Chapter 8: Using Integrated Teaching Methods

Chapter Eight Objectives

After completing Chapter 8, students should be able to do the following:

1. Describe the integrated directed teaching concept.
2. Describe the purpose, structure, and function of the demonstration method, Socratic method, concept attainment strategy, and cooperative learning method, valid reasons for their use, and techniques for their effective implementation.
3. Identify and explain the three-step procedure for role-playing and suggest ways to use role-playing in the classroom.
4. Explain the purposes of simulations and games and the benefits and limitations associated with their use.

Chapter Eight Objectives—Continued

5. Differentiate between human and person-to-computer simulations as well as between simulations and games.
6. Describe the three fundamental individualization strategies: individualized instruction, independent study, and mastery learning.
7. Identify the benefits and limitations associated with individualization of instruction.
8. Describe the purpose of drill and practice, as well as techniques for their effective use.

New Directions

- Teacher's Task in the Classroom is to **Deliver** Instruction.
- Shift in Today's Classrooms is for Teachers to Nurture Student Self-Direction in Learning.
- Teachers Provide Students w/Opportunities Before, During and After Instruction to Exercise Control Over their Own Learning.
- It is Hoped that Students will then Make Decisions and Solve Problems without Being Told at all Times.

The Demonstration Model

- Teacher uses **Introduction/Cognitive Set** to Present an Overview of the Demonstration.
- Teacher Shows Something and Students Observe the Demonstration in Silence.
- After the Observations, Teacher Questions Students about what they Observed.
  - Students are Asked to Think Logically, Make Inferences, and Reach Conclusions.

Guidelines for the Demonstration Model

1. Plan and Proceed Slowly.
2. Break Down Complex Demonstrations into Smaller Parts.
3. Demonstrate the Parts Separately—once Students Understand the Parts, Conduct the Demonstration in its Entirety.
4. Repeat Until Students Understand.
5. Demonstrate from Students' Perspective—Remember Left and Right are Reversed.

The Socratic Method

- Collective Attempt to Find the **Answer** to a Fundamental Question/Issue.
- Socratic Method follows this Pattern:
  - First a Broad, Open-Ended Question is Used.
  - Second Question Sequence Narrows Range of Responses and Focuses Students' Thinking onto Topic of Questioning Strategy.
  - Teachers Intersperse Among Questions Needed Review Information to Help Keep Students Focuses.
  - Concluding Question is Used to Bring Students to the Desired End Point.

Concept Attainment

- **Purpose**: Learn a Concept by Seeing Examples of It.
- Search for and Identification of Attributes Used to Distinguish Examples of a Given Group/Category of Nonexamples.
- It Follows this Pattern:
  - Concept is Identified.
  - List is Presented w/ *Yes* and *No* Examples.

Concept Attainment—Continued

- Pattern—Continued:
  - Designate a Chart/Blackboard/Whiteboard that has two Columns—*Yes* and *No*.
  - Present Three *Yes* and Three *No* Examples.
  - Focus on Examples Under the *Yes* Column—Discuss what they have in Common.
  - Present Three more Examples—Students are then Asked to Name the Concept—Discuss and Evaluate Each Hypothesis Until ONE is Left.
  - The Concept is Identified and Students Generate Examples of the Concept.
  - Students then Reflect on the Process Used—utilizing **Metacognition.**

Cooperative Learning

- Students Work Together in a **Mixed-Ability** Group of 4 Students to Accomplish a Task.
- Percentage of High, Middle and Low Learners in Each Group Should Represent the Appropriate Population of Each Group in the Whole Class.
- Success of the Group is Based on the **Individual Learning** of Each Team Member.
- Groups are Given Considerable Autonomy in Completing their Work.
- Full Participation is Increased when Roles for Group Members are used.
  - Recorder, Encourager, Materials Monitor, Taskmaster, Quiet Captain, and Coach.

Cooperative Learning—Continued

Essential Conditions for Cooperative Learning to Effective are:

- Recognition/Reward should be Provided to Groups to Motivate Group Members to Help Each Other Learn.
- Individual Quizzes should be Used to Evaluate Each Student's Contribution—Average of Quiz Scores in a Group/Students Might be Individually Responsible for a Unique Portion of a Group Task.
- All Students are Involved in the Group Grade.
- Better Students are Expected to Pull Up the Team Grade.

