When You Can't Get Out

Strategies for Supporting Community-Based Instruction

Daniel E. Steere and Caroline DiPipi-Hoy

Meet Matt and Samantha, two teenagers on the brink of finding success in the community after leaving high school. Their savvy teachers have learned to provide instruction and practice in skills they will need—both in the community and in school. These skills include basic life skills like buying groceries, preparing meals, using public transportation, and communicating with people in the community and at work. Through task analysis, continuous needs assessment, general case instruction, technology-based instruction, role playing, and simulations, their teachers have been able to support the learning needs of these teens and improve their chances for a successful and productive adulthood.

Students with severe intellectual disabilities often experience difficulty in generalizing skills learned in one situation (one setting, with one set of materials, or with certain people) to new situations (Snell & Brown, 2011). Because of this difficulty, teachers should consider supplementing classroom or school-based instruction with frequent and regular community-based instruction (CBI; Snell & Brown, 2011; Westling & Fox, 2009). The intent of

CBI is for students with disabilities to learn functional skills within the most natural environments and contexts. For most community-based activities (e.g., grocery shopping, taking public transportation, crossing streets, making small purchases, using an automatic teller machine [ATM], or ordering a meal in a restaurant), the best and most effective location for instruction is within the natural community environments in which the activities will take place.

Many teachers of students with severe disabilities, however, face challenges when they try to use CBI. Dymond (2012) described some common challenges: concerns about liability, difficulties with transportation, limited staffing to allow small-group or individual instruction, and increased program expenses. Although none of these challenges is an excuse for not using CBI, many teachers find it difficult to use CBI in optimal ways. Such difficulties, in turn, create significant obstacles in the education of students with severe disabilities. Students with severe disabilities tend to learn more slowly than many of their peers and need repeated, frequent exposure to natural cues to learn most effectively (Snell & Brown, 2011). Infrequent community "trips" accomplish little in

terms of productive and efficient learning. To learn skills most efficiently and quickly, students with severe disabilities need frequent experiences with a variety of real materials. For example, to learn to order preferred meals off of menus from local restaurants, students need experience with the varied menus, juxtaposed to highlight the important variation. Mastering of critical life skills is difficult to accomplish with infrequent CBI.

Therefore, teachers of students with severe disabilities should use strategies that will enhance the rate of acquisition of skills in community-based settings. Foremost among these strategies is frequent, regularly scheduled CBI. However, even under the best of circumstances, such instruction may not be frequent enough to allow rapid and efficient learning by students with severe disabilities. The reality is that many teachers struggle to implement CBI on a frequent and regular basis.

In this article, we review strategies that can be used to support and extend the benefits of CBI and that can help students with severe disabilities learn functional skills as rapidly and efficiently as possible. We discuss evidence-based intervention strategies that address particular types of learning challenges and describe steps teachers



can take to select the most appropriate school-based practices to support CBI. The strategies that we describe are intended to supplement and not supplant regularly scheduled, frequent CBI. One advantage to using technology is the visual component and ability to "bring in" real images of communitybased settings and skills being completed within those settings. In addition, teachers can depict a variety of

To learn skills most efficiently and quickly, students with severe disabilities need frequent experiences with a variety of real materials.

Practical Solutions for Bridging the Gap Between Classroom and Community

Teachers can augment their CBI by using video-based instruction, general case instruction, community-referenced instruction and simulations, and social stories.

Video Technology

Many teachers have successfully used video technology to help students learn functional skills such as ordering in a fast food restaurant (Mechling & Cronin, 2006), using public transportation (Mechling & O'Brien, 2010), grocery shopping (Hansen & Morgan, 2008), completing daily living skills (Cannella-Malone et al., 2006), and food preparation (Graves, Collins, Schuster, & Kleinert, 2005). Video technology can supplement CBI trips and can help provide solutions for schools and teachers facing a lack of resources for community-based instruction.

Video instruction is one way that technology has been used to teach individuals with disabilities. In particular, video modeling (viewing a skill being completed and then immediately completing it), video self-modeling (viewing videos of oneself completing a skill), and video prompting (viewing and completing discrete steps of a skill) are all video-based techniques that provide a visual component and that have effectively been used to introduce and reinforce communitybased skills (Allen, Wallace, Greene, Bowen, & Burke, 2010). Students use computers or video players to view the instructional materials.

settings and materials through videos without actually visiting the community site. Such diverse settings can supplement CBI and provide enhanced instruction for students who are experiencing a lack of generalization of skills. For example, students who are having difficulties with the skills involved with grocery shopping might benefit from video-based instruction from Power-Point presentations of such skills, as suggested by Van Laarhoven, Kraus, Karpman, Nizzi, and Valentino (2010). Given the large body of research in this area, the use of video technology as a supplement to CBI appears to be effective in addressing a variety of instructional needs.

