CHAPTER 12

Life Skills for Secondary Students With Intellectual Disability

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Learning Objectives

After reading Chapter 12, you should be able to:

- Describe the functional learning needs of secondary-age students with intellectual disability.

- Discuss the curricular focus for secondary students with intellectual disability.

- Define transition planning and services and their linkage to life skills instruction.

- Identify some general instructional approaches to teaching life skills to secondary students with intellectual disability.

- Describe the primary components of a secondary-level life skills curriculum.

The transition to adulthood is the primary instructional focus for secondary students with mild/moderate and moderate/severe intellectual disability. The time they spend in secondary education should be centered on their preparation for living autonomously in the community, obtaining and maintaining employment in a desired vocation, and actively participating as an adult within their community. In this chapter, we will examine the learning needs of secondary students with intellectual disability when preparing for their transition to post-school settings; describe the life skills typically targeted for these individuals; discuss the various settings in which instruction takes place and the general instructional approaches that are effective when preparing young adults for living, working, and recreating in integrated post-school environments; and the specific components of a life skills curriculum and how these may be embedded within the special education curriculum or solely within a life skills curriculum to meet individualized student needs.

OVERVIEW OF LIFE SKILLS FOR SECONDARY STUDENTS WITH INTELLECTUAL DISABILITY

Individuals with intellectual disability represent approximately 7 percent of students who attend public schools in the United States (National Center for Education Statistics, 2016). Of these, approximately 91 percent participate in varying degrees in general education placements (National Center for Education Statistics, 2015). Most of these students at the secondary level are served in a combination of special education classrooms—resource, self-contained, and community-based environments. While in these settings, they participate in the general education curriculum and learn the functional academics and life skills to meet post-school needs. Because individuals with intellectual disability are at risk for unemployment or underemployment, a particular focus at the secondary level is preparation for postsecondary education and employment (Petner-Arrey, Howell-Moneta, & Lysaght, 2015).

Chapter 10 described life skills as those skills that result in an individual's active participation in everyday activities in the areas of daily living, recreation and leisure, community functioning, and employment. In an instructional program in which students with intellectual disability are exposed to life skills as part of their preschool and elementary curriculum, they are better prepared to engage in increasingly complex activities that integrate academics with functional skills at the secondary level (Agran & Hughes, 2014). While making

FIGURE 12.1 Curricular Emphasis for Secondary Students With Intellectual Disability
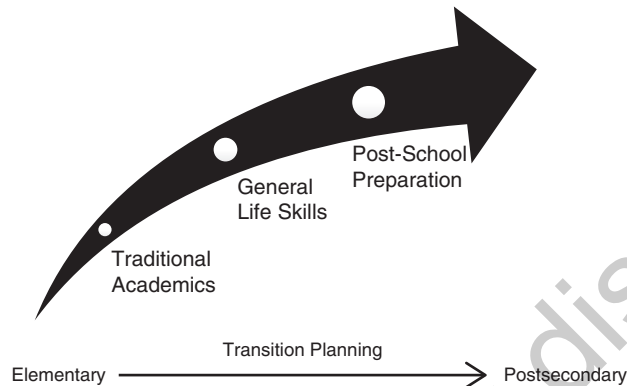
progress in the general education curriculum remains important for older students with intellectual disability, the instructional emphasis moves to life skills as they progress toward the post-school environment (Wandry, Wehmeyer, & Glor-Scheib, 2013). More specifically, instruction shifts from acquiring the foundational academic skills for classroom success to the specific life skills that will lead to post-school goal attainment in home, community, and work settings. Figure 12.1 illustrates this movement from elementary to post-school settings.

The National Longitudinal Transition Study-2 (NLTS2) was conducted between 2000 and 2009 and documented the in-school and post-school experiences of individuals with disabilities who started and then exited secondary school during the time frame. NLTS2 data revealed that students with intellectual disability were less likely to pursue postsecondary education or obtain competitive employment after leaving high school (Grigal, Hart, & Migliore, 2011). Investigators who analyzed these data also found low rates of independent living and confirmed low employment among individuals with intellectual disability (Newman, Wagner, Cameto, & Knokey, 2009). Over the same period, studies verified the positive impact of life skills programming for students with intellectual disability, reporting increased employment, life satisfaction, graduation rates, and postsecondary education participation (Benz, Lindstrom, & Yovanoff, 2000; Miller & Chan, 2008). While instructional programming in the NLTS2 was not described in detail, reports indicated that students with

intellectual disability were taught in both general education classrooms and self-contained settings with curricular emphasis varying between the general education curriculum and functional life skills (Bouck, 2012; Bouck & Joshi, 2012). Yet, Bouck (2010) found that increasingly fewer pupils with intellectual disability have access to life skills training at the secondary level. As such, emphasis must center on preparing individuals to meet their post-school goals and include instruction in life skills.

The philosophical foundation for focusing instruction on life skills for students with intellectual disability is grounded in the ideals of social role valorization (Wolfensberger, 1983). Three central concepts are embedded within this model and include the criterion of ultimate functioning (Brown, Nietupski, & Hamre-Nietupski, 1976), the dignity of risk (Perske, 1972), and the competency–deviancy hypothesis (Gold, 1980). These concepts concentrate on the core values and philosophies that drive today's service delivery for individuals with intellectual disability. Each concept also reinforces the necessity for providing life skills to those who might not naturally acquire these skills and who are at risk for community isolation and devaluation.

