

Using Backward Chaining to Teach First-aid Safety Skills

Objective: To teach students first-aid skills for treating a minor cut

Setting and Materials:

Settings: classroom, home, and/or community

Materials:

- 1. First-aid kit including (a) tape, (b) gauze pads, (c) liquid or cream antiseptic, (d) disposable cleaning towels, (e) tissues, (f) a clean cloth, and (g) cotton swabs.
- 2. Data sheets for each student
- 3. Red make-up (artificial blood)

Content Taught

Minor Cut

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Discriminative Stimulus	Student Response
Simulated injury placed on students' appendages and teacher provides situation statement.	Student removes clean cloth from first-aid kit and places it firmly on cut.
2. Cloth held tightly on student's cut.	Student shows cut to teacher.
Teacher evaluates severity of cuts and tells students to apply first aid.	Students open first-aid kit and remove antiseptic, tape, and gauze.
4. First-aid materials out of first-aid kit.	Students wash and dry hands either with soap and water or towelettes.
5. Students with clean, dry hands.	Apply antiseptic according to manufacturer's directions.
6. Antiseptic is applied to cut.	Students open the gauze package and remove from package. Gauze pad is placed on wrapper without touching the skin-side surface of the gauze.
7. Gauze pad on wrapper.	Student pulls tape 2.5 to 3 inches and cuts with aid of dispenser by pushing on cutter with finger. Tape is placed on one side of

the gauze and then gauze is placed on cut by grasping the tape only.

8. Gauze is covered with one piece of tape and placed on cut.

Student pulls tape 2.5 to 3 inches and cuts with aid of dispenser by pushing on cutter with finger. Student's hand is on the table, and places the tape on the side of the gauze not covered with tape such that tape strips are parallel.

9. Cut is covered with two pieces of tape on gauze.

Throw trash away and put materials away.

Teaching Procedures

- 1. Show each of the items in the student first-aid kits and allow the students to examine the items as they are described.
- 2. Provide a brief rationale for learning why and how to apply first-aid skills (e.g., side effects for failing to properly treat injuries).
- 3. Mark an area of the student's arm or hand to simulate the site of an injury needing first-aid.
- 4. Provide an attentional cue or situational statement to the student that there is a need for first-aid treatment.
- 5. Prompt the student through all steps of the task analysis until reaching the target step and immediately providing a controlling prompt during the first trial. Three trials will be given to each student.
- 6. During the second and third trials, wait 5 seconds for the students to initiate and perform the target step before providing the controlling prompt.
- 7. Record the prompting level for each step of the task analysis and give verbal descriptive praise and a penny on a continuous reinforcement schedule for each correct response.
- 8. If the student makes an error, cue them to wait, withhold the reinforcement, and then model the correct response so the student can continue with the task analysis.

Evaluation

- Record the number of steps in the task analysis completed as unprompted correct or unprompted incorrect. Correct responses are based on the following:

 (a) conformity to the response definition (topography),
 (b) performance of steps in the correct order (sequence),
 (c) completing the step within 60 seconds (duration).
- 2. Continue instruction with the first-aid skill until all students in the small group perform all steps at 100% unprompted correct responses in 2 consecutive daily probe trials.

Lesson Plan Based on:

Gast, D. L., Winterling, V., Wolery, M., & Farmer, J. A. (1992). Teaching first-aid skills to students with moderate handicaps in small group instruction. *Education and Treatment of Children*, 15, 101-124.

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