Cooperative Learning Approaches

1. **Peer Tutoring:**
   - Material is Presented to Pairs of Students.
   - Students use Structured Exercises and Worksheets w/ Answer Sheets to Reinforce the New Material.
   - Students Take Turns being Tutors and Provide Each Other w/Immediate, One-On-One Feedback.

Cooperative Learning Approaches—Continued

2. Student Teams Achievement Division (STAD):

- Student are Paired on Evenly Matched Teams of Four/Five.
- Team Scores are Based on the Extent to which Individuals Improve their Scores on Skills Tests.
- Rewards Given to Teams whose Members Improve Over their Past Performance.
- Rewards for Improvement Encourage Group Cooperation.

Cooperative Learning Approaches—Continued

2. (STAD)—Continued

- **Steps for STAD are:**
  - Pretest Given and Students Ranked in Descending Order.
  - Mixed-Ability Groups Formed—each Team should Have High-, Medium, and Low Ability Students.
  - Lessons are Presented.
  - Worksheets used by Students to Further Study Material.
  - Teacher Monitor Groups.
  - Administer Quizzes.
  - Assign **Team Scores** based on Individual Score Gains.

Cooperative Learning Approaches—Continued

3. Group Investigation:

- Students Placed in Teams of Three to Six to Investigate/Solve Problems.
- Groups should be **Heterogeneous.**
- Teacher's Role to Facilitate Investigation and Maintain the Cooperative Effort.
- Students Develop: Group Goals, Assigning Individual Responsibilities, and Completing Projects.

Cooperative Learning Approaches—Continued

3. Group Investigation—Continued

- **Steps** for Group Investigation are:
  - Topic is Selected.
  - Cooperative Planning.
  - Implementation.
  - Analysis and Synthesis.
  - Presentation of the Product.
  - Evaluation.

Cooperative Learning Approaches—Continued

4. **Jigsaw Strategy:**
   - Six Member Teams **Investigate** a Common Problem—usually Presented in Written Form.
   - Teacher **Divides the Written Material** into Equal Parts that Reflect the Number of Students in Each Group.
   - Individual Members of the Team are **Assigned** a Particular Section of the Material and Study and/or Research it.
   - Members of Other Teams who Studied the Same Part **Convene** and Review and Analyze the Material.
   - Members then Return to their Groups and **Take Turns Teaching** their Part to Other Team Members.
   - Comprehensive **Quiz** is Given.

The Demonstration

TABLE 8.1 The Demonstration

Method	Description
Ordinary Demonstration	Individual shows and explains something to class
Inquiry Demonstration	Individual shows class something without explanation, students observe, make inferences, and reach conclusions
Socratic Method	Questioning-and-interaction to draw information out of students
Concept Attainment	Teaching strategy designed to help students learn concepts and practice analytical thinking skills
Cooperative Learning	Students work together as a team on assigned tasks

Simulations and Games

- **Simulation:**
  - Models of what Exists/Might Exist Under Manageable and Controlled Conditions.
  - Roles Must be Assumed w/Activities for the Participants.
  - Participants Encouraged Express the Actions and Arguments Behind an Issue.
- Two Types of Simulations:
  - **Human**—Role Playing and Sociodramas.
  - **Person to Computer—**Simulations Games.

Simulations and Games—Continued

- **Role-Playing:**
  - Participants *Become* Another Individual.
  - **Purpose** is to Understand this Person's Actions and Motivation behind them—*Walk in their Shoes.*
  - Role Playing has:
    - Structure.
    - Stated Issue to be Resolved.
    - Teacher Briefing before the Episode Detailing the Situation Under Study.
    - In Some Cases a Winner and Loser.
    - Facilitates Student Decision Making.
    - Individuals/Group.
    - Follow-Up Debriefing Discussion.

