Chapter 3.2 Part 9
Skill Development Sequences: Task Analysis and Chaining
Learning Objectives

• Define task analysis.

• Define behavior chain.

• Identify the 3 types of behavioral chains.

• Define each of the 3 types of behavior chains.
What is Task Analysis?

• A **task analysis** is a process of breaking a complex skill into smaller, more manageable units. These units are typically ordered into sequential steps or tasks (Cooper et al., 2007).
Example of Task Analysis  
(Bailey & Wolery, 1992)

• **Target Skill:** Shoe Tying.
  • Partially tighten shoelaces.
  • Pull shoelaces tight--Vertical pull.
  • Cross shoelaces.
  • Tighten shoelaces--Horizontal pull.
  • Tie shoelaces into a knot.
  • Make a bow and tighten it.
Conducting a Task Analysis
(Cooper et al., 2007)

• Breaking a skill into the appropriate units of learning can be a difficult.

• Helpful tips:
  • Observe the skill in competent individuals.
  • Consult with people who are highly skilled in target skill.
  • Perform the skill personally to see what steps are needed.
Chaining

• **Chaining** is a teaching procedure that links various simple responses together to make a more complex behavior (Newman et al., 2003).

• Chaining is a useful tool for teaching complex sequences of skills that can enhance independent living skills (Cooper et al., 2007).
How to Use Chaining
(Cooper et al., 2007)

• The first step in chaining is to conduct a task analysis, which is used to identify skills that will be taught in the chain.

• Once the skills are identified, teaching can begin.

• As each skill is mastered, a new skill from the chain is taught and reinforcement is provided for performance of all learned skills in the correct order.
Chaining Methods

• Three types of chaining methods:
  • Forward chaining
  • Backward chaining
  • Total task presentations
Types of Chaining

- **Forward chaining** involves teaching skills in their naturally occurring order (Cooper et al., 2007).
Example of Forward Chaining
(Bailey & Wolery, 1992)

1. Partially tighten shoe laces
   - Pull shoe laces tight-Vertical pull
   - Cross shoe laces
   - Tighten laces-Horizontal pull

2. Partially tighten shoe laces
   - Pull shoe laces tight-Vertical pull
   - Cross shoe laces
   - Tighten laces-Horizontal pull

3. Partially tighten shoe laces
   - Pull shoe laces tight-Vertical pull
   - Cross shoe laces
   - Tighten laces-Horizontal pull
Types of Chaining

• **Backward chaining** involves teaching the skill starting with the last skill in the chain (Cooper et al., 2007).
Example of Backward Chaining
(Bailey & Wolery, 1992)

1. Partially tighten shoe laces
2. Pull shoe laces tight-Vertical pull
3. Cross shoe laces

1. Partially tighten shoe laces
2. Pull shoe laces tight-Vertical pull
3. Cross shoe laces

1. Partially tighten shoe laces
2. Pull shoe laces tight-Vertical pull
3. Cross shoe laces

Tighten laces-Horizontal pull
Reinforcement

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Types of Chaining

• **Total task presentations** involves teaching all the skills identified in the task analysis all at once (Cooper et al., 2007).
Example of Total Task Presentation
(Bailey & Wolery, 1992)

- Partially tighten shoe laces
- Pull shoe laces tight-Vertical pull
- Cross shoe laces
- Tighten laces-Horizontal pull

Reinforcement