Social role valorization (SRV) is the practice of creating or supporting socially valued roles for all individuals at risk of social devaluation so that they are afforded the benefits provided to valued citizens (Wolfensberger, 1983). These benefits include enhancement of their social image in physical settings (where they live and participate with other valued individuals), relationships (social integration), activities (age-appropriate and integrated activities), language (labels), and image (personal appearance). Ultimately, it is about attributing value and positively communicating about each person who otherwise might be considered undesirable or without value. The practice of using person-first language when referring to an individual with a disability is one outcome of social role valorization.

Couched within the social role valorization framework is the **criterion of ultimate functioning** in which an individual possesses the skills to "function as productively and independently as possible in socially, vocationally, and domestically integrated community environments" (Brown et al., 1976, p. 11). Educational assumptions and practices that deviate from an individual's active and autonomous participation in these environments should be avoided. For example, denying a student access to interactions in integrated settings with typically developing peers because his or her behavior is not considered

TABLE 12.1 Questions for Determining the Criterion of Ultimate Functioning

1. Why should we engage in this activity?
2. Is this activity necessary to prepare students to ultimately function in complex heterogeneous community settings?
3. Could students function as adults if they did not acquire this skill?
4. Is there a different activity that will allow students to approximate realization of the criterion of ultimate functioning more quickly and more efficiently?
5. Will this activity impede, restrict, or reduce the probability that students will ultimately function in community settings?
6. Are the skills, materials, tasks, and criteria of concern similar to those encountered in adult life?

SOURCE: L. Brown, J. Nietupski, and S. Hamre-Nietupski, The criterion of ultimate functioning and public school services for severely handicapped students. In M. Thomas (Ed.), *Hey, Don't Forget About Me: Education's Investment in the Severely, Profoundly, and Multiply Handicapped* (Reston, VA: Council for Exceptional Children, 1976), pp. 2–15.

acceptable will lead to missed opportunities to teach and use appropriate social, behavioral, and communication skills within natural contexts. Because secondary students with intellectual disability are nearing their transition to post-school settings, training in life skills should take precedence. Table 12.1 presents the questions that should be asked when determining the criterion of ultimate functioning for individuals and will help determine whether or not an activity or skill is appropriate.

The desire to protect individuals from potential harm is one reason people with intellectual disability are denied opportunities to engage in activities, environments, and interactions in integrated settings without direct oversight from someone without a disability. For example, persons with intellectual disability are often prevented from choosing where they live, what and when they eat, what they do during their free time, or with whom they socialize by caregivers or others who fear for their safety or their exposure to risk. Yet, children, teenagers, and adults without a disability are regularly provided these opportunities. The **dignity of risk** purports that there is human dignity afforded to persons who take risks and that in doing so they are not restricted from actively participating in an integrated society (Perske, 1972). As students with intellectual disability progress through elementary and secondary settings in preparation for post-school environments, they should be expected to take risks, engage in self-determined behaviors, and make decisions and choices based on their own preferences with greater constancy. While precautions can be taken to decrease

TABLE 12.2 Dignity of Risk Principles

1. Adults should make their own decisions and be afforded the opportunity to do so.
2. Reasonable supports and assistance to make independent decisions should be provided before others assume that responsibility.
3. Adults have the right to make decisions that are opposed to the decisions of others. They also have the right to experience the consequences based on those decisions including failure.
4. An individual's best interests and preferences must be considered for any decision made on behalf of that individual and must not infringe on his or her "basic rights and freedoms."

SOURCE: Adapted from the Dignity of Risk Project, *Our Perspective on the Dignity of Risk and the Care of Older Adults*. Retrieved October 2, 2016, from www.qorf.org.au/what-is-the-dignity-of-risk/

the likelihood of negative consequences from taking risks, no one should be denied the opportunity to participate in the human experience as "there can be a dehumanizing indignity in safety" (Perske, 1972, p. 26). Table 12.2 describes the basic principles to consider when working with those considered at risk.

The **competency–deviancy hypothesis** (Gold, 1980) is the third concept tied to the social role valorization paradigm that addresses the impact of how we prepare students with a disability for integrated society and for how they will be perceived by others. This hypothesis describes the tolerance of community members for behaviors that attract negative attention when demonstrated by individuals typically at risk for being devalued. For example, the ability to successfully care for oneself, interact with others, manage personal finances, complete a job, and independently move throughout the community (walk, drive, ride the bus) are all life skills that facilitate an image of competence. Thus, when a person is regularly able to display competent and valued behaviors and skills in public daily life, society will have greater tolerance when unusual or different behaviors may be exhibited. When considering this idea within the context of social role valorization, priority must be given to preparing all students to display not only socially acceptable behaviors but also those that convey a message of competence. These critical life skills are described later in this chapter.

