# Explanation of Teaching Continuum
(Adapted from Wolfinger, 1984)

## 1. Exposition

<u>Definition</u>
Exposition includes those verbal methods in which some authority or expert (textbook, speaker, film, video, fact sheet) presents information without overt interaction taking place between the expert and the learners. Common examples of the expository method are lecture, video or textbook reading.

<u>Uses and Benefits</u>
- To present information, especially when time is limited
- To give directions
- To wrap up an activity
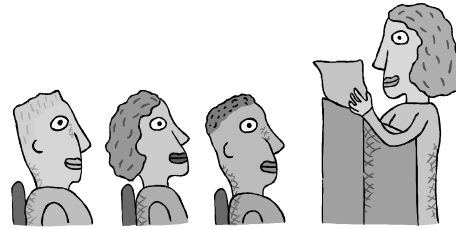
<u>Problems and Concerns</u>
- Verbal learning tends to be passive.
- Any verbal presentation is organized according to the leader's idea of logical order. This may not be the same as the learner's logical order, especially with culturally diverse groups of learners.
- What is said is not always what is heard, and verbal presentations are open to interpretation.
- Verbal presentations are limited by the learner's attention span (whether young or old). Visual aids help.
- Verbal presentations are difficult for children in elementary grades to follow. They need concrete materials in order to understand concepts and ideas.

The leader can make exposition more interactive by asking questions. This is a good technique to use to review previously learned content material, check for understanding, and/or present new material.

<u>Strategies</u>
Lecture, illustrated lecture (e.g., slide show, PowerPoint, video), lecture with discussion, guest speaker, panel discussion, debate, point-counter point, storytelling, dramatization, reading aloud, teleconference, poster, chart, exhibits, guided field trip (content), guided imagery, simulated field trip, drill and practice, games (content), recitation, textbooks, manuals, handouts, brochures, fact sheets, fiction, non-fiction, computer-assisted instruction, distance learning

# 2. Discussion

<u>Definition</u>
A discussion is an open forum in which learners express their opinions as well as review factual material. It is a natural opportunity for learners to build skills in communication, inference, application, synthesis, and drawing conclusions.  Typically the pattern of discussions can be characterized as either "ping pong" or "basketball" style.  The former involves the leader (or facilitator) saying something first, then a participant responding and then back to the leader.  This back-and-forth keeps the interaction under the control of the leader.  The latter involves the leader saying something and then the discussion bounces around among the participants with little or no involvement by the leader.  Basketball style discussions tend to involve more participants and generate a wider range of ideas and perspectives.  In most learning situations, we strive to have learners talk as much or more than the leader.

Two broad categories of discussions are:
- Open discussion—learners determine the topic and the role of the leader is to ask those questions that will lead the learners to consider various ideas. The leader may need to define terms and encourage differing points of view.
- Planned discussion—the leader determines the content of the discussion, plans the questions in advance, and guides the learners toward some predetermined goal or conclusion.

<u>Uses and Benefits</u>
- To introduce a topic
- To bring to a topic a wide variety of information, attitudes, opinions, insights, and talents
- To allow learners (participants) to bring in life experiences
- To help learners make inferences, draw conclusions, communicate, and express values and attitudes
- To involve learners cognitively
- To create greater motivation, interest, and involvement in learning and decision making
- To address controversial issues and help learners clarify values and positions
- To provide a safety valve for emotional tensions
- To use the expertise inherent in each group

<u>Problems and Concerns</u>
- It is a verbal approach.
- It can be controversial, even to the extent of interfering with someone's ability to learn.
- One or a few participants can dominate discussion. Some learners will not participate, especially in a culturally diverse learning situation.

<u>Strategies</u>
Small group (facilitated or non-facilitated), large group (facilitated or non-facilitated), fish bowl, buzz groups, couple buzzers (also in triads), think-pair-share, case discussion, interviews, circle response, group writing or drawing, friends meeting, talking stick, Dear Abby or Andy, brainstorming, electronic (chat rooms, listserv), video and teleconferencing, interviews of guests and resource people

## 3. **Demonstrations**

Definition
There are two types of demonstrations. During a **traditional** demonstration, the leader stands before the group, shows something, and then tells what happened. The leader is the only one involved. The emphasis is on content. During a **discovery** demonstration the leader silently conducts the demonstration and the learners attempt to determine why what is shown occurs. The emphasis is on process rather than content.

Conducting demonstrations poses some unique challenges, especially if doing them in front of groups of 20-30 learners. The following tips apply to many different kinds of demonstrations:

- Practice, Practice and Practice—Anytime you do a demonstration, it is important to try it out first, to be sure you know that it will work the way it is supposed to and to identify potential problems. Remember one of Murphy's laws: If you tell someone that something will always happen, it won't; and if you tell them it never happens, it will.
- Take precautions—Anticipate potential accidents or problems (e.g., have paper towels for spills, protect surface areas with plastic, have a first aid kit).
- Make everything visible—Elevate demonstration materials as high as is practical and safe (e.g., on a sturdy box on a table). Stand behind or to the side so that you do not block the learners' view. Use food coloring to make liquids more visible. Have the learners sit in a tiered or layered arrangement like bleachers close to the demonstration so that everyone can see (e.g., the first row sits on the floor, the second on chairs, the third on desk or table tops).

