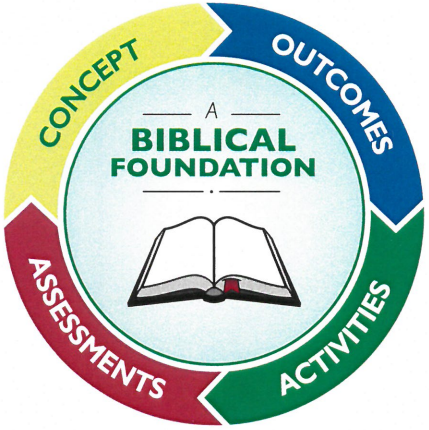
Active Teaching & Learning Techniques Continuum



Complex Techniques

Service Learning

Collaborative Learning

Problem- or Project-based Learning

Case Study

Guided Lecture

Inquiry Learning

Structured Peer Review

Simulation

Threaded Discussion

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4 Corners/Either-Or

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Graphic Organizer

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Illustrated Diagram

Periodic Pause

Simple Techniques

Active teaching and learning techniques help students to engage and become effective learners.

Research consistently demonstrates students learn more by doing than by listening.

SOUTHERN ADVENTIST UNIVERSITY

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Active Teaching & Learning Technique Definitions

4 Corners – The instructor labels the four corners of the room with signs: *strongly agree*, *agree*, *disagree*, and *strongly disagree*. A content-related statement is read, and students are asked to move to the corner of the room that best represents their opinion. The most effective statements have no right or wrong lack one correct or obvious answers. Students are then asked to justify/explain their positions. After at least one person from each corner has spoken, students are provided an opportunity to move to a new corner if a presented idea has influenced them to change their opinion.

Card Sort – Students sort cards into categories from predefined meanings. Categories/meanings can be given or technique can be used where students create their own categories/meanings. Sorting the cards gives students a structure to talk meaningfully with one another about content and professors can use to check for understanding.

Case Study – Narratives, situations, data samplings, or statements present unresolved and provocative issues, situations, or questions. Cases challenge students to analyze, critique, speculate, and express opinions. They bring real-world problems into the classroom.

Collaborative Learning – Students work in groups of two or more to solve a problem, complete a task, or create a product.

Either-Or – An activity or question is used in a situation in which there is a choice between two different plans of action, but both choices together are not possible and neither choice is right or wrong.

Exam Wrapper – Short handouts that students complete before and after taking an exam. Exam Wrappers direct students to review and analyze their exam preparation and performance (and the instructor's feedback) so they can improve. Students indicate how much time they spent and in what areas preparing for the exam, in addition to noting the areas of strength and weakness reflected in their graded exam. When completed, the handouts are collected and reviewed by the instructor to gain insight into how students might be coached into better performance. A week or so before the next scheduled exam, the exam wrappers are returned to the students again so they can review their responses and implement their conclusions as they prepare for the upcoming new exam.

Gallery Walk – Displays/Student Posters/or Stations are spread on walls around the room or hallway. Students go around to each display (individually or in groups), giving feedback on post-it-notes, completing a task assigned, or responding to a prompt at each station.

***Graphic Organizer** – A visual display that demonstrates relationships between facts, concepts, or ideas or can be used to guide students as they take notes during a lecture i.e., Venn diagram, tree, table, or a worksheet developed to accompany the presentation.

Guided Lecture – Guided lectures include teacher-prepared hand-out notes that outline or map lectures, but leave "blank" spaces for key concepts, facts, definitions, etc. As the lecture progresses, students fill in the spaces with content. Guided lecture notes help students follow a lecture, identify its important points, and develop a foundation of content to study and to apply.

Human Continuum – A line is placed on the floor with arrows on both ends to resemble a continuum. Students are given a content-related statement, statements that have no right or wrong answer, work especially well. Students place themselves along the continuum to indicate the degree to which they agree or disagree with the statement. Those who are completely neutral, confused, or just not comfortable responding stand in the middle. After each statement the instructor calls on one or two students at several locations (not forgetting the middle) to justify and explain their positions. After hearing their classmates' reasoning, students are given an opportunity, if they so desire, to adjust their positions on the continuum.

***Illustrated Diagram** – a geometric figure, used to **illustrate** or explain an object by outlining its parts and their relationships, and/or workings; or a chart or graph explaining or illustrating ideas, and/or statistics.

*Research shows these techniques to have the most impact on student learning.

Inquiry Learning – Students use an investigative process to discover concepts for themselves. After the instructor identifies an idea or concept for mastery, a question is posed that asks students to make observations, pose hypotheses, and speculate on conclusions. Then students are enlisted to tie the activity back to the main idea/concept.

***Jigsaw Activity** – A general topic is divided into smaller, interrelated pieces. Each member of a team is assigned to read and become an expert on a piece. After each person has become an expert on their piece of the topic, they teach it to the other team members.

Minute Paper – Students write for one minute on a specific question (which might be generalized to "What was the most important thing you learned today?").

Muddiest Point – Like the Minute Paper, but asks for the "most confusing" point instead.

***Periodic Pause** – This is a simple technique fostering "active listening" by using clarification pauses. Throughout a lecture (every 12-15 minutes), particularly after stating an important point or defining a key concept, the professor pauses to allow students to review notes individually or in pairs or triads to check for understanding – they can also answer each other's questions. *Research has shown that using this technique alone, students can raise their overall score for the course by 2 grade points.*

Problem-based Learning – Students apply course knowledge when given a realistic problem or dilemma where they devise one or more solutions or resolutions.

Project-based Learning – Students apply course knowledge to produce a project such as a process or product design, research or a program proposal.

Role-playing – Students "act out" a part of the learning event to get a better idea of the concepts and theories being discussed.

Self-Assessment – Students receive a quiz (typically ungraded) or a checklist of ideas to determine their understanding of the subject. Concept inventories or similar tools may be used at the beginning of the semester or the beginning of the chapter for students to help them identify their misconceptions.

Self-Reflection – After an experience/activity in class, ask students to reflect on "what" they learned, "so what" (why is it important and what are the implications), and "now what" (how to apply it or do things differently).

Service Learning – Students learn by applying course related experiences in service to the local community. Written or oral systematic reflection on the process and outcome is essential.

Simulation – An imitation of the operation of a real-world process/system using a model that represents the key characteristics/functions of the real-world process/system.

Structured Peer Review – A process where students read and give targeted comments on each other's work as a way of improving their peers' assignment. The reviewers need specific directions from the professor on expectations before reading and providing feedback.

Student Response System/Clickers – Students can use technology such as clickers, vote with a thumbs up or down, or complete a smart phone poll, to provide input while gaining a deeper understanding of course concepts.

Think-Ink-Pair-Square--Students are given a question or topic and are asked to first think about what they know, then record their ideas, and pair up with a partner to share what they wrote. The final stage is to join together with another pair to share ideas.

Think-Pair-Share – Students first work on a given problem or topic individually, then compare their responses and thoughts with a partner and synthesize a joint statement to share with the class.

Think-Pair-Square – Students work individually first, then with a partner and finally join together with another pair to synthesize a joint statement to share with the class.

Threaded Discussion – An online running commentary of messages between students which is centered on a question usually posed by the professor.