Simulations and Games—Continued

- Sociodrama:
  - Form of Role Playing.
  - Difference is Alternative Solutions to Problems of Concern to a Total Group are Explored—Community Issue, or Problem Before the United Nations.
- Educational Games:
  - Involve Participants in Decision-Making Roles.
  - Compete for Certain Objectives Bound by Rules.
  - Reflect Society.
  - Offer Participants the Opportunity to Experience Roles that are Present in Life.

Simulations and Games—Continued

- Computer-Simulation Games:
  - Foster Problem-Solving.
  - Promote the Development of Hand-Eye Coordination.
  - Serve as a Motivational Device for Students.
  - New Graphics and Animation Replicate the Real Experience for Participants.
  - Builds on Student Interest for Games.

Simulations and Games—Continued

Benefits of Simulations and Games	Limitations of Simulations and Games
1. High Student Involvement and Interest.	1. Demand a Great Deal of Imagination of the Part of the Teacher and Students.
2. Immediate Feedback.	2. Often Can Screen Important Parts of the Real Environment.
3. Increase Practice of Communication Skills.	3. High Expense for Commercially Produced Simulations & Games.
4. Teachers can Work w/Large Range of Student Capabilities at same time.	4. Relationships Develop Between Students and Teachers that are too Informal.
5. Reward Analytical and Critical Thinking and Permit Experimentation.	

Individualized Strategies

Methods to Individualized Instruction:

- Vary the Pace of Instruction—Higher Achieving Students can go through Activities Quickly and Lower Achieving Students can Move Slower.
- Vary the Instructional Objectives—Break Down Objectives into Component Parts to Meet the Needs of both High and Low Achieving Students.
- Vary the Learning Methods—Teachers Can Use Textbooks, Peer Tutoring, Learning Centers or Computer Assisted Instruction to Meet the Learning Needs of Students.

Individualized Strategies—Continued

Methods to Individualized Instruction, Continued:

- Vary the Types of Materials—Teachers can use Films, Music, Books on one Topic with Multi-Levels, and Models.
- Provide Choice in the Products—Students should have the Choice of Ways to Demonstrate their Mastery of a Topic (Research, Building a Model, Videotaping, Oral Histories, Power Point Presentations or Podcasts.
- Peer-Tutoring/Cooperative Learning—where Students Assist each other in Learning.

Individualized Strategies—Continued

Independent Study:

- Example of **Self-Directed Learning.**
- Individual Carries Out an Educational Activity with Little or No Guidance.
- Activity Selected by the Learner.
- Allows Teachers to Work w/Individual Students.
- Examples of Independent Study are:
  - Self-Directed Research on a Topic of Interest.
  - Reading and Reviewing Books of Interest
  - Tutor Other Students.
  - Working at Centers.
  - Completing Classroom Models.

Individualized Strategies—Continued

Mastery Learning:

- **Group Approach** to Learning.
- Considered an Individualized Approach Because Group Members Usually Have the Same Needs and Receive Similar Instruction as if they were an Individual.
- Uses Diagnostic-Corrective-Enrichment Activities.
- Utilizes a High Degree of Individualization—Students Learn at their Own Pace and w/ Different Materials.

Individualized Strategies—Continued

- **Mastery Learning has the Following Two Forms:**
  1. **Enrichments and Alternatives** Parallel Each Other—w/the Posttest Evaluation Providing Closure for the Unit.
     - Students Are Routed to Enrichment Activities Until the Class is Ready for Formal Evaluation.
  2. **Students who Test Out—**Achieve Mastery—Early in the Process can Proceed to Next Unit/Work on Other Types of Individualized Strategies.