The settings in which secondary students with intellectual disability receive instruction are similar to those described for elementary pupils in Chapter 10. Instructional settings are dependent on each student's learning needs and where best to meet those needs. While some secondary pupils may spend extensive

time learning content in subject-specific classes (Spooner & Browder, 2015), others will receive instruction in alternative school and community-based settings. According to McLeskey, Landers, Williamson, and Hoppey (2012), as students with intellectual disability get older, they receive less instruction in general classroom settings. This may be attributed to meeting individual learner goals and teaching them in those settings in which target skills will be used. As such, educators must continually balance a student's right to access the general education curriculum with the impending necessity to acquire the skills that lead to successful community living and access, employment, and social relationships (Ayres, Lowrey, Douglas, & Sievers, 2011).

When individuals with intellectual disability are taught in general education classes, the instructional focus is often on actively participating in and learning the content being taught. However, to be effective, these learners may require instructional accommodations to learn the academic content due to the "emphasis on verbal skills, ability to recall information quickly, and the ability to focus on a teacher standing at the front of the room" (Downing, 2010, p. 5). While they can acquire anything (Spooner & Browder, 2015; Taber-Doughty, 2015), the majority who receive content instruction in secondary general education classes are frequently those with a mild intellectual disability whereas those with more severe levels are mostly taught in alternative school and community environments (McLeskey et al., 2012). When life skills are addressed in subject-specific classes, they may be embedded within the context of instruction. For example, a student included in a first-year foreign language class might learn the English version of the basic vocabulary that his classmates are learning in Spanish. When a spelling test over vocabulary words occurs at the end of the week, the target student demonstrates his mastery of new words by reading each word to his classmates so that they may translate it on their test. By embedding life skills, teachers are able to link developmentally appropriate curricular content with meaningful skills.

For learners taught in alternative school and community-based environments, the instructional focus typically centers on either academic remediation or life skills with a specific emphasis on preparing for post-school employment (Ayres, Mechling, & Sansosti, 2013). **Community-based instruction (CBI)** and **community-based vocational instruction (CBVI)** are the models used to teach students skills such as using public transportation, banking, shopping, and job-specific work behaviors. Different from field trips, which are single outings into the community (such as a trip to the museum or zoo),

community-based instruction and community-based vocational instruction allow for ongoing training in the real environments in which skills will be used and provide natural opportunities for life skills practice. Community-based instruction also facilitates the use of age-appropriate activities and the generalization of skills across multiple environments. When preparing students for competitive employment, community-based vocational instruction will center on general work adjustment behaviors and on-the-job training (remaining focused on a task, performing specific motor functions) within the context of real job settings. Table 10.14 in Chapter 10 (page 297) provides a list of vocational skills and behaviors as well as life skills examples. (See also page 281 for more on CBI and page 350 for more on CBVI.)

Performance success while participating across environments for students who participate in a life skills curriculum may be determined by their ability to fully or partially partake in activities. Secondary learners with intellectual disability vary greatly in their capacity to complete tasks autonomously or with accuracy. For those who generally acquire life skills quickly and are able to apply them to a variety of situations, the potential for post-school achievement is good. Yet, individuals who struggle with fully participating in activities with independent success may require an alternate criterion for participation. The **principle of partial participation** describes how individuals who are unable to complete all aspects of a task or activity still may be actively engaged or contributing by completing only parts of it (Baumgart et al., 1982). In other words, all students with intellectual disability, regardless of severity, can at least partially take part in any activity. Within the context of preparing for postsecondary and/or community involvement, this principle suggests that even partial participation will promote students' self-determination that may contribute to later quality of life (Wehmeyer, 2007; Wehmeyer & Schwartz, 1998).

TRANSITION PLANNING AND SERVICES

The Individuals with Disabilities Education Act (1990) (PL 101–476) provided the impetus for post-school planning by requiring that **transition services** be identified for all students with a disability. According to this legislation, transition services are

> a coordinated set of activities for a child with a disability that is designed to be within a results-oriented process, that is focused on

improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; is based on the individual child's needs . . . ; and includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and provision of a functional vocational evaluation. (34 C.F.R. Part 300/A/§ 300.43)

These services must begin no later than when a student reaches age 16 but may be included in his or her individualized education program (IEP) prior to that age. Because these services foster preparing students to enter and participate in integrated post-school settings, ensuring that life skills are addressed at this time holds even greater importance.

Teachers of secondary students with intellectual disability should always begin their instructional planning around a young adult's **individualized transition plan (ITP)**. This plan is a part of a student's IEP and specifically identifies the post-school outcomes that students want to achieve. Transition recommendations are made within the ITP for postsecondary training and adult living, community experiences, daily living, instruction, employment, and related services. Once these are identified, annual IEP goals and objectives are then determined for a student. (Under IDEA 2004, short-term objectives are only required in an IEP for students who take alternate assessments aligned with alternate achievement standards.) For example, if 16-year-old Daniel indicates that he wants to live in his own apartment with a roommate after graduation, work in a job in the movie theater industry, hang out with friends on the weekend, and ride a bicycle to various community localities, instruction will center on preparing him for ultimately achieving these desired goals. Thus, the ITP/IEP will determine the focus and location of instruction. The resources and supports needed to meet transition outcomes will be identified and included in the transition services process. See Figure 12.2 for sample transition recommendations for a student with a moderate intellectual disability. (For a full discussion of supported employment, see Chapter 13.)

