Collaboration Online: The Application of Jigsaw Instructional Strategy

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Agenda

1. Purpose of presentation
2. What is the Jigsaw instructional strategy?
3. Challenges & advantages in practice
4. Steps to implement the strategy
5. Examples in practice
    a. Privacy Laws and Employee Evaluation Records
    b. Article Reviews
6. Discussion

Jigsaw

- Jigsaw is an instructional strategy that breaks students into groups to collaboratively work on an assignment -- which is separated into smaller tasks.
- Students work in structured groups to reach consensus regarding a final outcome of an issue or topic.
- It is frequently used in f2f class settings.
- It can be successfully adapted for use in the online class environment to enhance student learning and engagement.

Resources: https://www.jigsaw.org/

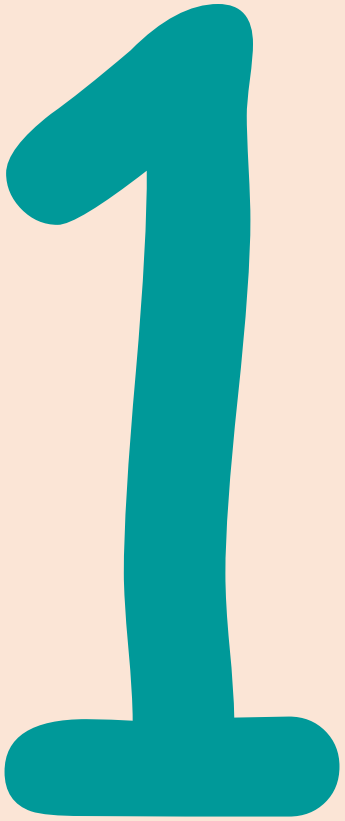
Implementation

6 Steps

Steps of Jigsaw Strategy:

Forming a jigsaw group:

Divide students into small groups (no more 5-6 students in a group) as a jigsaw group to work on a specific project.



Steps of Jigsaw Strategy:

Assigning a task/role:

Each member in a jigsaw group is responsible for a specific task (role) of the project. Meet with the group on the assigned project.

Steps of Jigsaw Strategy:

Forming a focus/expert group:

3

Reassign students from each jigsaw group to form homogeneous task/role groups.

Steps of Jigsaw Strategy:

Mastering the Task:

Deepen the content/skill level associated with the task/role.

Steps of Jigsaw Strategy:

Advancing the output of the project:

5

Students return to their jigsaw groups to complete the assigned project.

Steps of Jigsaw Strategy:

Evaluation:

Each jigsaw group presents what they have learned to the class.

- ☐ Discussion board posts
- ☐ Media presentations
- ☐ Objective Quizzes
- ☐ Surveys

Challenges of Online Jigsaw Activity

- **Organized Structure:**
  Jigsaw activity relies on a pre-define organized structure
- **Clear Instruction:**
  Precise, explicit, and clear instructions must be explained -- step-by-step to facilitate students' work
- **Reasonable Timeframe:**
  At least a 2 week timeframe is required for an online jigsaw activity
- **Supportive Technology:**
  Provide synchronous and asynchronous communication tools to support student collaboration

Advantages of Online Jigsaw Activity

- **Improves Understanding:**
  Supports social construction of knowledge
- **Facilitates Collaboration:**
  Within and across groups
- **Increases Engagement:**
  Varies instructional strategies
- **Easily Adopted & Integrated:**
  Applicable in any course

Examples

Example 1: Privacy Laws and Employee Evaluation Records

1. Assign students into a jigsaw group (3-4 students); each student studies two articles.
2. Each student is assigned a role in the jigsaw group (school leader/teacher/parent). Students meet with their group members to develop and post an issues list based on their interpretations of the readings.
3. Random sort of students in control and experimental groups
    a) Control: Students individually make and defend policy recommendations (post as journal entry)
    b) Experimental: Students meet online with those of like role, discuss issues and then return to their jigsaw group to share ideas and collectively make and defend policy recommendations (post on discussion board)
4. Students complete the survey and take a quiz to provide a basis to compare performance (depth of knowledge, perspective…)
5. All students who complete the entire activity will be awarded with an extra credit point award.

Example 2: A Simplified Jigsaw Activity - Article Review

1. Set up jigsaw groups: Each group studies five articles.
2. Each group member has lead responsibility for one of the five articles.
3. Jigsaw group meeting: Discuss each of the five articles and prepared a comparison summary for presentation to the class.
4. Each group posts their summary.
5. Whole class discusses the five group comparison summaries posted.

Article Review Group Activity

Fall 2014

- Five articles to study: Each group is responsible for one article presentation
- Each group posts one presentation
- Whole class discussed five articles

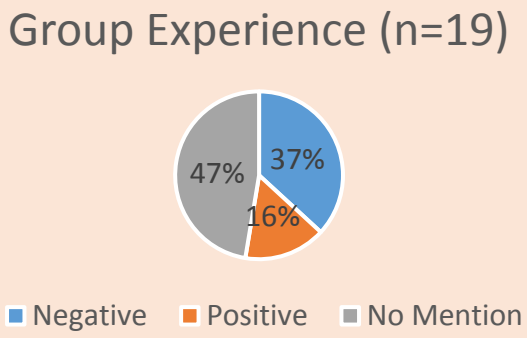
Fall 2015

- Each group discuss the total of five articles
- Each group member is responsible for one article
- Each small group discuss five articles
- Each group posts one comparison summary
- Whole class discuss five group comparison posts

Students' Discussion Posts (With/without the jigsaw instruction)

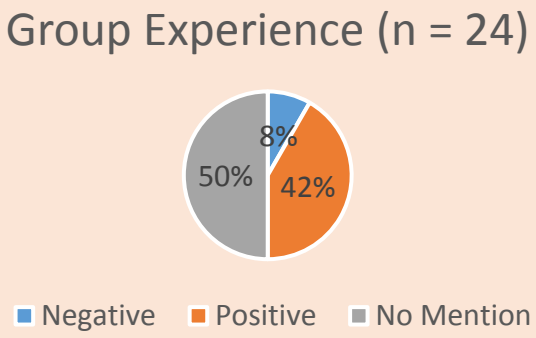
Fall 2014 (n=20)

- Total posts: 20
- Total clicks = 590
- Student Page Views (mean = 42.4 S.D. = 27.5)



Fall 2015 (n=24)

- Total posts: 78
- Total clicks = 2738
- Student Page Views (mean = 119.0 S.D. = 78.6)



Discussion

Questions?

Supplementary Resources

- The Jigsaw technique http://www.educationworld.com/a_curr/strategy/strategy036.shtml
- The Jigsaw Classroom: https://www.jigsaw.org/
- Example: Systems of Equations http://edtech2.boisestate.edu/tracismith/502/Jigsaw.html
- Pozzi, F. (2010). Using Jigsaw and case study for supporting online collaborative learning. *Computers & Education, 55*, 67-75.
- Blocher, J. M. (2005). Increasing learner interaction: using Jigsaw online. *Educational Media International, 42* (3), 269 – 278.