The Brookes Transition to Adulthood Series

EVIDENCE-BASED Instructional Strategies FOR Transition

by

David W. Test, Ph.D.
The University of North Carolina at Charlotte

with invited contributors

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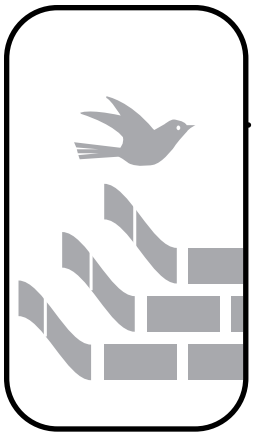
About the Author

David W. Test, Ph.D., Professor of Special Education at the University of North Carolina (UNC) at Charlotte, teaches courses in single-subject research, transition, classroom management, and professional writing. The majority of Dr. Test's publications have focused on self-determination, transition, community-based training, and supported employment. Along with Dr. Nellie Aspel and Dr. Jane Everson, he wrote the first transition methods textbook, titled *Transition Methods for Youth with Disabilities* (Merrill/Prentice Hall, 2006). Dr. Test currently serves as a co-principal investigator (with Dr. Paula Kohler and Dr. Larry Kortering) of the National Secondary Transition Technical Assistance Center, Co-Director on the North Carolina Indicator 14, Post-school Outcomes Project and the CIRCLES interagency collaboration Institute of Education Sciences research grant (with Dr. Claudia Flowers), and the UNC Charlotte Doctoral Leadership Personnel Preparation Program (with Dr. Diane Browder). He and Dr. Bob Algozzine currently serve as co-editors of *Career Development for Exceptional Individuals*.



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Bound for Success: Teaching Life Skills

April L. Mustian and Sharon M. Richter

Life skills instruction is included in the student development category of the Taxonomy for Transition Programming (Kohler, 1996), which focuses on instructional practices that emphasize life, employment, and occupational skill development. Life skills instruction is a specific subcategory of student development that includes leisure and social skills training; self-determination skills training, including goal setting, decision making, and self-advocacy; independent living skills training; and learning strategy skills training.

WHAT ARE LIFE SKILLS?

Life skills, as the term implies, are essential to life for all people, including individuals with intellectual disabilities. If an individual cannot perform life skills, another person will have to perform these skills for the individual (Brolin, 1989). Unlike knowledge of art and chemistry, which are skills that are important to success in certain settings such as a museum or a high school classroom, life skills are unique in that these skills are important to everyday functioning in *all* of the settings of life—home, school, and the community. People perform life skills every day in order to fulfill the varied roles of adult life, such as purchasing clothing, cashing a check, buying food at the grocery store, attending a course at the community college, taking medication when needed, taking public transportation to get to school, and working. Given that these skills are often prerequisites to independence and personal safety, acquiring these skills is critical to quality of life for all individuals. Therefore, life skills instruction is essential.

Life skills are generally grouped into five broad clusters: self-care and domestic living; recreation and leisure; communication and social skills; vocational skills; and other skills vital for community participation, such as postsecondary education (Nietupski, Hamre-Nietupski, Curtin, & Shrikanth, 1997).

WHY IS LIFE SKILLS INSTRUCTION DIFFERENT?

Many life skills can be taught via traditional classroom instruction. In other words, many life skills can be taught in the same manner that one would teach students how to complete

multiplication problems or decode new words. However, given that most life skills are learned so that students may participate more fully in their communities, teachers should also employ instructional strategies that are specifically designed to teach life skills to students with disabilities. To do so, special educators must design instruction for students with disabilities that considers the settings in which they are typically used. For example, if a student must learn to use a time clock at his or her job, the teacher should use the characteristics of the time clock and the room where it is located as a reference point to adequately prepare students to use the time clock at work. Similarly, if a student must learn to make purchases at a store, the teacher should consider the common characteristics of cash registers and cashiers when designing instruction. In both of these examples, teachers will likely provide some instruction in the community sites via community-based instruction, as discussed in Chapter 3.

IMPORTANCE OF LIFE SKILLS INSTRUCTION

Students with disabilities who exit high school with proficient life skills have better post-school outcomes than those students who do not. For example, Roessler, Brolin, and Johnson (1990) found students who had good daily living skills at high school exit were more likely to have a higher quality of life (i.e., independent living) and be engaged in post-school employment. In addition, Blackorby, Hancock, and Siegel (1993) found students with high self-care skills were more likely to be engaged in postsecondary education, employment, and independent living than those with low self-care skills. As a result, experts in the field have recommended students with disabilities receive explicit instruction and training in leisure skills, self-care, social skills, and other adaptive behavior skills.