FIGURE 12.2 Transition Recommendations and Related IEP Goals and Objectives

Student: Tina Thomas

Initial Transition Plan Date: April 13, 2012

Date(s) Transition Plan Reviewed/Revised: 4/12/13, 4/18/14, 4/15/15, 4/15/16

Student Preferences, Needs, and Interests

Tina attended her IEP meeting and expressed her post-school preferences. She indicated that she was interested in graduating with her class at age 18 and then going to work following graduation. Therefore, Tina will need a supported employment position in which a full-time job coach is available for initial and some follow-up training. She also indicated her desire to have her own apartment one day but, at this time, wants to continue to live at home with increased responsibilities. Information needs to be provided to Tina and her family regarding residential support services that Tina may need in the future. Tina has several friends from school, and activities she would like to continue with her friends include working out at the local gym, going to the movies, eating out, and doing crafts. Tina will therefore need assistance with transportation to and from social activities.

Needed Transition Services

Instruction:

1. Enroll in community-based instruction and community-based vocational instruction program. School will be responsible for providing transportation and instruction in community settings.

2. Enroll in exercise program at the local YWCA. Parents will be responsible for transportation and costs.

Related Services

1. Receive support/training services from the speech–language pathologist in communication and speech skills. These services should be provided across school, community, and home settings. The school will be responsible for ensuring these services.

2. Special education staff will provide transportation training and mobility skills (walking routes). School staff and parents will be responsible for training and providing opportunities for practice.

Community Experiences

1. Schedule visits with local residential service providers. School will provide Tina and her family with a listing of residential service providers in the area. Tina and her family will be responsible for scheduling visiting.

2. Receive specific training in community safety skills such as avoiding risks, stranger danger, asking for assistance, and emergencies. School staff and parents will be responsible for providing specific training.

Employment and Other Post-School Adult Living Objectives

1. Enroll in vocational rehabilitation services. School will invite the vocational rehabilitation counselor to the IEP meeting. Parents and Tina will be responsible for completing the intake process with the vocational rehabilitation counselor.

(Continued)

FIGURE 12.2 (Continued)

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2. Financial supports are needed. Tina will complete the application for receiving Social Security. In addition, her salary in her employment position needs to be above minimum wage. School staff will provide Tina and her family with Social Security information and phone numbers and will assist in the application process. The job coach will locate a supported employment position with an appropriate salary.

Daily Living Skills

1. Increase responsibilities at home. School and parents will provide instruction and opportunities to practice meal preparation, clothing care, general housekeeping, and yard maintenance.

2. Self-medicate. Establish a schedule and train Tina to follow in taking diabetes medication. School, parents, and family physician will work collaboratively to establish a schedule and train Tina.

Functional Vocational Evaluation

1. Complete modified vocational interest inventories to assist in the selection of a supported employment position. Special education staff and the school counselor will be responsible for conducting the vocational interest inventories with Tina.

What to Teach Secondary Students With Intellectual Disability

When determining what to teach secondary students with intellectual disability, consideration should be given to their needs identified by assessment and in each IEP and ITP. Planning for and providing recommendations for instruction, related services, community experiences, employment, adult living, and daily living in the transition plan will drive the decisions about what to teach to these secondary students. Transition assessment plays a valuable role in identifying students' needs as they prepare for post-school participation. The Division on Career Development and Transition of the Council for Exceptional Children describes **transition assessment** as a process for gathering information about an individual as it specifically relates to activities in current and future environments (Walker, Kortering, Fowler, Rowe, & Bethune, 2013). It is a formal and informal process that includes multiple measures where results are used to prioritize planning and instruction as students prepare for their transition to work, postsecondary education, community living, and recreational activities. Numerous resources exist for determining what assessments might be appropriate for transition. For example, the Transition Assessment Matrix (Northeast Indiana Cadre of Transition Leaders,

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2015) provides users a list of transition assessments specific for transition domains (employment, independent living, education/training), student grade level, and disability. The key to gathering meaningful information about an individual's transition needs is to use multiple measures that include information from the student, family members, teachers, and others who are familiar with the individual. Once information is gathered and results are reviewed, IEP/ITP recommendations are generally developed. Figure 12.3 provides an example of how IEP annual goals and short-term objectives may be aligned to the transition recommendations for each life skill domain. Within each goal and objective, the foci for instruction lead to meeting the post-school outcomes needed.

To address the transition recommendations within each of the life skill domains, instruction should include a focus on self-determination skills. **Self-determination** is an individual's ability to make his or her own life decisions and is illustrated by the following for components of behavior: autonomy, self-regulation, psychological empowerment, and self-realization (Flexer, Baer, Luft, & Simmons, 2013; Wehmeyer & Schwartz, 1997). **Autonomy** refers to behaviors that are directed by personal choice and decision making (Niemiec & Ryan, 2009). Students who are autonomous are able to express their choices and make decisions about their wants, needs, likes, and dislikes. **Self-regulation** is the ability to plan for the future, manage one's own behavior, and solve problems. When individuals self-regulate, they are able to save their money for desired purchases, demonstrate socially acceptable public and private behaviors, and determine a solution for getting to work on time when the bus is late. Individuals who are self-determined also learn that what they do and say is important and that others will respond accordingly. This state of mind is known as **psychological empowerment** in which individuals believe that their thoughts and actions matter and have an impact on their daily life (Wehmeyer & Schwartz, 1997). Finally, **self-realization** is the ability to recognize one's own strengths and limitations (Wehmeyer & Schalock, 2001). Individuals who understand self-realization are able to highlight their strengths to others and ask for accommodations where they may have challenges.

