



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

## 1 Sticky Note Parade



On a board, wall, or digital slide program, provide prompts for which students need to generate ideas, solutions, or questions. Give students 3 – 4 sticky notes on which they write a single idea and stick the notes on a board or wall in response to the prompts. Once all ideas are posted, the instructor and/or students can then group the notes by topic, theme, question, or chronology.

*Use it to help students generate connections between different sections or categories of content.*

## 2 Sorting and Sequencing Activities



Students sort content (readings, books, problem sets, etc.) into categories or sequence content logically. This can be done with slips of paper, cards, sticky notes, or with the “slide sorter” function of a presentation program, and can be completed synchronously or asynchronously.

*Use it when introducing students to multi-step tasks or sequences that require memorization. This activity is also beneficial for purposes of categorization and comparing.*

## 3 Frequent Quizzes and Spaced Retrieval Practice



Offer low-stakes tests or quizzes as formative assessments. These can also be incentives to complete the assigned reading. Test after learning new content, either at the beginning, middle, or end of class. To enhance retrieval, test again a few days or weeks after a particular class, module, or unit has finished.

*Frequent testing gives students practice retrieving information, which interrupts forgetting, makes retrieval routes stronger, and enables better retention of information.*

## 4 3-2-1 Reading Reflection



Ask students to list three things learned from the reading; two connections to self, other texts, or to the world; and one question about the reading. Use this reflection for class discussions or small group activities.

*The three prompts scaffold readings by asking students to self-monitor and direct their learning, and connect the reading to other content, the real world, or their personal experiences.*

## 5 Student-Led and -Designed Discussions



Students write discussion questions for each other and pose them to a small group or the class. They can provide an introductory rationale for their questions and act as discussion leaders.

*The need to teach content (e.g., run a discussion) is an effective way of getting people to learn content, and it can lead to more student engagement overall.*

## 6 Gallery Walk



Post prompts around the room or in a shared slide deck for students to address. Have students respond to prompts in writing at designated locations. Then, have them take a “gallery walk” through the room or deck, reading responses and noting anything interesting. They can interact with responses by using icons and stickers to upvote, star, or otherwise react to them.

*A great community-building activity, this also helps students to make connections, elicit prior knowledge, and crowd-source questions.*

## 7 Jigsaw Group Activity



For this group activity, divide content into segments. Each segment is one “jigsaw piece,” and together, all segments make a complete “puzzle.” Assign a group of students to become experts on their segment of content and then teach the content to the rest of the class. Continue doing so until all groups have presented and students have all pieces of the puzzle.

*This activity shift students into the content-delivery role, which will prompt deeper mental engagement with the material.*

## 8 Simulations



Queen’s University in Canada describes simulations this way: “Learners are tasked to solve complex problems in controlled environments through replicated ‘real-life scenarios’” (p. 5). Students can engage in pre-developed simulation scenarios using real-life props and other items, and simulations can be delivered online (via simulation software) and/or in-person.

*Use this when students need to practice applying knowledge and skills in a replicated performance environment.*

## 9 Role-Playing




Students assume a role in a complex or stressful real-life situation that prompts them to examine their responses to the environment.

*Use this when students need to practice replicating the skills and knowledge associated with a particular role or perspective (e.g., a negotiating table, a high-stakes discussion, or historical event).*



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU




# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU




# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

## 10 Case-Based Learning



Students study narratives, data sets, or other selected content related to specific scenarios that reflect real-world examples of the subject matter. They engage in structured discussions, activities, and assignments around the case study, either synchronously or asynchronously. Often, the actual outcome of the case is not revealed until the end of the session.

*Use this to give students practice synthesizing content through applied problem-solving with real-world examples.*

## 11 One-Minute Thesis



Create, or have students create, two lists: one with source material and another with concepts and themes. Ask a student to draw a connection between an item on each list. Give students one minute to develop a thesis connecting these two items, and then debrief as a class. Repeat the exercise until all items have been connected.

*This requires students to generate knowledge by increasing mental connections between different parts of the subject matter.*

## 12 Think/Pair/Share



Students individually respond to a prompt, pair up, and share their response with their partner. During the class debrief, ask partners to share their own or their partner's response.

*Use it to prompt students to form connections with each other and the content, and generate new ideas about the material.*

## 13 Concept Maps



Students create a map (typically a bubble map) by brainstorming major class themes, concepts, etc., and connecting them to one another in graphical form. They then provide an explanation of their maps.

*Use this when students need to generate connections between different types of content: new and old, from the present class and previous class, from one category and another.*

## 14 Three-Response Brainstorm



As individuals or in small groups, ask students to quickly brainstorm three responses to any of the following prompts: name three things you want to learn in this class, module, or unit; name three things you learned in our last class, module, or unit; name three things you want to learn more about what we've just reviewed. Create a list with students' ideas and use it to inform teaching in the moment or at a future date.