Explicit life skills instruction is often characterized by breaking down complex tasks into smaller instructional units, step-by-step modeling and guided practice, a wide range of examples and nonexamples, immediate corrective feedback, and multiple opportunities to practice specific skills (Archer & Hughes, 2010).

EVIDENCE-BASED PRACTICES IN LIFE SKILLS INSTRUCTION

The National Secondary Transition Technical Assistance Center (NSTTAC) has identified 48 evidence-based practices that have been used to teach students with disabilities across a range of life skills and instructional approaches. Table 7.1 displays the list of all evidence-based practices identified for life skills development. Each practice includes the following:

1. The level of evidence (strong, moderate, potential) as defined by NSTTAC
2. With whom the practice has been implemented
3. How the skill or instruction has been implemented
4. The setting or settings in which the life skill has been implemented
5. How the skill relates to the items on the Indicator 13 checklist
6. How the skill relates to the common core standards
7. The best place to find out how to teach the skill, with links to sample lesson plan starters
8. References used to establish the evidence base

Table 7.1. Evidence-based practices in life skills development

Instructional strategy	Skill
Using backward chaining to teach	Functional life skills
Using computer-assisted instruction to teach	Food preparation and cooking skills Functional life skills Grocery shopping skills
Using community-based instruction to teach	Communication skills Community integration skills Functional life skills Grocery shopping skills Purchasing skills
Using constant time delay to teach	Applied math skills Banking skills Communication skills Food preparation and cooking skills Functional life skills Leisure skills Purchasing skills
Using forward chaining to teach	Home maintenance skills
Using general case programming to teach	Safety skills
Using the one-more-than strategy to teach	Counting money Purchasing skills
Using progressive time delay to teach	Functional life skills Purchasing skills Safety skills
Using response prompting to teach	Food preparation and cooking skills Functional life skills Grocery shopping skills Home maintenance skills Laundry tasks Leisure skills Purchasing skills Safety skills Sight word reading Social skills
Using self-management instruction to teach	Social skills
Using self-monitoring to teach	Functional life skills
Using simulations to teach	Banking skills Functional life skills Purchasing skills Social skills
Using a system of least-to-most prompts to teach	Communication skills Food preparation and cooking skills Functional life skills Grocery shopping skills Purchasing skills Safety skills
Using a system of most-to-least prompts to teach	Functional life skills
Using total task chaining to teach	Functional life skills
Using video modeling to teach	Food preparation and cooking skills

Each practice description also provides links on NSTTAC's web site (http://www.nsttac.org) to research-to-practice lesson plan starters. The lesson plan starters are perhaps the most practical resource for classroom use. Each lesson plan starter contains a lesson objective, setting and materials, content taught, teaching procedures, evaluation method, and the research study on which the lesson plan was based. Several of these practices and accompanying lesson plan starters are described in more detail in the following sections.

Using the One-More-Than Strategy to Teach Purchasing Skills

Using the one-more-than strategy to teach purchasing skills has been identified as an evidence-based practice by the NSTTAC. It has been implemented with students with moderate intellectual disabilities and autism spectrum disorders, with ages ranging from 14 to 17 years. The one-more-than technique combined with cents-pile modification is a strategy to increase students' abilities to use money for purchases (Denny & Test, 1995). By using this functional strategy, learners can successfully purchase items by using currency without having to master skills related to coin usage and coin value, which can be barriers to successful purchasing in the community. Specifically, it can be used to teach individuals to pay one more dollar than requested (e.g., cost is $3.29 and the individual gives $4.00). The one-more-than strategy has been used to teach independent purchases (Cihak & Grim, 2008), making community purchases (Denny & Test, 1995), and purchasing grocery items (Ayres, Langone, Boon, & Norman, 2006). It has been implemented in both the school and community settings.

Figure 7.1 provides more complete information about using the one-more-than strategy to teach purchasing skills. The practice description for using the one-more-than strategy to teach purchasing skills provides two lesson plan starters (i.e., community purchases, independent purchases) for practitioners to use when implementing this evidence-based practice in the classroom. The lesson plan starter for using the one-more-than strategy to teach community purchases is displayed in Figure 7.2.

Using Constant Time Delay to Teach Banking Skills

Using constant time delay (CTD) to teach banking skills is another evidence-based practice identified by NSTTAC. It has been implemented with students with moderate intellectual disabilities, with ages ranging from 14 to 20 years. In CTD, several trials are first presented using a zero-second delay between the presentation of the natural stimulus and the response prompt. The trials that follow the simultaneous prompt condition apply a fixed time delay, such as 3 or 5 seconds (Cooper et al., 2007). In the studies used to establish the evidence base for using CTD to teach banking skills, CTD included using a 3-second constant time delay (McDonnell & Ferguson, 1989) and a 3-second time delay in combination with video modeling, community-based instruction (CBI), and simulation (Branham et al., 1999). The specific banking skills taught using CTD are cashing a check, writing a check, and using an automated teller machine (ATM). This practice has been implemented in a self-contained classroom and in the community setting.

