

Analysis of Direct Instruction

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Synopsis of Direct Instruction

1. Direct Instruction uses well-developed lessons that identify major concepts, rules, or “big ideas.”
2. It uses carefully-constructed language and procedures to communicate to students.
3. Instruction is fast-paced to maximize student engagement.
4. The instructor continuously directs and monitors student engagement and understanding.

Brief History of Direct Instruction

Direct Instruction began as a research project at a preschool associated with the University of Illinois. **Siegfried E. Englemann**, Carl Bereiter, and other researchers sought to discover the impact of early and systematic instruction of academic skills to poor children. They began to create the basic structure of Direct Instruction. Their program produced promising results and Bereiter and Englemann published *Teaching Disadvantaged Children in the Preschool* in 1966.

From 1968 to 1976, the U.S. Department of Education conducted **Project Follow Through**, a study of a variety of educational approaches including Direct Instruction. This is the largest educational study ever conducted. More than 100,000 children and 170 communities were involved in the study and it cost nearly a billion dollars. It measured basic skills, cognitive development, and self-esteem. Direct Instruction dramatically outperformed both traditional teaching and the other new approaches in all three measurements.

Since the time of Project Follow Through, Englemann and other educational researchers have continued to develop Direct Instruction programs. In subsequent research, Direct Instruction has been found successful with students from a variety of language backgrounds and socioeconomic levels. Direct Instruction has also proved successful with students of different ages and IQs.

The Three Basic Elements of Direct instruction

I. Program Design

A. Content Analysis-identifying central concepts and strategies for instruction of those concepts.

1. Big ideas or themes (Social Studies)
 - a) PSE-problem, solution, and effect
 - b) Stages of Cooperation
 - a. Get together and discuss
 - b. Occasional cooperation
 - c. Regular voluntary cooperation
 - d. Legally binding cooperation
 - c) Four factors of groups success
 - a. Capability
 - b. Resources
 - c. Motivation
 - d. Leadership
2. Strategic integration, the big ideas should be applied in multiple contexts
3. Conspicuous strategies, explicitly using the big ideas across the curriculum
4. Scaffolding, graphic organizers, interspersed questions, and combining the lesson with the students' background knowledge
5. Primed background knowledge, the big idea and filling in gaps in student background knowledge.
6. Judicious review, review should be distributed over time and cumulative.

B. Clear Communication

1. The "wording principle," be consistent with your choice of words when communicating the central concepts.
2. The "set-up principle," examples and non-examples that share the greatest number of irrelevant features are provided to the students.

3. The “difference principle,” juxtaposing examples and non-examples similar to each other except in the key feature.
4. The “sameness principle,” showing examples that are as different to demonstrate the entire range.
5. The “testing principle,” tests should juxtapose examples and non-example in random order.

C. Instructional Formats-clear and precise ways to present the material are created. They are gradually modified until students are using the concept or skill independently.

D. Sequencing of Skills

1. Skills for a strategy should be taught before the strategy.
2. The strategy should be taught before exceptions.
3. Easy skills should be taught before more difficult ones.
4. Strategies and information that are likely to be confused should be separated in the instructional sequence

E. Track Organization-concepts and skills should be incorporated subsequent units of instruction. These continuing lines of instruction are called tracks.

II. Organization of Instruction

A. Instructional Grouping-homogenous groups with differentiated instruction

B. Instructional Time-maximize the amount of time students are activity engaged in the lesson by planning, having materials in hand, and efficient classroom routines.

C. Scripted Presentation-have your lessons well scripted out so that you focus on delivery and interaction with students.

D. Continuous Assessment-ongoing assessments are given to monitor progress, alter group assignments, and alter pace.

III. Student-Teacher Interaction

A. Active Student Participation-students interact with the instructional material and receive relevant feedback.

B. Group Unison Responses-choral responses, generally not used in secondary content area classes.

C. Signals-teachers use visual and auditory cues to make sure the students answer in unison and listen for mistakes.

1. Focus cue
 - a) Point to task
 - b) Ask question
 - c) Give direction
2. Think time
3. Verbal cue
 - a) Get ready
 - b) What word
 - c) What sound
4. Interval
5. Signal
 - a) Snap
 - b) Clap
 - c) Touch
 - d) Hand drop

D. Pacing-brisk to hold attention.

E. Teaching to Mastery-all student should master the content. The lowest performing student should be the gauge.

1. Students should be 70% correct on information introduced for the first time.
2. Students should be 90% correct on information taught earlier in the lesson.
3. Students should be 100% correct on at the end of the lesson.