Overall, self-determination is a critical component of life skills instruction for secondary students with intellectual disability due to its beneficial effect on post-school outcomes including employment, independent living, and financial independence (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). Specific

FIGURE 12.3 Alignment of IEP Goals and Objectives With Transition Recommendations per Life Skills Domain

COMMUNITY DOMAIN

Transition Outcome Recommendation

Use self-advocacy skills at home, on the job, and in various community settings

IEP Annual Goal

- Tamara will identify her own vocational strengths, weaknesses, and necessary accommodations.

Short-Term Objectives

- Tamara will verbally indicate three of her vocational strengths and weaknesses when asked by an interviewer, coworker, or teacher in both real and role-playing situations in school and vocational settings, independently in eight of ten opportunities.
- During role-playing activities with teachers and novel individuals in school and community settings, Tamara will state her need for additional lighting at her workstation independently in eight of ten opportunities.

Instructional Strategies

- Tamara's teacher verbally confirms Tamara's vocational strengths and weaknesses during classroom and vocational activities. He asks Tamara to identify her strengths during multiple occasions. As well, Tamara completes a daily checklist that identifies task success and challenges. During role-playing and actual vocational activities, Tamara is asked to refer to her checklist and then verbally describe her strengths and weaknesses. Coaching is provided to simplify descriptions and offer solutions to accommodate any weaknesses.
- When there is a need for additional lighting, the teacher will prompt Tamara to verbally state, "I need more light to see my work." Tamara also will be prompted to approach her direct supervisor (paraprofessional, teacher, or co-worker) to make her verbal request.

VOCATIONAL DOMAIN

Transition Outcome Recommendation

Obtain a supported employment position in the food services industry

IEP Annual Goal

- Charles will participate in three community-based vocational training sites for the 2016–2017 school year.

Short-Term Objectives

- With indirect supervision, Charles will train in the food services cluster working on dishwashing skills for a range of 6 to 8 hours per week, for six out of eight training sessions, for no more than 215 hours.
- Given a picture prompt, Charles will identify and correct errors 80 percent of the time for five days in a variety of community sites (restaurants, library, post office).

Instructional Strategies

- Charles will practice loading trays in the school cafeteria and in the classroom kitchen. He will also use the industrial sink sprayer to rinse dishes before loading them onto trays for washing.

- Charles will practice using picture prompts for completing familiar and unfamiliar tasks in the classroom and community.

RECREATION/LEISURE DOMAIN

Transition Outcome Recommendation

- Participate in a variety of recreation/leisure activities at home and in the community

IEP Annual Goal

- Ellen will participate in at least three school- and community-based recreation/leisure activities during the school year.

Short-Term Objectives

- During gym, Ellen will increase the amount of weight she lifts by 5 percent over baseline performance over a six-week period.

- While in the community, Ellen will maneuver her wheelchair up and down ramps without assistance during 100 percent of opportunities for the entire school year.

Instructional Strategies

- Across the school day, the teacher will prompt Ellen to lift and retrieve her own materials around instructional settings to complete tasks. Furthermore, during physical activities in the community such as bowling, she will be prompted to lift and roll bowling balls of increasing weights over time.

- Ellen will be provided practice in maneuvering herself when transitioning from the school bus to the building, moving between classes, and crossing streets.

DOMESTIC DOMAIN

Transition Outcome Recommendations

- Live semi-independently in an apartment with a roommate with supervision provided by Acme Residential Supports

IEP Annual Goal

- Sally will learn to prepare simple meals in a variety of settings.

Short-Term Objectives

- Sally will operate independently a microwave oven to prepare a meal at home, at school, and on the vocational training site for two days each week for twelve weeks.

- Given a list of five items needed to prepare a simple meal, Sally will locate and purchase these items with indirect supervision one time per week for twelve weeks.

(*Continued*)

Instructional Strategies

- Digital pictures and video prompts will be used to teach Sally to operate a microwave oven. Different microwave ovens will be operated according to the environment (school, work-site break room). Picture prompts will be shared with parents to be used at home to facilitate learning.
- Self-recorded audio prompts will be used in school and grocery settings to facilitate accurate grocery shopping skills.

self-determination skills include choice and decision making, problem solving, goal setting, independence, self-management, self-instruction, self-advocacy, and self-awareness (Wehmeyer & Schalock, 2001). Instruction in these and other related self-determination skills should be interwoven with functional life skill practice and acquisition. Embedding these skills will not only help to make them practical and relevant for the student, but will also help to bridge the gap between initial learning and later generalization of the skill for use among multiple contexts. Table 12.3 provides the definitions of each self-determination skill and examples of how these may look in a life skills curriculum.