Figure 7.3 provides more detailed information on using CTD to teach banking skills. In addition, see Chapter 3 for more information on using CTD. The practice description for using CTD to teach banking skills provides one research-to-practice lesson plan starter for practitioners to use in order to implement this evidence-based practice in the classroom. This lesson plan starter was created specifically for teaching students to cash checks and use an ATM (see Figure 7.4).

Using Response Prompting to Teach Sight Word Reading

Using response prompting to teach sight word reading is an evidence-based practice identified by NSTTAC. This practice has been implemented with students who have moderate and severe intellectual disabilities, with ages ranging from 14 to 26 years. Response prompting

Using One-More-Than Strategy to Teach Purchasing Skills

What is the evidence base?

A moderate level of evidence based on three moderate-quality single-subject studies

With whom was it implemented?

Students with
- Moderate intellectual disabilities (two studies, $n=7$)
- Autism (one study, $n=4$)

Ages ranging from 14 to 17
Males ($n=6$), females ($n=5$)
Ethnicity
- None reported ($n=11$)

What is the practice?

The one-more-than strategy is used to teach individuals to pay one more dollar than requested. (e.g., cost is $3.29 and the individual gives $4.00; Denny & Test, 1995). It is also referred to as "next dollar," "counting on," or "dollar more" strategy.

How has the practice been implemented?

One-more-than strategy has been used to teach
- Independent purchases (Cihak & Grim, 2008)
- Making community purchases (Denny & Test, 1995)
- Purchasing grocery items (Ayres, et al., 2006)

Where has it been implemented?

School and community (one study)
School (one study)

Where is the best place to find out how to do this practice?

The best place to find out how to implement *one-more-than strategy* is through the following research to practice lesson plan starters:

- Using the one-more-than strategy to teach community purchases: http://www.nsttac.org/LessonPlanLibrary/46.pdf
- Using the one-more-than strategy to teach independent purchases: http://www.nsttac.org/LessonPlanLibrary/LessonPlanCihakandGrim2008nextdollar.pdf

How does this practice relate to Indicator 13?

Indicator 13 checklist Item 3: Teaching purchasing skills may reflect results of transition assessment information.

Indicator 13 checklist Item 4: Purchasing skills may be a transition service designated in an IEP that will enable a student to meet his or her postsecondary independent living goal(s)

Indicator 13 checklist Item 6: Teaching purchasing skills may be an IEP objective that supports a student's postsecondary independent living goal(s)

How does this practice relate to common core standards?

Understand ratio concepts and use ratio reasoning to solve problems (Grade 6)
- Use ratio and rate reasoning to solve real-world and mathematical problems.

Comprehension and collaboration (Grade 8)
- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Knowledge of language (Grade 8)
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.

References used to establish this evidence base

Ayres, K.M., Langone, J., Boon, R.T., & Norman, A. (2006). Computer-based instruction for purchasing skills. *Education and Training in Developmental Disabilities, 41,* 252–263.

Cihak, D., & Grim, J. (2008). Teaching students with autism spectrum disorder and moderate intellectual disabilities to use counting-on strategies to enhance independent purchasing skills. *Research in Autism Spectrum Disorders, 1,* 716–727.

Denny, P.J., & Test, D.W. (1995). Using the one-more-than technique to teach money counting to individuals with moderate mental retardation: a systematic replication. *Education and Treatment of Children, 18,* 422–432.

Figure 7.1. Practice description for using the one-more-than strategy to teach purchasing skills. (From National Secondary Transition Technical Assistance Center. [2011]. *Using one-more-than strategy to teach purchasing skills.* Charlotte, NC: Author.)

Purchasing Items Using "One-More-Than" Technique

Objective: To teach purchasing skills by using the "one-more-than" technique with the "cents-pile modification" with 1-, 5-, and 10-dollar bills

Setting: Instruction is conducted in the school library four times each week. Skill generalization is measured in the community at stores and restaurants near the school.

Materials: Each student was given five 1-dollar bills, one 5-dollar bill, and one 10-dollar bill during all instructional sessions.

Content taught

The one-more-than technique with the cents-pile modification is a strategy to increase students' abilities to use money for purchases. By using this functional strategy, learners can successfully purchase items by using currency without mastery of skills related to coin usage and coin value, which can be barriers to successful purchasing in the community.

The following description of this strategy has been developed based on information in the article.

