**TEACHING STRATEGIES**

**Purposeful Learning Protocols to Create Meaningful Classroom Experiences**

**Note: For quick viewing, each strategy could available on the website as a separate activity rather than one (long) running document.**

**Template for each teaching strategy:**

**a. Purpose**

**b. Steps**

**c. Time**

**d. Size of group (small: < 10 people; large: > 10 people)**

**Brainstorming or Focused Listing:**

1. Purpose: group technique for generating new, useful ideas and promoting creative thinking. It can be used to help define a project or problem or remediate a project or problem by identifying potential barriers and developing possible solutions.
2. Steps:
3. Instructor poses a question or problem specific enough to help participants focus on the intent, but open enough to allow innovative thinking (without bias).
4. Instructor guides the group to generate as many ideas as possible. Scribe notes all suggestions. Explanation for ideas should be discouraged (slows process and allows for premature evaluation of ideas).
5. If consensus is desired, group may vote on ideas.
6. Time: Prep – 1-2 minutes; Delivery - varies from a few minutes to 30 minutes
7. Size of group: small or large

**One-minute write:**

1. Purpose: very short writing activity (taking one-minute or less to complete) in response to an instructor-posed question, which can be used to “activate” learners by getting their prior knowledge and beliefs about the topic to be covered, which readies the brain to make connections between the ideas they are about to encounter and the ideas they have already stored in their brain. As an instructor, it also provides early feedback about what prior knowledge or misconceptions learners have about the topic, so this lesson can build on their knowledge or dismantle their misconceptions. prompts learners to reflect on current knowledge of a subject or the day’s lesson to provide the instructor with useful feedback
2. Steps:
   1. Instructor asks, “When you hear the word ‘PCOS,’ what immediately comes to your mind?”
   2. Learners write for one minute
   3. Debrief main points
3. Time: Prep – 1 minute; Delivery – 5 minutes
4. Size of group: small or large

**Think-Pair-Share or Write-Pair-Share:**

1. Purpose: motivate students to think on their own and then promotes higher-level thinking by sharing with others in the learning environment.
2. Steps:
   1. Instructor asks a question. Open-ended questions are more likely to generate more discussion and higher-level thinking.
   2. Give students 1-2 minutes to think about (or write) their individual response to the question.
   3. Given students 1-2 minutes (or longer) to discuss the question with the person next to them (or in groups of 3-4 students at most) to work out an answer.
   4. Ask for responses from some or all of the pairs/small groups to share with the larger group.
3. Time: Prep – 1 minute; Delivery – 5 minutes
4. Size of group: large

**Marvin’s model:**

1. Purpose: facilitate rapid communication about a topic at hand among a large group of people, or to get many of view in play quickly without engaging in dialogue.
2. Steps:
   1. Introduction: Facilitator instructs the large group to break into subgroups of 5-7 members and instructs the subgroups – “When I ask a question, I will give you 30 seconds to think, and then each member of the group will answer quickly, in turn. Each will get exactly 30 seconds to answer. As each member speaks, the other listen silently. No one responds to anyone else’s answer.
   2. Questions: The facilitator poses a series of questions (e.g., “What’s the first think you think about when I say *PCOS?”, “*What do you think about when it comes to *teaching* PCOS?” “How about the *assessment* of learning in PCOS?”)
   3. Debrief: Following several questions, the facilitator debriefs the group – “What has the group learned from this first exploration of the topic at hand? What, if anything, do members think we might have to unlearn?”
3. Time: Prep – 5 minutes; Delivery – 10 minutes (may be longer)
4. Size of group: small

**Text rendering experience:**

1. Purpose: To collaboratively construct meaning, clarify, and expand thinking about a text or document.
2. Steps:
   1. Take a few moments to review the document and mark the sentence, the phrase, and the word that you think is particularly important for our work.
   2. First Round: Each person shares a sentence from the document that he/she thinks/feels is particularly significant.
   3. Second Round: Each person shares a phrase that he/she thinks/feels is particularly significant. The scribe records each phrase.
   4. Third Round: Each person shares the word that he/she thinks/feels is particularly significant. The scribe records each word.
   5. The group discusses what they heard and what it says about the document.
   6. The group shares the words that emerged and any new insights about the document.
   7. The group debriefs the text rendering process.
3. Time: Prep – 10 minutes; Delivery – 15 minutes (may be longer)
4. Size of group: small