F. Correction Procedures

1. Teacher models
2. Test
3. Retest
4. Student performs independently

G. Motivation

1. Proper placement of students
2. Lavish praise
3. Minimize admonishments

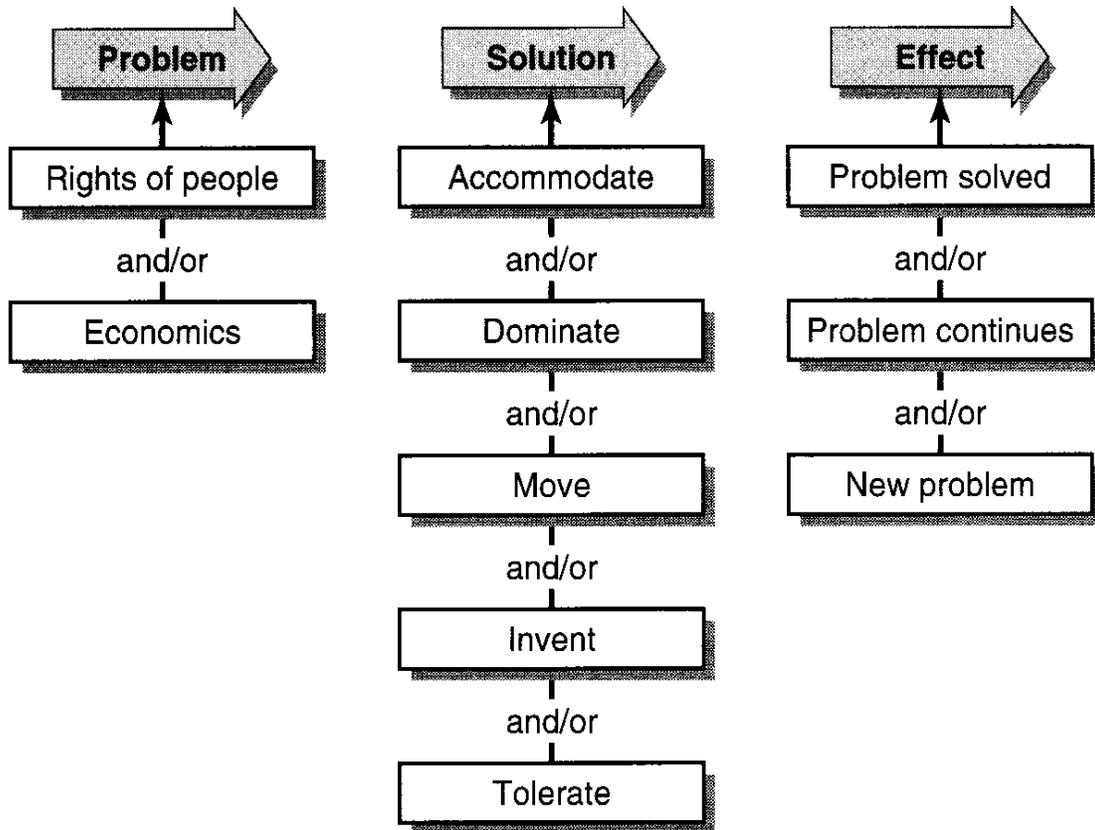


FIGURE 8.1 Problem-Solution-Effect. Adapted from *Understanding U.S. History: Volume I—Through 1914*.