1. The purchaser listens for the price of an item (e.g., "Three dollars and forty-eight cents").
2. The purchaser counts one dollar for the "cents pile" (i.e., 48 cents) and puts it aside.
3. The purchaser then places the number of dollar bills identified in the price (i.e., three) and places these on the cents-pile dollar.
4. The purchaser then pays for the item using all of the bills in the pile.

Teaching procedures

1. Tell students that you will teach them a method they can use to go to the store and buy things themselves.
2. Orally describe and model to introduce the concept of one-more-than with cents-pile modifications. For example, say, "If the salesperson says, 'two dollars and fifteen cents,' you put one dollar to the side for the cents pile, and then count out two dollars."
3. Tell students they are going to role-play purchasing items using the method.
4. Separate training items into four price groups, 0–$4.99, $5.00–$9.99, $10.00–$14.99, and $15.00–$20.00.

Figure 7.2. Research-to-practice lesson plan starter for using one-more-than strategy to teach purchasing skills.

From National Secondary Transition Technical Assistance Center. (2008). *Purchasing items using "one-more-than" technique.* Charlotte, NC: Author.

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5. For the first price group, 0–$4.99, students will use the cents-pile modification to count out one more dollar than the amount requested.

6. Name a price between 0–$4.99 in one of the following ways:
   a. With the terms *dollars* and *cents* included (e.g., "That will be four dollars and twenty cents")
   b. Without dollars and cents (e.g., "That will be four twenty")

7. Model paying the first training amount by counting one dollar to the side for the cents pile and then count out the number of dollars requested.

8. Have students practice paying the first training amount.

9. For each correct response, provide descriptive verbal praise on a continuous schedule of reinforcement schedule by pointing out that the student had just given enough dollars to pay for items, such as "Good job. You just gave me enough dollars."

10. For each incorrect response, verbally describe and model the correct response and then have the student try again. If student then responds appropriately, provide praise. If the student responds incorrectly, move to the next item by saying, "Let's try another one."

11. Provide students with three additional training amounts from the same price group using one of the ways to state the price identified in Item 6 above.

12. Use the same procedure for all price groups with additional instruction related to counting on from 5- and 10-dollar bills.

13. Show the students the bill(s), model counting-on from the bill(s), and then model the example item for that price group (e.g., for 7 dollars, start with a 5-dollar bill and count on). As you place a 5-dollar bill on the table, say, "Five." As you place each dollar bill on the 5-dollar bill, say "six" as you place the first bill and "seven" as you place the next bill on the money stack.

14. Ask students to repeat the modeled item.

15. During training sessions, use 12 amounts that were not used in previous training sessions.

16. When students achieve 12 correct responses out of 12 opportunities, present mixed practice to students by randomly distributing three amounts from each of the four price groups across the 12 training items.

Evaluation

Collect student performance data on the percent correct on 12-item daily probes. Probes should include prices from the different price ranges and be stated to students in one of the following ways:

1. With the terms *dollars* and *cents* included (e.g., "That will be five dollars and twenty cents")

2. Without dollars and cents (e.g., "That will be five twenty")

Lesson plan based on

Denny, P., & Test, D. (1995). Using the one-more-than technique to teach money counting to individuals with moderate mental retardation: A systematic replication. *Education & Treatment of Children, 18,* 422–432.

From National Secondary Transition Technical Assistance Center. (2008). *Purchasing items using "one-more-than" technique.* Charlotte, NC: Author.

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Using Constant Time Delay to Teach Banking Skills

What is the evidence base?

A potential level of evidence based on two acceptable quality single-subject studies

With whom was it implemented?

Students with moderate intellectual disabilities (two studies, $n=7$)
Ages ranged from 14–20
Males ($n=2$), females ($n=1$)
- Gender not specified (one study, $n=4$)

Ethnicity
- None reported ($n=7$)

What is the practice?

Constant time delay (CTD) has been defined as first presenting several trials using a zero-second delay between the presentation of the natural stimulus and the response prompt. The trials that follow the simultaneous prompt condition apply a fixed time delay (e.g., 3 seconds or 5 seconds; Cooper, Heron, & Heward, 2007).

In the studies used to establish the evidence base for using CTD to teach banking skills, CTD included using a
- Three-second CTD in combination with video modeling, community-based instruction, and simulation (Branham,, Collins, Schuster, & Kleinert, 1999)
- Three-second CTD (McDonnell & Ferguson, 1989)

How has the practice been implemented?

CTD was used in combination with video modeling, community-based instruction, and simulation to teach
- Cashing a check (Branham et al., 1999)

CTD was used to teach
- Writing a check
- Using an ATM (McDonnell & Ferguson, 1989)

Where is the best place to find out how to do this practice?

The best place to find out how to implement CTD is through the following research to practice lesson plan starter:

- Using CTD to teach banking
  http://www.nsttac.org/LessonPlanLibrary/LessonPlanMcDonnellFergusonbanking.pdf

Where has it been implemented?