General Case Instruction

Following the steps described by Horner, Sprague, and Wilcox (1982), teachers can increase the generalized responding of students with severe disabilities on a variety of community skills. The intent of general case instruction is to teach students using representative examples of functional skills that show the range of situations that students may encounter in real life. Teachers can then use natural contexts to demonstrate the relevant variation in the tasks at hand. The steps described by Horner et al. (1982) are as follows: (a) describe the instructional universe (the range of situations to which the student will need to generalize the skill), (b) describe the variation in cues and steps in the activity within the instructional universe, (c) select examples for teaching and for testing for generalization (probes), (d) sequence

the teaching examples to highlight variation in the task, (e) teach the student using the teaching examples, and (f) test for generalization using the probe examples.

These steps can help teachers select the best locations and situations for CBI. Teachers can also use the steps to select representative examples of materials they want to use for classroom instruction to support CBI. For example, a teacher could analyze the variation in menus of local restaurants and then bring in a range of actual menus into the classroom. Other tasks that are completed in varied ways and that could be taught in a classroom or school setting include putting on and fastening different coats or sweaters, filling out different job application forms, opening different beverage or food containers, or using different types of phones. Video technology could extend this approach to allow teachers to expose their students to variations in tasks that cannot be brought into the classroom (e.g., different menus behind counters in fast food restaurants or different crosswalk signals). By bringing varied materials that are selected using the general case strategy into a classroom, teachers can provide more frequent instruction and can juxtapose representative examples of activities so that students can more easily discern the variations in the tasks.

Community-Referenced Instruction and Simulations

Dymond (2012) defined communityreferenced instruction as teaching skills that are needed in both school and community settings. This term means that students are completing activities in natural contexts and at times within school settings, thereby receiving additional practice. For example, students could practice requesting a specific lunch or making a purchase in the cafeteria, or social skills can be practiced through naturally occurring opportunities within the school. For example, students can practice how to greet different people appropriately through opportunities that are naturally distributed throughout the day. As with

all strategies we have described, community-referenced instruction is most effective when paired with regularly scheduled CBI (Dymond, 2012; Westling & Fox, 2009).

Simulations are instructional opportunities that approximate the conditions that are found in natural community environments (Dymond, 2012). These simulations can include opportunities to practice skills and role-play within the school or classroom. For example, students can practice purchasing (Xin, Grasso, DiPipi-Hoy, & Jitendra, 2005), using a cell phone (Tabor, Alberto, Seltzer, & Hughes, 2003), or ordering in a restaurant (Mechling & Cronin, 2006). Likewise, students who experience difficulties with social skills can engage in additional role-playing sessions with teachers and peers. These simulations can be presented naturally or through video technology.

Social Stories

Some students may struggle with the social skills needed to successfully complete community-based activities, such as interacting with a cashier when making a purchase, asking for help if a problem arises in a community setting (e.g., public bus is running late), and knowing how to approach different situations that require specific social skills (e.g., entering a quiet setting such as a doctor's office or community library). Social stories, most frequently used with individuals having autism spectrum disorder (ASD), are short individualized stories used to help people understand what to expect from a given situation in terms of what others may be doing, saying, and feeling (Gray & Garund, 1993). Supplementing CBI with social stories may occur through repeated readings of stories describing community-based events in the classroom before practicing skills in actual community settings. Used as a supplement to scheduled community visits, this strategy may improve successful social interactions and overall behavior in communitybased settings by reinforcing key skills and behaviors.

Selecting School-Based Instructional Practices

To select the most effective schoolbased instructional approaches to support CBI, teachers should follow the four steps described next. We offer two examples to illustrate the use of these steps with two different students with severe disabilities.

Review IEPs to Identify Needed Skills

First, teachers need to review their students' individualized education programs (IEPs) to identify skills that students will need to use to be functional in community environments. This review is particularly important for students in transition from school to adult life in the community. Examples of important skills include making a purchase at a store, ordering from a menu, selecting grocery items in a supermarket, completing job application forms, and identifying and boarding the correct bus.