**Jigsaw:**

1. Purpose: Allow participants to access to learning from a greater amount of text than time would permit had everyone read or viewed the same texts.
2. Steps:
   1. Introduction and grouping: the facilitator introduces the activity and arranges participants into groups of three to five. The groups can be randomized by counting off. Texts are assigned to each group.
   2. Reading and individual highlighting: participants read their groups’ text individually, and highlight key points from their own perspective. (May be done before class session)
   3. Discussion and group highlighting: In each of these small groups, participants share and discuss what they feel to be the key points from the reading. After discussion, they co-construct sand record a list of key points for sharing in the jigsaw groups.
   4. Jigsaw group sharing: The groups are reconfigured so that each jigsaw group has at least one expert prepared to teach others about his or her group’s text. Group members take turns sharing the collection of key points with the others. The facilitator may decide that a certain order of sharing makes sense based on the nature of the texts. Clarifying questions and discussion can occur through this step in the process.
   5. Individual writing: individually, participants make notes capturing their learning from the jigsaw session.
   6. Go-round: as time permits, the facilitator invites some or all participants to share one idea from the session that hold particular significance for them.
   7. Debrief: the facilitator invites participants to comment on the process.
   8. Variation: substitute a “gallery walk” for the jigsaw step (step 4). The expert group members record key points on large chart paper and post them for all to see. Participants visit each chart and add questions or comments to them using post-it notes. After the gallery walk, the experts reconvene at the chart they made and respond orally to some of the comments.
3. Time: Prep – 30 minutes; Delivery – 50 minutes (10-15 minutes for group highlighting; 30 minutes or longer for jigsaw group sharing)
4. Size of group: small or large (broken into small groups)

**Muddiest point:**

1. Purpose: This check for understanding gives the teacher a quick picture of misconceptions and confusion that still exists in the learners’ minds. It may be used at any time during a lesson, after learners have had an opportunity for learning to progress them toward the learning target. It may be most helpful when students seem to be having difficulty grasping a concept or process.
2. Steps:
   * 1. The teacher distributes half sheets of paper or index cards.
     2. The teacher asks learners to describe “the muddiest point” of the lesson thus far, clarifying what is meant by muddiest point--something that is still confusing, they don’t understand, and/or it conflicts with what they’ve always thought/believed.
     3. The teacher tells learners that responses may be used to plan future instruction to reinforce the importance of them being totally honest in their responses.
     4. After reading responses and taking action, the teacher shares with students how responses were used as a guide to plan the next instruction.

Variation: two column response, with one column being “Crystal Clear” and the other “The Muddiest Point”.

c. Time: Prep – 1 minute; Delivery – 1 minute

d. Size of group: small or large

**Success analysis protocol:**

1. Purpose: Engage colleagues in collaborative analysis of cases from practice in order to understand the circumstances and actions that make them successful, and then to apply this understanding to future practice.
2. Steps:
3. Preparing a case: Reflect on and write a short description of a ”Best Practice” in your clinic for patients or classroom with students. Note what it is about the practice that makes it so successful.
4. Sharing: In small groups, the first person shares orally his or her successful practice, while the other take notes.
5. Analysis and discussion: The rest of the group asks clarifying questions about details of the best practice. The group analyzes what they heard about the presenter’s success and offers additional insights about how this practice is different from other practices. Probing questions are appropriate and the presenter may choose to respond to these questions when he or she steps back into the discussion. The presenter responds to the group’s analysis of what made this experience so successful.
6. Repeating the pattern: other members of the group share their best practices and what made them so successful, followed by clarifying questions and group analysis and discussion.
7. Compilation: the group compiles on paper a list of specific successful behaviors and underlying principles that seem characteristic of all.
8. Reporting out: If there are multiple small groups, the groups report out in some way, (e.g., by means of posting lists in room and “gallery walking”).
9. Discussion: the facilitator prompts a general discussion with the questions, “Do the lists have elements in common? Do any contain behaviors or underlying principles that surprised you?”
10. Debrief: In the large group, the facilitator asks, “How might we apply what we have learned in this protocol to other parts of our work? How might learners use this protocol or a variation of it to reflect on their work?”
11. Time: Prep – 5 minutes; Delivery – 30 minutes or longer
12. Size of group: small or large (broken into smaller groups)