Self-contained classroom and community (one study)
Community bank (one study)

How does this practice relate to Indicator 13?

Indicator 13 checklist Item 3: Teaching banking skills may reflect results of transition assessment information

Indicator 13 checklist Item 4: Conducting bank transactions may be a transition service designated in an individualized education program (IEP) that will enable a student to meet his or her postsecondary independent living goal(s)

Indicator 13 checklist Item 6: Teaching banking skills may be an IEP objective that supports a student's postsecondary independent living goal(s)

How does this practice relate to common core standards?

Understand ratio concepts and use ratio reasoning to solve problems (Grade 6)
- Use ratio and rate reasoning to solve real-world and mathematical problems, such as by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Comprehension and collaboration (Grade 8)
- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Knowledge of language (Grade 8)
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.

References used to establish this evidence base

Branham, R.S., Collins, B.C., Schuster, J.W., & Kleinert, H. (1999). Teaching community skills to students with moderate disabilities: Comparing combined techniques of classroom simulation, videotape modeling, and community-based instruction. *Education and Training in Mental Retardation and Developmental Disabilities, 34,* 170–181.

McDonnell, J., & Ferguson, B. (1989). A comparison of time delay and decreasing prompt hierarchy strategies in teaching banking skills to students with moderate handicaps. *Journal of Applied Behavior Analysis, 22,* 85–91.

Figure 7.3. Practice description for using constant time delay to teach banking skills. (From National Secondary Transition Technical Assistance Center. [2011]. *Using constant time delay to teach banking skills.* Charlotte, NC: Author.)

Cashing Checks and Using an ATM

Objective: To teach students to make a cash withdrawal at an automated teller machine (ATM) or write checks for cash

Setting: Bank

Materials:

1. ATM card
2. Check writing materials: checks and withdrawal slips
3. Optional materials for students requiring additional supports:
   - A cue card that provides students with the correct spelling and format for the written dollar values to be entered on the check
   - A complete model of a check for cash in the amounts of $10 and $20

Content taught

Students are taught to withdraw money from a bank one of two ways. They are taught to withdraw $10 and $20 by accessing an ATM or by writing checks for cash at a bank.

Task analysis for use of the ATM

1. Insert the access card.
2. Enter the personal identification number.
3. Press the button indicating that the correct number has been entered.
4. Press the button to indicate a withdrawal from a checking account.
5. Enter 1000 or 2000 to indicate dollar and cent amount.
6. Press the *Correct* button.
7. Lift the door and remove the bill.
8. Press the button to indicate end of transaction.
9. Remove the access card and receipt from the appropriate slots.

Task analysis for writing a check

1. Enter the bank and move to a table.
2. Enter the correct date on the check.
3. Write the word *CASH* on the appropriate line.
4. Enter the appropriate dollar value (i.e., 10.00 or 20.00).
5. Write the dollar value on the correct line (i.e., *Ten and 00/100* or *Twenty and 00/100*).
6. Sign the check.

(continued)

Figure 7.4. Research-to-practice lesson plan starter for using constant time delay to teach banking skills.

From National Secondary Transition Technical Assistance Center. (2008). *Cashing checks and using an ATM.* Charlotte, NC: Author.

Cashing Checks and Using an ATM *(continued)*

7. Cash the check.
8. Exit the bank.

Teaching procedures

Pretest procedures

1. Begin the session by providing the student with the necessary materials (e.g., access card, checkbook, pen) and a verbal prompt (e.g., "Withdraw ___ dollars from the money machine" or "Write and cash a check for ___dollars.").
2. Each student should withdraw $10 and $20 during each probe session.
3. If the student makes an error, except for signing their name, complete the step for them and prompt them to finish the activity.
4. If the student makes an error while signing their name, physically assist them in signing without providing additional feedback. Prompt the student to finish the rest of the task.
5. At the end of the session, return the money that was withdrawn into the appropriate account.
6. Collect data on the number of steps completed correctly.

Instructional procedures

1. Instructional sessions should last 20 minutes; students should receive two to six trials per session and at least one trial on each of the two target amounts (i.e., $10 and $20) during each instruction session.
2. Assistance during instruction should be provided using the prompt hierarchy and faded by reducing the level of prompting on the hierarchy.
3. Prompt hierarchy:
   a. Physical assistance plus direct verbal cue
   b. Point plus direct verbal cue or model plus direct verbal cue
   c. Direct verbal cue
   d. Gesture
4. The initial prompt provided to students should be determined during pretesting procedures.
5. Prompts should be faded after two consecutive correct trials.
6. If students make an error, they should be prompted through the task by being prompted with the correct level on the hierarchy.