Uses and Benefits
- To protect learners when danger is involved
- To show how to use something
- To begin or end a unit of study
- To control time when the action needs to be stopped periodically to show important changes or to point out specific elements
- To illustrate an important concept when there is not enough equipment and substitutions cannot be made
- To develop problem solving skills
- To grab learners' attention before introducing a concept or unit
- To actively, mentally engage learners in learning

Problems and Concerns
- Demonstrations don't always work.
- Learners may become restless and inattentive.
- Learners may have difficulty seeing the demonstration.
- It is difficult to locate demonstrations that are difficult enough to challenge the learners yet simple enough to allow for possible solutions.
- Because the group may ask questions, the person who is demonstrating needs to know precisely what happened and why.
- The fact that there is a lack of closure in the discovery demonstration is a problem for many leaders. The emphasis is on problem solving, not reaching one "right" answer.

Strategies
Models, skills, procedures, scientific processes, experiments, modeling, guided field trip (process)

## 4. **Guided Discovery**

<u>Definition</u>
Guided discovery is a method by which learners develop inquiry skills and information processing skills. The learners are totally involved with materials, people, and the environment and use these to develop concepts and facts.  Reading, listening to verbal information from the leader, and other forms of exposition are very limited.  Emphasis is on content and process.

<u>Uses and Benefits</u>
- To encourage learners to explore the content through the use of concrete experiences
- To allow learners to use process skills to generate content information
- To actively engage learners in first-hand, real-world learning
- To release the leader from the role of authority and giver of knowledge to become a facilitator and fellow investigator
- To replace the notion that the leader must know all the answers

<u>Problems and Concerns</u>
- Learners, especially young people, are not inherently good investigators nor do they automatically know how to work appropriately, especially in small groups. Collaboration and investigation skills need to be taught in order for guided discovery to be fully effective.
- Because learners work independently, time is a problem. Some learners finish early, others take "too long."
- Because learners are developing their own exploration activities, different and incorrect answers frequently result. Because the final outcome of guided discovery is the teaching of content, such differences and deviations may cause confusion.
- Sometimes learners develop guided discovery activities that are not relevant to the problem at hand. These are tangents to the original problem and may lead to confusion, or at least                not to the content that the educator intends the students to learn.
- The method is time consuming.  Investigation, activity development, and drawing conclusions all take time.
- Management of learners and materials must be carefully planned in advance and monitored to prevent chaos as students begin to investigate challenging questions.

<u>Strategies</u>
Sensory awareness or observation experiences, directed activities, directed labs (experiments), field experiences, field trips (with process), games, simulations, role playing, directed drama, debate, participatory dramatization, brainstorming, concept mapping, webbing, individual and group projects*, peer teaching, multi-age teaching, drill and practice

*Individual and group projects include, for example, poster, mural, diorama, computer generated art, collage, drawing, bulletin boards, sculpture, skit, public service announcement, TV show, puppet show, PowerPoint presentation, bumper sticker, comic strip, political or other cartoon, parade, interactive exhibit, display, video, slide show, photo essay, original song or musical piece, new words to old song, journal, research report, creative writing, poetry, newspaper article or editorial, graph, chart, model, map, invention

# 5. Open Inquiry

<u>Definition</u>
Open inquiry provides a degree of freedom not found in any of the previous methods. In open inquiry, the leader and/or learner present a problem. Materials that could be used to solve the problem are provided and learners use any method they wish to arrive at a solution. Open inquiry focuses predominantly on process.

<u>Uses and Benefits</u>
- To teach problem-solving skills
- To allow learners to develop creative solutions to the problems presented
- To provide learners with the freedom to solve a problem any way they can with safety, materials, and access being the major constraints
- To enable learners to use processes in a genuine problem-solving situation

<u>Problems and Concerns</u>
- It tends to look, and sometimes be, chaotic, as learners discuss their findings and demonstrate their activities to one another.
- It requires lively curiosity and willingness to share what is found.
- If needed, locating enough materials can be problematic.
- As with guided discovery, open inquiry requires time.
- It is difficult to focus learning on specific content since learners are working on different problems or aspects of a problem.
- Evaluation poses a problem, especially in schools where grades are required.
- For many students, open inquiry involves high risk

<u>Strategies</u>
Learner-centered investigations, surveys or questionnaires, interviews, case studies (written, tape recorded, video taped, role played), issues analysis and investigations, community studies, problem solving, decision making, action projects, service learning, individual and group projects*

*Individual and group projects include, for example, poster, mural, diorama, computer generated art, collage, drawing, bulletin boards, sculpture, skit, public service announcement, TV show, puppet show, PowerPoint presentation, bumper sticker, comic strip, political or other cartoon, parade, interactive exhibit, display, video, slide show, photo essay, original song or musical piece, new words to old song, journal, research report, creative writing, poetry, newspaper article or editorial, graph, chart, model, map, invention

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