Collaborative and Active Teaching Techniques

Summer 2018
Session 2
Carolien Annink, Ph.D.
Recap

Discussion techniques – session 1

Session 1 summary

1. Think-Pair-Share
2. Round Robin
3. Buzz Groups
4. Talking Chips
5. Three Step Interview

Experiences?

• 1. Designing the activity.
• 2. Implementing the activity.
• 3. Adjusting the activity and new trials.
Session 2
Active and Collaborative teaching, using...

- Reciprocal teaching techniques &
- Graphic Information Organizers
Reciprocal Teaching- Why?

Experts: Most effective method of teaching because:

1. Students purposefully help each other & establishes interdependence
2. Active rather than passive: both give and receive
3. Thorough understanding necessary
4. Helps retain learning
5. Cooperation rather than competition

1. Advantages: beneficial for a. master subject matter content, b. discipline-based skills c. study skills (meta cognition) d. own peer language
2. Each student has a stake in the successful learning of others – skill for work place
Collaborative and Active Learning Techniques for your Courses

Reciprocal Teaching techniques:
1. Note-Taking Pairs
2. Learning Cell
3. Fish Bowl
4. Role Play
5. Jigsaw
6. Test-Taking Teams
Collaborative and Active Learning Techniques for your Courses

Reciprocal Teaching techniques:

# 1. Note-Taking Pairs – instructions:

• Individually take notes (of video, lecture, chapter)
• Form pairs
• Partner A begins summarize first section, partner B offers corrections and additional info
• Partner B summarizes the next section, partner A offers corrections and additional info
• Continue to alternate
Practicing “Note Taking Pairs”

Take notes while watching an 8-minute video
• *Reeducating the Mind*, Patricia Alexander, UMD

Use worksheet

Be prepared to share notes with your neighbor

• URL:
  • [http://www.aera100.net/ed-talk-videos.html](http://www.aera100.net/ed-talk-videos.html)
Collaborative and Active Learning Techniques for your Courses

Reciprocal Teaching techniques: # 2: Learning Cell
1\textsuperscript{st} individually – A & B \textbf{formulate questions} (from lecture, textbook, etc)
2\textsuperscript{nd} with partner – B \textbf{answers A’s questions}
3\textsuperscript{rd} with partner – A offers \textbf{corrections/add info}
4\textsuperscript{th} switch – A answers B’s questions, B corrects, discussion

\underline{For reading assignments or other learning activity}
- Encourage students to create \textbf{thought-provoking questions} (at home: “entry ticket”, extra points, or in class)
- Students put material in own words
- Students think analytically
- Students begin use language of discipline
Possible Use in Your Class

Activity: Learning Cell

• Take a minute and think how you could incorporate this activity in your lessons

• Write on worksheet
Collaborative and Active Learning Techniques for your Courses

# 3: Fish Bowl

- Inner circle: (3-5) students comfortable and capable of having a good discussion
- Outer circle: (rest) observers
- Discussion prompt- relevant to daily life
- Closing

- Need moveable desks or chairs
- Goal of this activity: practice discussing a topic we are learning about (both content and group process)
- Discussers: show their knowledge of topic by giving their interpretations; adhere to good discussion practice
- Observers: Maybe have list with points to look for, maybe different aspects. Sharpen their listening skills, analyze how content is portrayed, analyze group process, report out
- Closing: all reflect on participation in group
Possible Use in Your Class

Activity: Fish Bowl

• Take a minute and think how you could incorporate this activity in your lessons

• Write on worksheet
Collaborative and Active Learning Techniques for your Courses

# 4. Role Play

1. Present scenario, allow for questions, discussions
2. Assign roles
3. Announce time
4. Enact role play
5. Follow with discussion
6. Reenact changing characters

- Role play engages students in a creative participatory activity that requires them to apply course concepts as they assume fictional identities or envision themselves in unfamiliar situations.
- For hesitant speakers: pretending you are someone else ameliorates some of the anxiety
- Scenario: everyday situation – relevancy of content – connection to existing knowledge
- Closure stage: debrief on lessons learned
Possible Use in Your Class

Role Play activity:

• Take a minute and think how you could incorporate this activity in your lessons

• Write on worksheet
Collaborative and Active Learning Techniques for your Courses