Evaluation

Students should perform 100% of the task analysis steps correctly for two consecutive sessions. Record the errors of each step of the tasks analyses if the student makes step initiation errors, discrimination errors, and response errors. Step initiation errors should be recorded when the student does not complete the step within 5 seconds after the prompt is given. Discrimination errors are recorded when the student performs the step out of sequence or if they fail to respond correctly. Response errors are recorded when there is an incomplete response given or if the student performs the step too slowly.

Lesson plan based on

McDonnell, J.J., & Ferguson, B. (1989). A comparison of time delay and decreasing prompt hierarchy strategies in teaching banking skills to students with moderate handicaps. *Journal of Applied Behavior Analysis, 22,* 85–91.

From National Secondary Transition Technical Assistance Center. (2008). *Cashing checks and using an ATM.* Charlotte, NC: Author.

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has been defined as a stimuli that later functions as extra cues and reminders for desired behavior. This type of prompting can come in visual, auditory, textual, or symbolic forms (Cooper et al., 2007). In the two studies used to establish the evidence base for using response prompting to teach home maintenance skills, response prompting included video prompts paired with verbal prompts (Taylor, Collins, Schuster, & Kleinert, 2002) and static picture prompts (Gaule, Nietupski, & Certo, 1985). This practice has been used to teach laundry and grocery store sight words and has been implemented in the supermarket and community settings.

Figure 7.5 provides a practice description with more detailed information on using response prompting to teach sight word reading. The practice description for using response prompting to teach sight word reading provides one research-to-practice lesson plan starter for practitioners to use in order to implement this evidence-based practice in the classroom. This lesson plan starter was created specifically for teaching laundry skills to students (see Figure 7.6).

Using Community-Based Instruction to Teach Grocery Shopping Skills

Using CBI to teach grocery shopping skills is an evidence-based practice identified by NSTTAC. It is a practice that has been implemented with students who have mild, moderate, and severe intellectual disabilities, with ages ranging from 17 to 20 years. As described in Chapter 3, CBI is instruction that occurs in the community setting in which targeted functional skills would naturally occur (Brown et al., 1983). In the studies used to establish the evidence base for using CBI to teach grocery shopping skills, instruction included CBI immediately followed by simulated instruction (Bates et al., 2001) and classroom-based instruction followed by CBI (Gaule et al., 1985). In the study by Bates et al. (2001), results indicated that simulated instruction paired with CBI was more effective than using CBI alone to teach students grocery shopping skills.

Figure 7.7 provides a practice description with more detailed information on using CBI to teach grocery shopping skills. The practice description for using CBI to teach grocery shopping skills provides one research-to-practice lesson plan starter for practitioners to use in order to implement this evidence-based practice in the classroom. This lesson plan starter was created specifically for teaching students to purchasing skills in the grocery store setting (see Figure 7.8).

TYPES OF INSTRUCTION USED IN LIFE SKILLS DEVELOPMENT

Among the research studies used to establish the 48 evidence-based practices on life skills development, 16 different instructional approaches were used. Specifically, effective strategies for teaching life skills to students with disabilities include the following:

- Backward chaining
- Computer-assisted instruction
- Community-based instruction
- Constant time delay
- Forward chaining
- General case programming

Using Response Prompting to Teach Sight Word Reading

What is the evidence base?

A potential level of evidence based on two acceptable quality single-subject studies

With whom was it implemented?

Students with
- Moderate intellectual disabilities (two studies, $n=5$)
- Severe intellectual disabilities (one study, $n=2$)

Ages ranged from 14 to 26
Males ($n=1$ females) ($n=6$ males)
Ethnicity
- None reported ($n=7$)

What is the practice?

Response prompting has been defined as a stimuli that later functions as extra cues and reminders for desired behavior. Can be visual, auditory, textual, or symbolic (Cooper, Heron, & Heward, 2007).

In the studies used to establish the evidence base for using response prompting to teach home maintenance skills, response prompting included
- Video prompts paired with verbal prompts (Taylor, Collins, Schuster, & Kleinert, 2002)
- Static picture prompts (Gaule, Nietupski, & Certo, 1985)

How has the practice been implemented?

Visual and verbal prompting has been used to teach
- Laundry sight words (Taylor et al., 2002)

Static pictures have been used to teach
- Grocery store sight words (Gaule, Nietupski, & Certo, 1985)

Where has it been implemented?

Supermarket (one study)
Community (one study)
School (two studies)

Where is the best place to find out how to do this practice?

The best place to find out how to implement response prompting is through the following research-to-practice lesson plan starter:

- Using response prompting to teach laundry sight words
  http://www.nsttac.org/LessonPlanLibrary/56_85.pdf

How does this practice relate to Indicator 13?

Indicator 13 checklist Item 3: Teaching sight word reading may reflect results of transition assessment information.