**Fishbowl:**

1. Purpose: peer-learning strategy in which some participants are in an outer circle and one or more are in the center. All participants have roles to fulfill. Those in the center, model a particular practice or strategy. The outer circle acts as observers and may assess the interaction of the center group. Fishbowls can be used to assess comprehension, to assess group work, to encourage constructive peer assessment, or to discuss issues in the practice setting.
2. Steps:
   1. Arrange chairs in the room in two concentric circles. The inner circle may be only a small group or even partners.
   2. Explain the activity to the students and ensure that they understand the roles they will play.
   3. You may either inform those that will be on the inside ahead of time, so they can be prepared or just tell them as the activity begins. This way everyone will come better prepared.
   4. The group in the inner circle interacts using a discussion protocol (e.g., set of specific questions to discuss).
   5. Those in the outer circle are silent, but given a list of specific actions to observe and note.
   6. One idea is to have each student in the outer circle observing one student in the inner circle (you may have to double, triple, or quadruple up.) For example, tallying how many times the student participates or asks a question. Another way is to give each student in the outer circle a list of aspects of group interaction they should observe and comment on. For example, whether the group members use names to address each other, take turns, or let everyone’s voice be heard.
   7. Make sure all students have turns being in the inside and the outside circles at some point, though they don’t all have to be in both every time you do a fishbowl activity.
   8. Debrief: have inner circle members share how it felt to be inside. Outer circle members should respectfully share observations and insights. Discuss how the fishbowl could improve all group interactions and discussions.

Variations: leave an empty seat in the fishbowl for an outside participant who wants to speak. He or she should move to the vacant seat and join the discussion until someone else from outside the circle wants to join. That person then taps the first person on the shoulder, and they quietly switch places. Many teachers stay out of the fishbowl, since their presence can make the discussion less natural. Whether in or out of the group, however, the teacher must keep time, attend to behavior issues that the fishbowl group cannot handle, and maintain group protocols.

c. Time: Prep – 10 minutes; Delivery – 20-30 minutes

d. Size of group: small or large (depending on how many are interacting or observing)

**Gallery walk:**

1. Purpose: share information with others in a gallery walk type setting. The protocol involves small-group collaboration, while making individuals responsible for the learning and the teaching.
2. Steps:
3. Divide participants into groups—size of group will vary with the topic and how it can be divided
4. Assign each group a specific segment of your topic (example: symptoms of PCOS, diagnosis of PCOS, treatment of PCOS, or PCOS resources).
5. Provide each group with additional materials they need to further enhance the study that has already been introduced, probably in a large-group setting.
6. Allow time for group to read and discuss the new information. Using prior knowledge along with the new knowledge, have them create a visual representation that each person in the group will use to teach others in the session.
7. Be clear that each person has to understand the text and images on the poster in order to present the information effectively. Allow time for the groups to help one another focus on key components.
8. Post the work around the room or in the hallway.
9. Regroup participants so each new group has at least one member from the previously established groups.
10. Give specific directions at which poster each group will start and what the rotation will look like.
11. The speaker at each poster is the person(s) who participated in the creation of the poster.
12. When all groups have visited each poster, debrief.

Variation: all participants rotate and ask questions or leave comments on the chart paper which is later addressed by the presenter orally.

c. Time: Prep – 30 minutes; Delivery – 60 minutes

d. Size of group: small or large

**Debate:**

1. Purpose: engage learners by considering the facts of a situation/problem as well as the implications. Participants think critically and strategically about both their own and their opponent's position. Debates require students to engage in research, encourage the development of listening and oratory skills, and provide a method for teachers to assess the quality of learning of the students. Debates also provide an opportunity for peer involvement in evaluation.
2. Steps:
   1. Instructor poses the question and creates teams of 2-4 students to take a “pro” or “con” stance. Students may need time to research the answer to the question prior to debate.
   2. Initial response - The debate will begin with the pro side speaking first. They will have 8-10 minutes of uninterrupted time to explain their position.
   3. initial response - The above step is repeated for the con side.
   4. Rebuttal preparation – Both teams have 2-3 minutes to prepare for the rebuttal.
   5. Rebuttal - The rebuttals will begin with the con side and they will have up to 5 minutes to speak.
   6. Rebuttal - The pro side will then perform the rebuttal for up to 5 minutes.
   7. Class discussion occurs for approximately 5 minutes to answer any questions and address any remaining issues.
3. Time: Prep – 30 minutes; Delivery – 45 minutes
4. Group size: small or large (if teams made into small groups with various questions for debate)

**OTHER TEACHING STRATEGIES THAT COULD BE FURTHER EXPLAINED**

Reading with Guiding Questions

Graphic Organizers/Concept Mapping: to show relationships between concepts

Patient Case Protocol (Assess Disease and Drug; Plan with Recommendation, Rationale, Monitoring, and Patient Education)

Three Step Interview

Roundtable

Double Entry Journal

Socratic questioning

Ongoing project analysis

Compass activity

Role play

Games

Send-a-problem

Audience Response System (ARS)

Notes/Work exchange

Trigger tapes

Know-Want-Learn: what they do know, what they want to know, how they will use what they learn