Individualized Strategies—Continued

The Traditional Instructional Model

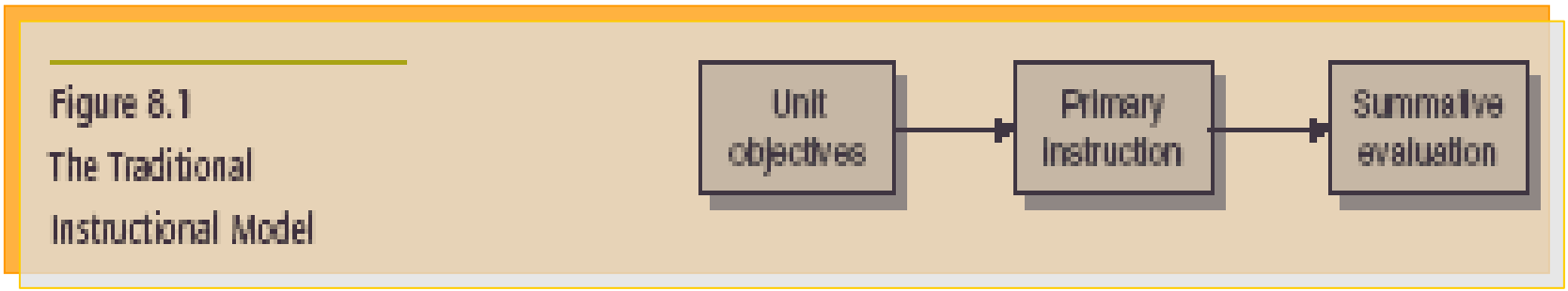
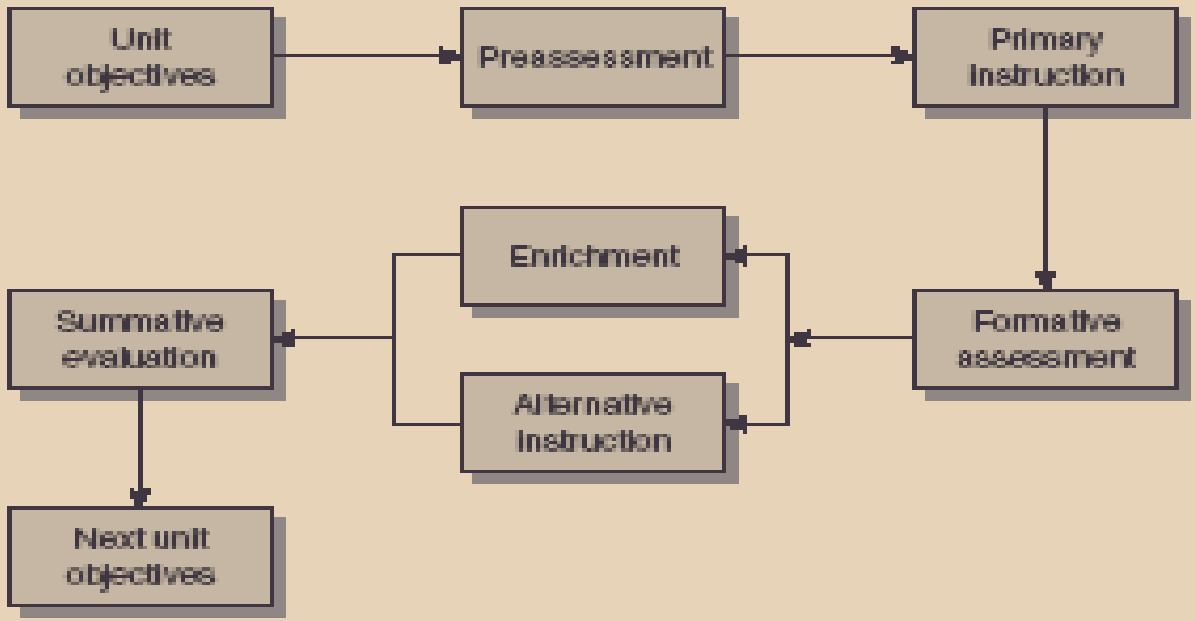


Figure 8.1
The Traditional Instructional Model

Individualized Strategies—Continued

The Mastery Model of Instructional

Figure 8.2
The Mastery Model of Instruction



Individualized Strategies—Continued

Effectiveness of Individualization:

- Mastery Learning **Improves** Learning—however, when Used as the Only Method is Not Superior to the Traditional Model of Instruction.
- Individualized Strategies Leave Students on their Own too Much—Students have to be Self-Motivated to Benefit from Individualized Strategies.
- Individualization works when it is Monitored and Planned Carefully.
- Mixture of Direct Instruction and Individualized Instruction is the Most Effective Approach.
- **Teacher** is the Key Factor in the Classroom—they Motivate, Provide Guidance and Design Instructional Strategies.