Stages of Cooperation

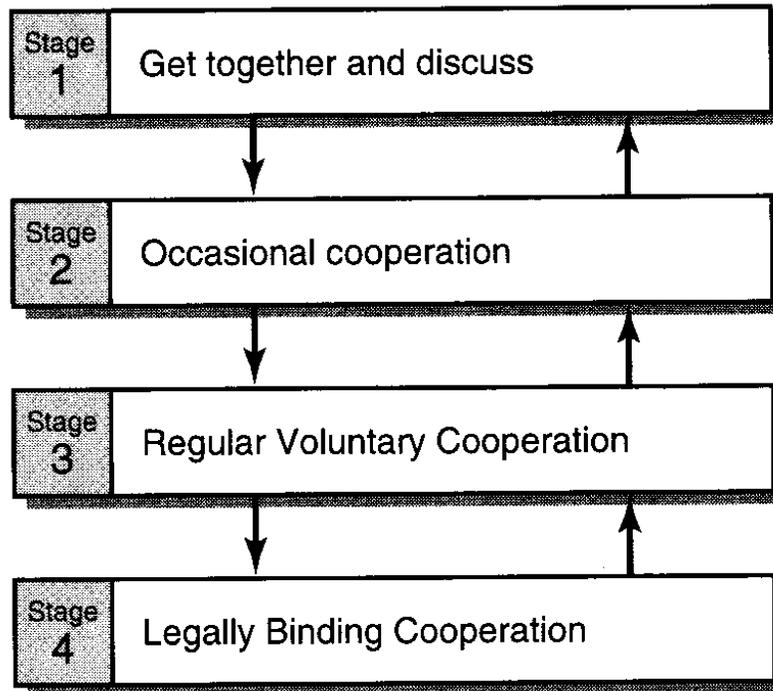


FIGURE 8.2 Stages of Cooperation. Adapted from *Understanding U.S. History: Volume I-Through 1914*.

Four Factors of Group Success

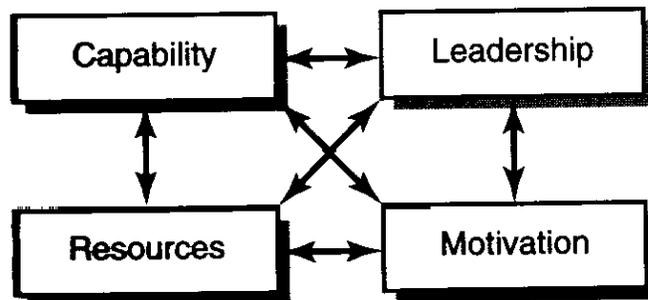


FIGURE 8.3 Four Factors of Group Success. Adapted from *Understanding U.S. History: Volume I-Through 1914*.

Creating Direct Instruction Lessons

I. Unit Planning

A. Identifying Objectives

B. Analyzing Content and Identifying “Big Ideas”

C. Sequencing Content

1. Prerequisite skills and foundational knowledge should be taught first.
2. Higher-utility skills and important knowledge should be taught before lower-utility skills and less important knowledge.
3. Easy skills and concepts should be taught before more difficult skills and content.
4. Concepts and information likely to be confused should be separated.

II. Lesson Planning and Delivery

A. Learning Set Activities (material previously mastered)

1. Questions and Answers
 - a. Group
 - b. Individual
 - c. Praise for correct responses
2. Drills
3. Games

B. New Material and Guided Practice Activities

1. Brief presentation
2. Guided practice problems
3. Frequent questions
 - a. Group
 - b. Individual
 - c. Praise for correct responses
 - d. Activities with oral and writing responses may come later in the session

C. Independent Practice Activities

1. Worksheets
2. Completed study guides by groups or individuals
3. Instructional games
4. Computer games and simulations designed to integrate previously learned material

5. Peer tutoring
6. Mastery tests

III. Evaluation

A. Student Performance

B. Instructional Interactions with the Students

1. Were there numerous opportunities for the students to respond to the relevant examples
2. 8/2 ratio of correct answers to incorrect answers
3. Were students on-task for more than 90% of the time?
4. Was there sufficient time for all three phases of the lesson?

C. Structure of the Lesson

1. Major changes are warranted if the more than 20% of them fail to meet a criterion of 80% correct.
2. Smaller changes as necessary to correct minor problems in the lesson.