt points and makes a presentation on them.

83. The Question Game
(Thiagi, 1988)

- Each student comes with 10 questions cards with answers on the back.
- Divide into groups of 4-5
- Mix cards up and exchange with another group.
- Players read cards and answer it or bluff
- Others in group can challenge
- 2 pts for correct challenge, 1 pt for correct answer (2 if challenged), and 2 pts for successful bluff

84. Best 3 (Thiagi, personal conversation, 2003)

- After a lecture, have students decide on the best 3 ideas that they heard (perhaps comparing to a handout or dense sheet of paper).
- 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.

85. 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

86. Library Day
(Bonk, 1999)

- Have students spend a day in the library finding and summarizing a set number of articles.
- Have them bring to class and share in small groups interested in similar topics.
- Perhaps give each student 1 minute to describe what found.

87. One Visual Exercises

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

88. 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.

89. 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.

90. Poster Sessions
(Bonk, 1995)

- Have students create something from the readings—a flowchart, timeline, taxonomy, concept map.
- Have half of the students present their ideas in one half of the room for 15-20 minutes and then reverse roles.

91. Starving Artist Art Fair
(Bonk, 1997)

1. Have students create concept maps for different chapters.
2. Put work on wall and only identification is a student number.
3. Students go around the room and rank each piece of art.
4. Pass out 1,000,000 of Bonker bills to each student.
5. Bid on artwork
6. Those with highest rated artwork and most accumulated artwork get bonus points.

92. 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.

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93. Movie assignments (Bonk 2004)

Group B: The brave and daring might try:

- The Absent Minded Professor (Ed Wynn, Fred MacMurray, Keenan Wynn)
- Animal House (John Belushi, Kevin Bacon, Tim Matheson, Donald Southerland)
- Back to School (Rodney Dangerfield, Robert Downey, Ned Beatty)
- Bedtime for Bonzo (Ronald Reagan, Jesse White, a monkey named Bonzo)
- Bill and Ted's Excellent Adventure (Keanu Reeves, Alex Winter, George Carlin)
- The Elf (Will Ferrell, Bob Newhart, Edward Asner, James Caan)
- Fame (Laura Dean, Irene Cara)
- Fast Times at Ridgemont High (Sean Penn, Judge Reinhold, Nicolas Cage)
- Ferris Bueller's Day Off (Matthew Broderick, Jennifer Grey, Charlie Sheen)
- Footloose (Patrick Swayze, Jennifer Grey)
- Grease I or II (John Travolta, Olivia Newton-John, Sid Caesar, Sha Na Na)
- Hoosiers (Gene Hackman, Dennis Hopper, Barbara Hershey)
- Kindergarten Cop (Arnold Schwarzenegger, Penelope Ann Miller)
- Legally Blond I or II (Reese Witherspoon, Raquel Welch, Luke Wilson)
- Titanic (Leonardo DiCaprio, Kate Winslet, Kathy Bates, Bill Paxon)
- War Games (Matthew Broderick, Ally Sheedy, Dabney Coleman, Barry Corbin)
- Weird Science (Robert Downey Jr., Kelly LeBrock, Bill Paxon)

94. Tell Tall Tales, Creative Writing

a. **Start a topic of discussion perhaps with an interesting scenario or "just imagine" if this happened or an object obituary.**
b. **Pass on the story to a student to continue it at another location or have volunteers.**
c. **Continue with story.**
d. **Perhaps combine with a Stand and Share activity.**

95. 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)**
- **Reassign roles if someone drops class**
- **Perform within roles—try to refer to different personalities in peer commenting**

96. Class Voting and Polling (perhaps electronic)

1. Ask students to vote on issue before class (anonymously or send directly to the instructor)
2. Instructor pulls our minority pt of view
3. Discuss with majority pt of view
4. Repoll students after class

(Note: Delphi or Timed Disclosure Technique: anomymous input till a due date and then post results and reconsider until consensus Rick Kulp, IBM, 1999)

97. Scavenger Hunt

1. Create a 20-30 item scavenger hunt
2. Post scores

98. Peer Interviews

➢ After lecture, have learners interview each other about what they learned.
➢ Introduce each other based on what learned.

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99. Three Step Interviews

➢ After complete lecture, assign pairs of students who interview each other about what they learned.

➢ Pairs introduce each other to another group based on what they learned.

➢ Groups introduce each other to class based on what they learned.

100. 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.

What can we say about collaborative learning activities???

- **They are everywhere!!!!!!!!**

- **Resistance is futile!!!!!!!**

Low Time <-------> High Time Strategy Continuum

- Voting, Polling
- Web Links/Comments
- Case Discuss/Create
- Starter-Wrapper, Q&A
- Summing Up
- Pros & Cons
- Ranking, Categorizing
- E-mail Pal, Critical Friend
- Brainstorming, Rev BS
- Minute Papers

- Mock Trials, Role Play
- Guest Experts & Lectures
- Debates, Controversies
- Symposia, Panel Discuss
- Electronic Roundtables
- Concept Maps, Webs
- Taxonomies, Timelines
- Thoughtful Exams
- Jigsaw
- Problem-Based Learning

Low Time/Risk Idea: _____
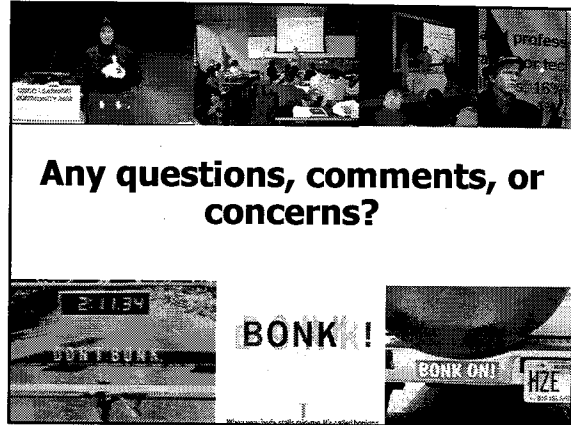High Time/Risk Idea: _____

Final Advice

- **Start small, share.**
- **Do not be afraid to share or ask for help**
- **Learn from as well as with your students**
- **Lower immediate expectations (change takes time)**
- **Think low risk to high risk and low time to time intensive**
- **Make an action plan.**

Stand and Share

- Will Work: _____
- Might Work: _____
- No Way: _____

Any questions, comments, or concerns?

BONK !