GENERAL INSTRUCTIONAL APPROACHES

The general instructional approaches described in Chapter 10 continue to be relevant and effective strategies for secondary students with intellectual disability. Using a task analysis approach, group, simulation, in vivo, and community- and technology-based instruction are all grounded in research to support their continued use with these students as they prepare for the transition to post-school settings and activities. However, of particular importance are those strategies related to expanded community-based experiences and those within vocational settings. Test et al. (2009) noted that experiences within community settings were one of sixteen predictors for achieving post-school outcomes for students with a disability. Cimera (2010) indicated that, when employed, young adults with intellectual disability who participated in community-based vocational instruction while in a secondary program required fewer supports. Thus, specific instructional methods should be emphasized including simulation approaches, technology-based strategies, and natural supports to increase the likelihood of meeting post-school outcomes.

TABLE 12.3 Self-Determination Skills: Definitions and Examples

SELF-DETERMINATION SKILL	DEFINITION	EXAMPLES OF PROVIDING INSTRUCTION
Choice making	Identify the most appropriate and/or desired option between two or more viable options	• Student is prompted to choose a lab partner in science class.
Decision making	Make a decision based on the best information available	• During a writing activity for sending an e-mail response, student completes a checklist to identify critical information before composing her e-mail.
Problem solving	Identify a problem and a workable solution	• Student decides what to do when she incorrectly solves a math problem. • Student adapts to a change in the schedule.
Goal setting	Articulate dreams and desires into manageable goals	• During consumer science class, student engages in interview role-playing to describe current and future employment goals.
Independence	Manage environments with minimal assistance	• Student uses a picture prompting system to retrieve specific athletic materials (balls, hoops, cones) during physical education class.
Self-management	Control one's own behavior	• Student carries and refers to a behavior card in his pocket as a reminder of acceptable classroom behaviors.
Self-instruction	Learn new information and skills without the direct help of others	• Student uses a self-operated video modeling system to locate desired books in the school library.
Self-advocacy	Make one's own needs and desires known	• When encountering difficulty completing a math assignment, student asks for peer assistance and describes his difficulty.
Self-awareness	Understand one's own unique strengths and limitations	• During a career exploration class, student searches Internet websites for employment opportunities that match his strengths and interests.

Community-based instruction (CBI) and **community-based vocational instruction (CBVI)**. An effective CBI program requires multiple trips into the community for instruction and preparing students to generalize the skills they are learning. Yet, financial challenges may exist that prohibit multiple excursions per week. As such, **simulation** might be used when access to community-based settings is limited (Mechling & O'Brien, 2010). While not a replacement for CBI or CBVI, simulation is an approach that is used to replicate and reinforce the instruction and community environment where skills will be learned and activities will take place (Bouck, Taber-Doughty, & Savage, 2015). Its benefit is that it allows for repeated practice and reinforcement of community skills. Simulations may be in the form of artificial or modified materials and settings such as a digital video of a task being performed in the actual environment, interactive simulations used in virtual and augmented reality programs, static picture systems, and a modified environment that provides opportunities to practice skills with real materials such as purchasing a newspaper from a newspaper stand temporarily located in the classroom (Alberto, Cihak, & Gama, 2005; Cuvo & Davis, 1983; Mechling & Ortega-Hurndon, 2007).

When developing a CBI/CBVI program, planning should center on addressing students' IEPs and ITPs within community contexts. Planning should include obtaining parental consent and making specific arrangements regarding daily procedures, prioritizing skills, and data collection (Bouck et al., 2015). Obtaining parent consent for their son or daughter to receive instruction in settings outside of the school building should be the first step in facilitating CBI or CBVI. Within the form for consent, information should be given about the rationale for CBI, the types of skills students will learn, and the environments in which instruction will take place when requested from parents. Establishing a weekly or monthly calendar of instructional events and locations to be shared with parents and other stakeholders (school staff or administrators) is helpful for communicating the activities that will take place, where instruction will occur, and the specific skills that will be taught.

In addition to receiving consent and informing parents and others of CBI/CBVI activities, daily procedures must be established to ensure student safety in community settings. These include emergency procedures (emergency contact information, medical information, how to respond to and report emergency

situations to parents and school office) and student preparation (carrying official identification, how to seek assistance if lost or in trouble, how to dress appropriately for the community setting) (Bouck et al., 2015). Table 12.4 summarizes additional areas of consideration when preparing for and prioritizing skills for CBI and CBVI. As foundational procedures are set in place and tailored to each individual school situation, preparation for targeted instructional skills and data to be gathered is then determined. In addition, recommendations for the amount of time students should spend participating in CBI are provided in Table 12.5.

Skills identified as priorities for training are derived from previous measurements (ecological inventories and transition assessments) and are included in

TABLE 12.4 Community-Based Instruction/Community-Based Vocational Instruction Priorities

1. Skills that are frequently required or performed by the individual in community settings

2. Skills critical to health and safety when in the community

3. Costs for purchases in the community, transportation, etc.

4. Opportunities to learn and practice skills over time in the community

5. Location of community-based instruction in the students' communities to increase the opportunities for practice and skill generalization

SOURCE: Adapted from E. Bouck, T. Taber-Doughty, and M. Savage, *Footsteps Toward the Future: Implementing a Real-World Curriculum for Students With Developmental Disabilities* (Arlington, VA: Council for Exceptional Children, 2015).