Assess Student Skills to Select Appropriate Strategies

Assessment of strengths and needs will save valuable time and avoid instances of teaching skills that are known or require prerequisite skills. The community-skills needs assessment in Table 1 highlights considerations that the IEP team should make when planning how to approach supplements to CBI. When used as an assessment tool, CBI can provide important information about known and needed skills and assist in planning for instruction (see Table 2 for areas to assess).

For example, if the teacher discovers that a student understands and completes the steps required for a skill (e.g., purchasing), but struggles with social skills (e.g., communicating with the cashier) then role-play or social stories may be the most appropriate means of instruction. If the teacher discovers that the student does not understand the procedure needed for completing a skill, then instruction will need to focus on the steps required to complete the skill through a mix of simulated, video-based, and actual task completion. On the other hand, if the

teacher finds that the student simply needs to become fluent with the task. that is, the student understands how to complete the skill, but is inconsistent in performance, then repeated practice will be the course of instruction. Finally, if the needs assessment indicates that the student can complete the skill in some settings and situations, but not in other similar settings and situations, then it may be an issue with generalization. In this case, introducing a variety of materials (general case instruction) would be necessary.

Implement School-Based Instruction Concurrent With CBI

Once teachers select appropriate school-based instructional approaches, the teachers should use these strategies concurrent with regularly scheduled CBI. During CBI, teachers can note where students are struggling with the activities being taught and can then target their school-based instruction to provide extra practice. For example, if CBI on making a purchase in a store reveals that a student struggles with identifying the amount due, then teachers need to provide extra practice with the skill. Because students with severe intellectual disabilities tend to acquire new skills at a slower pace and often have difficulty generalizing skills, teachers should schedule instruction to occur as frequently as possible in both school and community settings.

Assess Progress and Modify Instruction If Necessary

As teachers provide both CBI and regular practice at school, they need to assess student progress with skill development in both school and the community. Such ongoing assessments may result in teachers selecting alternative school-based strategies. For example, if CBI shows that a student can make a purchase successfully in one store but not in others, then teachers could use general case instruction in the classroom, combined with videobased instruction, to provide the student with extra practice on identifying the correct amount due when that information is provided in different formats in different stores. Or, if a CBI

Table 1. Community Skills Needs Assessment

Student Name: Date:		
Community-Based Skill:		
Procedural		
Student can complete skill when asked.	Yes	No
Parent reports that skill is known.	Yes	No
Student has been taught or exposed to skill.	Yes	No
Social Skill		
Student demonstrates appropriate social behavior.	Yes	No
Student demonstrates verbal or pragmatic communication abilities.	Yes	No
Fluency		
Parent reports that student performs skill consistently.	Yes	No
Student completes skill quickly.	Yes	No
Student demonstrates fluency.	Yes	No
Generalization		
Skill completion is consistent between settings.	Yes	No
Skill completion is consistent when materials are varied.	Yes	No
Student can complete skill under different conditions.	Yes	No

Note. If "no" is circled, refer to guidelines in Table 2.

assessment reveals that a student fails to respond to social overtures in community settings, then teachers may use social stories as an additional instructional approach.

Samantha

Samantha, a 15-year-old student with autism and intellectual disabilities, required instruction of key community-based skills as per her most recent IEP. In particular, her IEP team identified the following skills that Samantha needed: independently selecting and purchasing meals, accessing and riding the public bus, and purchasing three to five items in a grocery store to prepare a small meal. Samantha's school was located in a rural setting, and CBI trips were scheduled twice a month. These

skills are important for Samantha to reach her transition goals of working in the community, living in her own apartment with support, and participating in community recreation activities.

Samantha's teacher first completed the community-skills needs assessment to pinpoint her specific target areas. The teacher discovered that Samantha struggled primarily with social skills and generalization. Samantha's teacher developed social stories for the skills noted in Samantha's IEP. Each story included details from Samantha's daily life (see box, "Sample Social Story for Samantha"). In addition, Samantha and her teacher practiced interactions that would likely arise in a purchasing situation. Her teacher first modeled for Samantha how to listen for a total

amount due, pay the cashier, and say thank you. Next, the teacher asked Samantha to repeat the model. Finally, the teacher acted as the cashier to allow for a more natural exchange in practicing the modeled skill. Samantha's teacher then worked on the skills necessary for generalization by taking interior and exterior photographs of local grocery stores (selected according to a general case analysis) and making a computer slide show for Samantha (see box, "Sample Photographs of Grocery Stores for Samantha"). She also taped short video clips of people ordering lunch in several different fast food restaurants and sit-down diners and loaded them onto a laptop computer for Samantha to watch. The teacher presented these supplements to

Table 2. Guidelines for Instruction

Procedural Problem	Supplement regular CBI visits with classroom instruction. Use video based prompting.
Social Skills Deficit	Use video modeling. Role play in classroom prior to CBI visits. Use social stories.
Fluency Problem	Encourage parents to supplement instruction with practice during family routines. Use community referenced instruction and simulations.
Lack of Generalization	Use general case instruction to select materials that show the range of situations that the student will encounter in the community. Use general case instruction to select situations to show the student using video technology.