# 5: Jigsaw
Students perform as both Experts & Learners
  - Experts: Learn their content (well enough) and teach to peers
  - Learners: Learn while their peers teach – advantage of peer language, peer explanations
Interdependence

Process:
1. Instructor has list of possible topics for developing expertise
2. Groups form on different topics (expert groups)
3. In expert groups students master the topic – also decide how is best to teach (examples, illustrations, applications)
4. Works well for pre-class reading – Chapters/sections of textbook, Articles
5. Variation: Student generated list of topics
Possible Use in Your Class

Jigsaw activity:

• Take a minute and think how you could incorporate this activity in your lessons

• Write on worksheet
Collaborative and Active Learning Techniques for your Courses

# 6: Test-Taking Teams

- Form groups of 4-6 (heterogeneous cognitive level)
- Students meet in groups to study the material
- Individually - administer the test (don’t return the test)
- Rejoin in groups, come to consensus – hand in 2nd time as group
- Compare two outcomes after tests return

Will teach students about individual accountability & collective knowledge, demonstrating value of collaborative learning. Instructor’s job: determine size/complexity of material to be mastered & decide how you want to do the grading (individual vs group grades)
Possible Use in Your Class

Test-taking Teams:

• Take a minute and think how you could incorporate this activity in your lessons

• Write on worksheet
Collaborative and Active Learning Techniques for your Courses

Using Graphic Information Organizers:
What are they? Why are they useful? “A picture is worth a thousand words.”

Characteristics GIOs: Information presented spatially, helps with:

- Patterns/relationships
- Holistic/detail
- Gathering/sorting ideas
- Practical for study guides (compact)
- Usable for assessment
Collaborative and Active Learning Techniques for your Courses

Graphic Information Organizers

Affinity Grouping

1. Individually, ask students to generate a multitude of characteristics of a concept, on multiple pieces of paper (like Post-its)

2. In groups, have students organize in a visual way their characteristics on the board, or on newsprint. Using markers to draw groups and connections
Collaborative and Active Learning Techniques for your Courses

Graphic Information Organizers

**Group Grid** – Information placed in a grid according to category rubrics

Good for clarifying conceptual categories and developing sorting skills
# Group Grid

Example from Music course

## EXHIBIT 10.3

**Team Matrix**

Put a checkmark in the column indicating the genre that is most clearly defined by this feature.

<table>
<thead>
<tr>
<th>Defining Features</th>
<th>Blues</th>
<th>Jazz</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Originated in urban areas</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Originated in rural areas</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originated in the Mississippi Delta region</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Merged European and African traditions</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Developed earlier</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Represented considerable interaction between Whites and Blacks from beginning</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Interaction between Whites and Blacks not pronounced until later</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Basis of rock ‘n’ roll</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses African-based melodic ornamentation and rhythmic traditions</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Improvisation in melody and in harmonic substitution</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvisation mainly in melody over standard progression</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Uses three main chords in a slow harmonic rhythm</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses many different chords, often fast harmonic rhythm</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Popular in Europe, especially France</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Imported back into America by British musicians</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Collaborative and Active Learning Techniques for your Courses

Graphic Information Organizers

*Sequence Chains:*
- Sequential thinking
- Useful for planning and studying
- Emphasize continuity or connections
Sequence Chain & Word Web
Example from a Biology Class

Chesapeake Bay Waterbird Food Web

Tertiary Consumers:
- Osprey
- Bald Eagle

Secondary Consumers:
- Gulls and Terns
- Wading Birds
- Large Piscivorous Fish
- Sea Ducks
- Tundra Swan

Primary Consumers:
- Small Planktivorous Fish
- Benthic Invertebrates
- Bivalves
- Herbivorous Ducks
- Geese and Mute Swans

Herbivores:
- Zooplankton

Primary Producers:
- Phytoplankton
- Submerged Aquatic Vegetation (SAV)
- Vegetation
Collaborative and Active Learning Techniques for your Courses

Graphic Information Organizers

**Word Webs:** central word, phrase or question – the stimulus for shared writing

Relationships that are difficult to understand from words alone
Possible use in Your class

Graphic Information Organizers

activity:

• Take a minute and think how you could incorporate one of these organizers in your lessons

• Write on work sheet

• Turn to neighbor and exchange ideas
Next Session

Homework:

• Develop and try out one Reciprocal Learning Technique and/or Graphic Information Organizer