TABLE 12.5 Recommended Community-Based Instruction Frequency and Duration for Secondary Students

GRADE/AGE	FREQUENCY	DURATION
Grades 6-8	2 days per week	90 minutes per day
Ages 14-16/17/18	2-3 days per week	90 minutes to 2 hours per day
Ages 18-22	4-5 times per week	2 or more hours per day

SOURCE: Adapted from P. Alberto, N. Elliott, T. Taber, E. Houser, and P. Andrews, "Vocational content for students with moderate and severe disabilities in elementary and middle grades," *Focus on Exceptional Children, 25*(9), 1993, pp. 1–10.

each student's IEP. As specific instructional skills are targeted for community settings, data must be gathered on student performance to first determine student learning and second evaluate the effectiveness of instruction. A challenge for recording data in community settings is portability. Thus, instructors should consider using data recording cards (index card size) that can fit in a shirt pocket or bag or data collection software available on an electronic device. A general practice for any time a student participates in CBI/CBVI is that when IEP-related goals/objectives are addressed, data will be gathered on student performance. Examples of two data collection formats, task analysis and self-graphing trial-by-trial recording forms, are presented in Figure 12.4.

Technology-based strategies include those that incorporate low or high technology and require limited or lengthy training and setup (Lane & Mistrett, 1996). In recent years, digital video, virtual reality, and augmented reality were used more frequently with students with intellectual disability to

FIGURE 12.4 Sample Data Collection Formats

Student ___June___	Task/Behavior ___Order in a fast-food restaurant___									
SESSIONS	1	2	3	4	5	6	7	8	9	10
Locate end of line and wait for turn	V	I	I	I	I					
Select items from menu	M	M	M	M	V					
Order desired food items	V	V	V	I	I					
Pay for purchase	P	P	P	M	M					
Retrieve tray with meal	V	V	I	I	I					
Locate an available seat	V	V	V	V	V					

Task analysis data card key: I = Independent, V = Verbal Prompts, G = Gesture, M = Model, P = Physical Prompt.

PART V • ADOLESCENTS AND YOUNG ADULTS WITH INTELLECTUAL DISABILITY

Student ___Jarvis___				Task/Behavior ___Selecting correct clothing size___					
10	10	10	10	10	10	10	10	10	10
9	9	9	9	9	9	9	9	9	9
8	8	8	8	8	8	8	8	8	8
7	7	7	7	7	7	7	7	7	7
6	6	6	6	6	(6)	(6)	6	6	6
5	5	5	5	5	5	5	5	5	5
4	4	(4)	4	(4)	4	4	(4)	4	4
(3)	(3)	3	3	3	3	3	3	3	3
2	2	2	(2)	2	2	2	2	2	2
1	1	1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0	0	0

Self-graphing trial-by-trial across sessions data card (number of steps correct per trial).

SOURCE: Adapted from E. Bouck, T. Taber-Doughty, and M. Savage, *Footsteps Toward the Future: Implementing a Real-World Curriculum for Students With Developmental Disabilities* (Arlington, VA: Council for Exceptional Children, 2015, p. 79).

not only facilitate skill acquisition while in the community but also practice those skills before and after community-based instruction experiences. For example, Cihak, Alberto, Taber-Doughty, and Gama (2006) compared static pictures and video prompting simulation in a classroom setting with middle school students with intellectual disability to preview purchasing and banking skills before they were used in the real setting. In addition, virtual reality was successfully used to teach vocational tasks to secondary learners with intellectual disability (Chang, Kang, & Huang, 2013). As technology continues to evolve and innovative technology-based strategies and tools are introduced, educators should continue to determine their effectiveness in promoting learning.

Three frequently used technology-based strategies are self-operated picture, auditory, and video prompting systems. Teachers develop these self-instructional delivery systems to enable students to learn and/or engage in tasks or behaviors with greater autonomy (Bouck et al., 2015). Applying the most recent technology, these prompts are generally developed using electronic apps or software and are delivered via smartphones and tablets. However, static pictures and audio/video recordings may also be used if newer technology is unavailable.

When developing a self-operated prompting system, consideration should be given to a student's preferred instructional format. Does she prefer to listen to verbal directions or view a video model of a task being completed? Is her preference to follow a series of pictures in a step-by-step process? Once this is determined, the preferred type of prompting should be created. When developed, a detailed task analysis should guide the prompts provided (Bouck et al., 2015). For example, for purchasing a soda from a vending machine using an auditory prompting system, clear verbal steps should be articulated for each step the student will complete ("locate price of soda," "count your change or dollars," "insert your money," "press your selection," "retrieve your soda," "check for change"). Table 6.7 in Chapter 6 (page 161) illustrates the steps for developing self-operated picture, auditory, and video systems.