Note: CBI = community-based instruction.

Samantha several times a week to prepare her for her scheduled CBI trips. During CBI trips, the teacher collected data on Samantha's progress with each skill by using task analyses and skill checklists. During these trips, the teacher observed specific skill areas that Samantha needed to improve and targeted these areas for additional classroom instruction. For example, because Samantha continued to have difficulty interacting with the cashier, her teacher conducted several role-play sessions in the classroom to practice natural exchanges that would take place with a cashier in the community. The teacher frequently reported on Samantha's progress to the team and continued making changes as needed.

ing long-term transition goals for adulthood: work in the community through supported employment, live in a community residence with support, and actively participate in his local community. Matt's teacher first reviewed his IEP to identify skills that he needed to learn and that would be used primarily in community environments. His IEP contained annual goals and short-term benchmarks (objectives) related to these skills: completing work activities with less supervision and prompting while in community-based work exploration sites, making purchase of up to \$20 in local stores, selecting and purchasing groceries from a grocery list of up to 10 items on a pictorial shopping list, crossing streets without assistance,

Many teachers find that providing additional independent work practice in school contributes positively to students' ability to work for longer periods of time at their community-based job site.

Matt

Matt is 16 years old and experiences severe intellectual disabilities. The transition section of his IEP lists the follow-

and responding appropriately to greetings from others in the community. Matt's teacher then assessed his abilities related to each of these goals dur-

ing the first month of school and determined that, although he could work well while at the community work sites, he needed more practice to work for longer periods (fluency problem). The teacher also discovered that he did not know the steps for making a small purchase or selecting groceries from a pictorial shopping list (procedural problems). Matt knew how to cross the street outside of the school, but not other streets in town; and his ability to greet people correctly was restricted to those with whom he was familiar (generalization problems). With this information, Matt's teacher selected the following school-based strategies to support CBI:

- · Having Matt work independently in the classroom for longer periods of time with fewer prompts to increase his fluency with independent work.
- Providing additional practice making small purchases by using naturally occurring opportunities in the cafeteria, supported by practice and role-playing in the classroom to help Matt master the steps of this skill.

Sample Social Story for Samantha

- Sometimes I eat lunch at a restaurant.
- When I get to the restaurant, I wait in line and look at the menu until it is my turn.
- When it is my turn, I will tell the cashier what I would like to eat. She will tell me how much it costs. My teacher will help me get my money out and I will hand it to the cashier. She may give me change.
- I will remember to say thank you to the cashier.
- I will wait for my food. When my food is ready, I will take it to a table.

Sample Photographs of Grocery Stores for Samantha











Providing additional practice selecting groceries using photos loaded onto a computer that showed different shelves in local stores, which allowed Matt to practice matching the items located on his list to the

Final Thoughts

Regularly scheduled, frequent CBI is essential for the instruction of students with severe disabilities. Many teachers find it extremely challenging to use CBI as frequently as their students

The practice using photos provided Matt with increased practice opportunities to identify the correct items from a grocery list, and his teacher noted that he was making faster progress while out in the community.

corresponding items on the shelves.

- Using general case instruction coupled with video technology to bring different cues for safely crossing a street (different crosswalk signals and videos of cars passing or stopping) into the classroom to increase his ability to identify when to safely cross the street.
- Using general case instruction combined with naturally occurring opportunities to practice greeting both familiar and unfamiliar people.

Matt's teacher used these strategies and assessed their influence on his ability to complete the activities in natural community environments with greater independence. She found that providing additional independent work practice in school contributed positively to Matt's ability to work for longer periods of time at his communitybased job site. Also, by practicing the steps for making purchases in school, Matt was better prepared to complete this activity in stores during CBI. The practice using photos provided Matt with increased practice opportunities to identify the correct items from a grocery list, and his teacher noted that he was making faster progress while out in the community. Finally, Matt's teacher noted that the use of general case instruction in the classroom to provide extra practice in teaching him how to recognize when to cross a street safely or how to greet different people was paying off in his increased abilities when out in the community.

need. Even if teachers are able to visit the community for frequent practice of skills, the strategies described in this article can enhance community-based instruction trips and potentially facilitate faster skill acquisition. These strategies may form an important support system for students to practice skills they need to use out in the community-skills that students find useful in responding to the variety of tasks and settings that they encounter in daily community activities.