Final Note on Individualized Strategies—Drill and Practice

- Drill and Practice are Examples of Individualized Strategies because:
  - Drill and Practice Can be Utilized when Working with One Student to Scaffold their Learning.
- Drill is Concerned w/ the Fixation of Specific Associations for Automatic Recall.
- Practice is Concerned w/Improvement.
- Drill and Practice should be an Integral Part of Curriculum—this will Allow Students the Opportunity to Refine their Skills.
- Drill and Practice Provide Teachers w/Feedback on Effectiveness of Instruction.

Final Note on Individualized Strategies—Drill and Practice—Continued

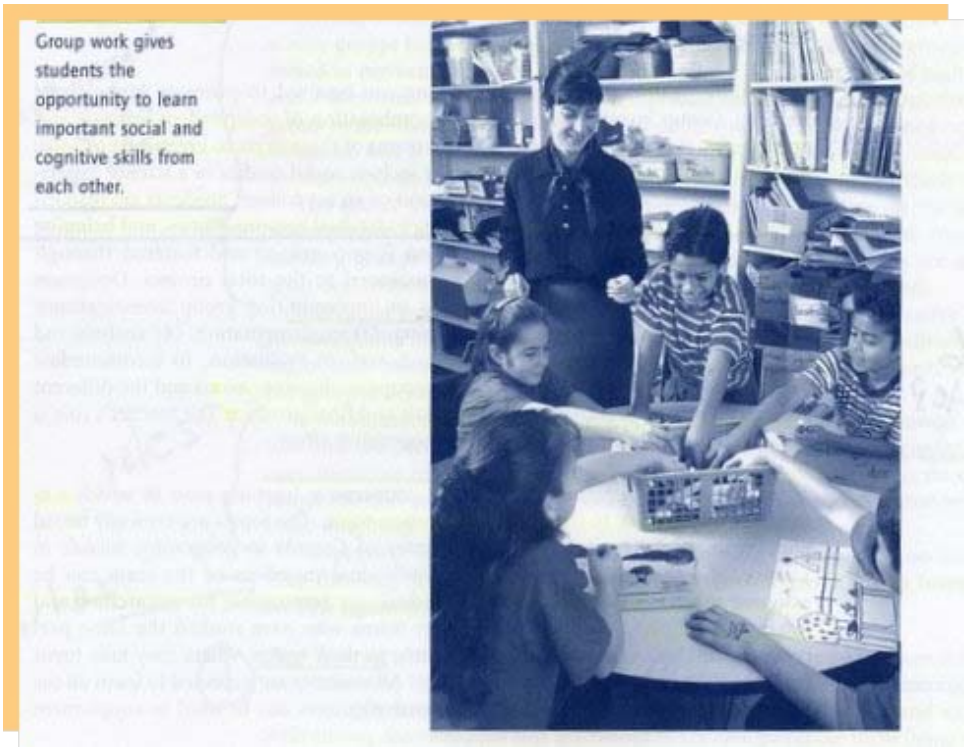
- Drill and Practice is **Effective** when:
  - Students are Taught to Work Alone during Drill and Practice Activities—to be Self-Directed.
  - Activities are Carefully Designed and Meet the Needs of Students.
  - Students should Know what to do when they Complete their Work.
  - Work should be Checked—Holding Students Accountable for their Work.

Individualization

TABLE 8.2 Individualization

Method	Description
Simulations and Games	Models of artificial situations and events designed to provide no-risk experiences for students
Individualized Instruction	Instruction tailored to interests, needs, and abilities of students
Independent Study	Activities carried out with little or no guidance
Mastery Learning	Diagnostic-corrective-enrichment model where students work on objectives until mastery is achieved
Drill and Practice	Development of automatic and/or improved performance

Reflection



Based on your Reading of this Chapter, Discuss the **Importance** of Group Work as a Technique to facilitate the Individualization of Instruction.

The End!