Indicator 13 checklist Item 4: Sight word reading may be a transition service designated in an individualized education program (IEP) that will enable a student to meet his or her postsecondary independent living goal(s).

Indicator 13 checklist Item 6: Teaching sight word reading may be an IEP objective that supports a student's postsecondary independent living goal(s).

How does this practice relate to states' Career Clusters Initiative: Essential Knowledge and Skills?

ESS02.01 Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
- Determine the most appropriate reading strategy for identifying the overarching purpose of text.

ESS02.01.02 Demonstrate the use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in the workplace.
- Employ verbal skills when obtaining and conveying information.

References used to establish this evidence base

Gaule, K., Nietupski, J., & Certo, N. (1985). Teaching supermarket shopping skills using an adaptive shopping list. *Education and Training of the Mentally Retarded, 20,* 53–59.

Taylor, P., Collins, B.C., Schuster, J.W., & Kleinert, H. (2002). Teaching laundry skills to high school students with disabilities: Generalization of targeted skills and nontargeted information. *Education and Training in Mental Retardation and Developmental Disabilities, 37,* 172–183.

Figure 7.5. Practice description for using response prompting to teach sight word reading. (From National Secondary Transition Technical Assistance Center. [2011]. *Using response prompting to teach sight word reading.* Charlotte, NC: Author.)

Laundry Skills

Objective: To teach students laundry skills

Setting: Family living classroom

Materials:

1. Laundry basket filled with laundry
2. Liquid detergent
3. Fabric softener sheets
4. Eight functional words (e.g., temperature, detergent, cycle) printed on 5" × 7" cards displayed on washer or dryer or on the laundry products being used

Content taught

Task analysis steps for doing laundry:

1. Carry laundry basket with clothes to washer.
2. Open the washer lid.
3. Put clothes in the washer.
4. Twist the lid and remove it from the bottle of liquid detergent.
5. Pour the correct amount into a measuring cup.
6. Replace the cap on the bottle of liquid detergent.
7. Pour detergent from the measuring cup into the washer.
8. Close the washer lid.
9. Select the correct cycle.
10. Select the water temperature.
11. Select the load size.
12. Press the button to start the washer.
13. When the last cycle has finished remove clothes from the washer.

Figure 7.6. Research-to-practice lesson plan starter for using response prompting to teach sight word reading. *(continued)*

From National Secondary Transition Technical Assistance Center. (2008). *Laundry skills.* Charlotte, NC: Author.

In *Evidence-Based Instructional Strategies for Transition* by David W. Test.
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Laundry Skills *(continued)*

14. Put clothes in the dryer.
15. Put fabric softener sheet in the dryer.
16. Close the dryer door.
17. Select the desired setting.
18. Press the button to start the dryer.
19. When the dryer stops remove clothes from the dryer.
20. Remove clothes from the dryer and put them into the laundry basket.

Teaching procedures

1. Present materials.
2. Deliver intentional cue (i.e., "Are you ready to wash and dry clothes?") and wait for affirmative response.
3. Deliver task direction (e.g., "[*Name*], wash and dry the clothes.") and wait 5 seconds for student to begin step and 15 seconds for student to complete step.
4. If student performs step correctly, provide verbal praise and wait 5 seconds for student to initiate next step.
5. If student performs step incorrectly, fails to initiate a response within 5 seconds, or fails to complete a step within 15 seconds, repeat the task direction using a verbal prompt (e.g., "After you put clothes in the washer, twist lid and remove it from the detergent.") and wait 5 seconds for student to begin step and 15 seconds for student to complete step.
6. If student performs step incorrectly following verbal prompt, model the correct response along with verbal prompt and wait 5 seconds for student to begin step and 15 seconds for student to complete step.
7. Proceed in this manner delivering praise for correct responses or delivering next level of prompt hierarchy until student completes each step of task analysis.

Evaluation

Evaluate the student's performance by collecting data on the percentage of steps correct on the task analyses.

Lesson plan based on

Taylor, P., Collins, B.C., Schuster, J.W., & Kleinert, H. (2002). Teaching laundry skills to high school students with disabilities: Generalization of targeted skills and nontargeted information. *Education and Training in Mental Retardation and Developmental Disabilities, 37,* 172–183.

From National Secondary Transition Technical Assistance Center. (2008). *Laundry skills.* Charlotte, NC: Author.

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Using Community-Based Instruction to Teach Grocery Shopping Skills

What is the evidence base?

A potential level of evidence based on one acceptable quality group study and two acceptable quality single-subject studies

With whom was it implemented?