References

- Allen, K. D., Wallace, D. P., Greene, D. J., Bowen, S. L., & Burke, R. V. (2010). Community-based vocational instruction using videotaped modeling for young adults with autism spectrum disorders performing in air-inflated mascots. Focus on Autism and Other Developmental Disabilities, 25, 186-192. http://dx.doi .org/10.1016/0270-4684(85)90003-5
- Cannella-Malone, H., Sigafoos, J., O'Reilly, M., de la Cruz, B., Edrisinha, C., & Lancioni, G. E. (2006). Comparing video prompting to video modeling for teaching daily living skills to six adults with developmental disabilities. Education and Training in Developmental Disabilities, 41, 344-356.
- Dymond, S. (2012). Community participation. In P. Wehman & J. Kregel, (Eds.), Functional curriculum for elementary and secondary students with special needs (3rd ed., pp. 351-387). Austin, TX: Pro-
- Graves, T. B., Collins, B. C., Schuster, J. W., & Kleinert, H. (2005). Using video prompting to teach cooking skills to secondary students with moderate disabilities. Education and Training in Developmental Disabilities, 40, 34-36.
- Gray, C. A., & Garund, J. D. (1993). Social stories: Improving response of students with autism with accurate social informa-

- tion. Focus on Autistic Behavior, 8(1), 1-10.
- Hansen, D. L., & Morgan, R. L. (2008). Teaching grocery store purchasing skills to students with intellectual disabilities using a computer-based instruction program. Education and Training in Developmental Disabilities, 43, 431-442.
- Horner, R., Sprague, J., & Wilcox, B. (1982). General-case programming for community activities. In B. Wilcox & G. T. Bellamy (Eds.), Design of high school programs for severely handicapped persons (pp. 61-98). Baltimore, MD: Paul H. Brookes.
- Mechling, L. C., & Cronin, B. (2006). Computer-based video instruction to teach the use of augmentative and alternative communication devices for ordering at fast-food restaurants. The Journal of Special Education, 39, 234-245. http://dx .doi.org/10.1177/00224669060390040401
- Mechling, L. C., & O'Brien, E. (2010). Computer-based video instruction to teach students with intellectual disabilities to use public bus transportation. Education and Training in Autism and Developmental Disabilities, 45, 230-241.
- Snell, M., & Brown, F. (2011). Instruction for students with severe disabilities (7th ed.). Boston, MA: Pearson.
- Tabor, T., Alberto, P., Seltzer, A., & Hughes, M. (2003). Obtaining assistance when lost in the community using cell phones. Research and Practice for Persons With Severe Disabilities, 28, 105-116. http:// dx.doi.org/10.1177/1088357610380412
- Van Laarhoven, T., Kraus, E., Karpman, K., Nizzi, R., & Valentino, J. (2010). A comparison of picture and video prompts to teach daily living skills to individuals with autism. Focus on Autism and Other Developmental Disabilities, 25, 195-208.
- Westling, D., & Fox, L. (2009). Teaching students with severe disabilities (4th ed.). Upper Saddle River, NJ: Merrill-Pearson.
- Xin, Y., Grasso, E., DiPipi-Hoy, C., & Jitendra, A. (2005). The effects of purchasing skill instruction for individuals with developmental disabilities: A meta-analysis. Exceptional Children, 71, 379-400.

Daniel E. Steere (Pennsylvania CEC), Professor; and Caroline DiPipi-Hoy (Pennsylvania CEC), Assistant Professor, Department of Special Education and Rehabilitation, East Stroudsburg University of Pennsylvania, East Stroudsburg.

Address correspondence concerning this article to Daniel E. Steere, Department of Special Education and Rehabilitation, East Stroudsburg University, 200 Prospect Street, East Stroudsburg PA 18301 (e-mail: dsteere@po-box.esu.edu).

TEACHING Exceptional Children, Vol. 45, No. 2, pp. 60-67.

Copyright 2012 CEC.

Copyright of Teaching Exceptional Children is the property of Council for Exceptional Children and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.