*Use this to get students to self-identify connections between content and pre-existing knowledge.*

## 15 WIFM? (What's in It for Me?)



Ask students to identify how a skill or piece of knowledge will personally benefit them in any area of their lives. These can be written down and/or shared as a class.

*Use this to prompt students to connect the material to themselves and their own lives.*

## 16 Teach Back



In groups or as individuals, assign students to teach a concept back to the class. This task can be delimited by delivery time, format (e.g., a hand-drawn picture), or structure (e.g., top three points). Provide feedback, either as a class or individually.

*Teach-backs deepen knowledge and reinforce recall by requiring students to review content at a level that enables them to teach it back to their peers.*



# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

# ACTIVE LEARNING STRATEGIES

Course planning cards provided by  
The Center for Teaching Excellence & Innovation, JHU

## SOURCE LIST

References are listed below according to the card number.

1. 2. 3. Brown, P. C., Roediger, H. L., III, & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. The Belknap Press of Harvard University Press.
4. University of Vermont. (n.d.). *Lower students' stress with the 3-2-1 reading strategy*. <https://www.uvm.edu/wid/supporting-academic-reading-and-notetaking-strategies>
5. Instructional Moves. (n.d.). *Facilitating student-led discussions*. Harvard Graduate School of Education. <https://instructionalmoves.gse.harvard.edu/facilitating-student-led-discussions>

## SOURCE LIST

6. 7. University of Georgia. (n.d.). *Active Learning Techniques*. <https://activelearning.uga.edu/instructor-development/instructor-resources/>
8. Experiential Learning Hub. (2021). *Simulation-based experiential learning: Faculty toolkit*. Queen's University. [https://www.queensu.ca/experientiallearninghub/sites/qelhwww/files/uploaded\\_files/Simulation%20Toolkit/Simulation%20EL%20Faculty%20Toolkit%20%20Final%20Final%20April%202020.pdf](https://www.queensu.ca/experientiallearninghub/sites/qelhwww/files/uploaded_files/Simulation%20Toolkit/Simulation%20EL%20Faculty%20Toolkit%20%20Final%20Final%20April%202020.pdf)
9. Northern Illinois University Center for Innovative Teaching and Learning. (2012). *Role playing*. <https://www.niu.edu/citl/resources/guides/instructional-guide/role-playing.shtml>

## SOURCE LIST

10. Instructional Moves. (n.d.). *Case teaching*. Harvard Graduate School of Education. <https://instructionalmoves.gse.harvard.edu/case-teaching>
11. Lang, J. M. (2016). *Small teaching: Everyday lessons from the science of learning*. Jossey-Bass.
12. Bowman, S. L. (2005). *The ten-minute trainer: 150 ways to teach it quick & make it stick*. Pfeiffer.
13. Lang, J. M. (2021). *Small teaching: Everyday lessons from the science of learning* (2nd ed.). Jossey-Bass.
14. 15. 16. Bowman, S. L. (2009). *Training from the back of the room! 65 ways to step aside and let them learn*. Pfeiffer.

## ICON KEY

### TIME

**All times** are approximate and should be considered starting points for course planning. Estimates for preparation and student engagement times could vary depending on the class size, delivery modality, materials needed, and technology required.



Preparation Time

Student Engagement Time

Debrief Time

## ICON KEY



The estimated **Preparation Time** for each activity.



: **Minimal** preparation time required



: **Moderate** preparation time required



: **Maximum** preparation time required

## ICON KEY



The estimated **Student Engagement Time** for an activity relative to the total instructional time allowed for a class, module, or unit.



: **Short** engagement time

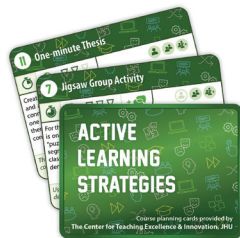


: **Medium** engagement time



: **Long** engagement time

## ACTIVE LEARNING STRATEGIES



Active learning supports the development, retention, and synthesis of new knowledge through interactive and engaging teaching strategies that are rooted in cognitive science. Encompassing both demonstrable behaviors and targeted cognitive tasks, the active learning strategies in this deck support effective engagement between students and content, instructors, and other students. **The strategies can be used for in-person, hybrid, and online asynchronous classes.**



For more information about these cards, please visit: <https://ctei.jhu.edu/teaching/active-learning-cards>

## ICON KEY



Plan time for **Debrief**.

## ICON KEY

### GROUPING ASPECT



: Suitable / not suitable as an **individual** activity



: Suitable / not suitable as a **paired** activity



: Suitable / not suitable as a **group** activity



May not be an individual activity

Can be a paired or group activity