Students with
- Mild intellectual disability (one study, $n=20$)
- Moderate intellectual disability (one study, $n=20$)
- Moderate to severe intellectual disability (two studies, $n=9$)

Ages ranged from 16 to 20, two studies; mean age of 17.2 years, one group study
Males ($n=33$), females ($n=16$)
Ethnicity
- None reported (three studies, $n=49$)

What is the practice?

Community-based instruction (CBI) is teaching functional skills that take place in the community where target skills would naturally occur (Brown et al., 1983).

In the studies used to establish the evidence base for using CBI to teach grocery shopping skills, CBI
- Immediately followed simulated instruction (Bates, Cuvo, Miner, & Korabek, 2001)
- Followed a phase of instruction in the classroom (Gaule, Nietupski, & Certo, 1985)
- Was the only setting for instruction (Ferguson & McDonnell, 1991).

How has the practice been implemented?

Simulated instruction paired with CBI was more effective and efficient than CBI alone to teach students tasks associated with purchasing items in a grocery store, using a 32-step task analysis, including picture lists (Bates et al., 1999).

Response prompts (static picture cues) were used to teach students to locate, obtain, and purchase items in the grocery store during the second and third phases of instruction, following a first phase of classroom instruction (Gaule et al., 1985).

Concurrent sequencing, presenting all steps without controlling order, was used to teach selecting grocery items from a list (Ferguson & McDonnell, 1991). All instruction occurred in the community in this study.

Where has it been implemented?

Grocery stores (three studies)

Where is the best place to find out how to do this practice?

- Using CBI to teach purchasing skills
  RtPLP Starter, CBI to teach grocery shopping, Gaule et al., 1985.

How does this practice relate to Indicator 13?

Indicator 13 checklist Item 3: Teaching grocery shopping skills in the community may reflect results of transition assessment information.

Indicator 13 checklist Item 4: CBI on grocery shopping may be a transition service designated in an IEP that will enable a student to meet his or her postsecondary independent living goal(s).

Indicator 13 checklist Item 6: Teaching grocery shopping skills using CBI may be an IEP objective that supports a student's postsecondary independent living goal(s)

How does this practice relate to common core standards?

Reason quantitatively and use units to solve problems. (Number and Quantity, Grades 9–12)
- Use units as a way to understand problems and to guide the solution of multistep problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

Solve real-life and mathematical problems using numerical and algebraic expressions and equations. (Expressions and Equations, Grade 6)
- Use variables to represent two quantities in a real-world problem that change in relationship to one another.

(continued)

Figure 7.7. Practice description for using community-based instruction to teach grocery shopping skills. (From National Secondary Transition Technical Assistance Center. [2011]. *Using community-based instruction to teach grocery shopping skills*. Charlotte, NC: Author.)

Figure 7.7. *(continued)*

How does this practice relate to States' Career Clusters Initiative: Essential Knowledge and Skills?

Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities (Academic Foundations).

- Identify whole numbers, decimals, and fractions.
- Demonstrate the use of relational expressions such as: equal to, not equal, greater than, or less than.
- Demonstrate knowledge of basic arithmetic operations such as addition, subtraction, multiplication, and division.

Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice (Communications).

- Determine the most appropriate reading strategy for identifying the overarching purpose of a text (i.e., skimming, reading for detail, reading for meaning, or critical analysis).

References used to establish this evidence base

Bates, P.E., Cuvo, T., Miner, C.A., & Korabek, C.A. (2001). Simulated and community-based instruction involving persons with mild and moderate mental retardation. *Research in Developmental Disabilities, 22,* 95–115.

Fergusen, R., & McDonnell, J. (1991). A comparison of serial and concurrent sequencing strategies in teaching generalized grocery item location to students with moderate handicaps. *Education and Training in Mental Retardation, 26,* 292–304.

Gaule, K., Nietupski, J., & Certo, N. (1985). Teaching supermarket shopping skills using an adaptive shopping list. *Education and Training of the Mentally Retarded, 20,* 53–59.

- The one-more-than strategy
- Progressive time delay
- Response prompting
- Self-management instruction
- Self-monitoring
- Simulations
- Least-to-most prompts
- Most-to-least prompts
- Total task chaining
- Video modeling

Table 7.2 provides definitions for each type of instructional approach that has been used to teach life skills development.

SUMMARY

As evidenced by the practice descriptions and research-to-practice lesson plan starters described in this chapter, multiple instructional approaches have been used and found effective for teaching life skills. When choosing how best to teach life skills to students with disabilities, there are important considerations to acknowledge. First, if students require instruction to increase the probability that they will experience postsecondary success in the area of independent living, then teaching functional life skills should become a part of their transition plan, with generalization of such skills being the primary goal.

It is also important to consider cost-efficiency and access to resources when planning instruction in life skills development. For instance, although CBI is an evidence-based practice and has been mentioned multiple times in this text, some teachers may not have