Finally, using **natural supports** is critical to learner success in integrated settings. Natural supports generally refer to the peers and co-workers who are learning and working within the same integrated environment and who might provide prompting and other learning support to others. Individuals with intellectual disability often benefit from instruction that is more natural and less systematic as may be provided by colleagues. For example, when teachers provide positive reinforcement as students learn and respond to instruction, they often use systematic and planned responses such as prompts, verbal reinforcement, modeling, and gesturing. Yet, when peers or coworkers provide supports, it is less planned and occurs more naturally. Peer-delivered reinforcement might not be provided for each instance of correct behavior and instruction. Rather, instructions might be more abrupt such as "Go get that for me" or "Put that here" without any reinforcement. A "high-five" might be offered when a task is completed, or nothing might happen and the individual with intellectual disability needs to continue on with his or her schedule of activities. These types of supports are what individuals will typically encounter in integrated settings and often result in positive experiences.

When natural supports are provided in school, community, and/or work settings, student success is noted. For example, evidence illustrates that when adolescents with and without intellectual disability were paired in a community-based fitness program, students with intellectual disability experienced health benefits, independence, and friendships with their exercise buddies (Stanish & Temple, 2012). In vocational settings, co-workers also serve an important support role. They may provide natural supports and on-the-job training as workers with intellectual disability learn and generalize vocational

skills (Storey & Certo, 1996). Evidence also suggests that coworker involvement positively impacts employment retention for adults with intellectual disability (Cimera, 2001) and can result in cost reductions for supported employment services (Cimera, 2007). Overall, when teachers are able to integrate both peers and coworkers into the learning and support landscape, adolescents with intellectual disability benefit.

While simulation, technology-based strategies, and natural supports provide a methodological foundation for life skills instruction, considerable planning and organization is necessary to ensure that successful learning will occur in community-based and vocational settings. Specifically, procedures must be in place for selecting instructional settings, identifying needed supports, ensuring communication with families and school administration, organizing transportation, arranging for instruction and data collection, and preparing staff for delivering instruction in community settings. However, this all begins with conducting a transition assessment to determine where to emphasize instruction.

COMPONENTS OF A LIFE SKILLS CURRICULUM FOR SECONDARY STUDENTS WITH INTELLECTUAL DISABILITY

When secondary students with intellectual disability participate in a life skills curriculum, instruction will center on domestic, recreation/leisure, community, and vocational domains. Additionally, instruction in self-determination will be integrated across the domains and educational curriculum. Thus, students will learn skills specific to their transition needs across the environments in which those skills will be used, while practicing the act of asserting their personal will and making their choices known. Within the domestic domain, secondary students will focus on adult skills related to personal management (making appointments, seeing a doctor, grooming), personal finance (banking, budgeting, purchasing goods and services), food preparation and storage (cooking, food safety, cooking safety), and household management (yard maintenance, home cleaning, laundry) among other home-related activities (Bouck et al., 2015). Within the recreation and leisure domain, students will learn skills related to personal fitness, team sports, individual activities, and other leisure pursuits such as gaming, gardening, or photography. Basically, activities in this domain represent those in which an individual would engage during his or her free time. Activities that might be learned in the community domain include mobility training (traveling training throughout

the neighborhood, city, or long distance such as walking, driving, bicycle riding, or using public transportation) and consumer-related skills (shopping, requesting services, eating in restaurants). Finally, vocational domain skills are directly related to preparing for, locating, participating in, and maintaining future employment. This could include skills such as following a schedule in a work setting, learning how to interact with customers and co-workers, setting an alarm clock at home to arrive on time to work, and job-specific skills. Throughout secondary programming, students with intellectual disability should not only be afforded multiple opportunities to acquire the many skills associated with each domain but also be provided numerous occasions for practicing these skills over time. For example, for a student who is learning how to do laundry, opportunities should be provided at school, such as using the gym machines to wash uniforms or the classroom washer to launder towels, and in the community, such as visiting a coin Laundromat to wash classroom or personal items. Skills such as measuring soap, machine operation, and counting money would all be taught as part of the instructional routine. Table 12.6 provides a list of sample life skills for each instructional domain and how and where these skills may be taught.

Because secondary students with intellectual disability also participate in integrated educational settings and access the general education curriculum, life skills may be addressed within the context of content-area subject matter (see Table 12.7). While these individuals will continue to participate in community-based instruction and community-based vocational instruction to acquire and practice the skills needed for postsecondary success, opportunities to reinforce meaningful skills may be afforded in general education subject matter. For example, the secondary general education curriculum is focused on increasingly complex academics that serve as the basis for postsecondary education and vocational achievement. Mastery of advanced mathematics (statistics, algebra, geometry), science (biology, chemistry, physics), language arts (writing, reading, vocabulary development, speaking, listening media literacy), and social studies (history, civics, geography, economics) is the foundation for numerous future vocations. While individuals with intellectual disability may never use some of this academic content in future employment, skills related to each subject will be critical for future success. In today's world, adults need to be proficient in using electronic communication (English), understanding finances (social studies), measurement (mathematics), and life science (science).

TABLE 12.6 Secondary Life Skills per Instructional Domain

DOMAIN	SKILLS	HOW AND WHERE TO TEACH
Domestic	• Grooming/dressing/hygiene—self-care, shaving, brushing hair and teeth, using deodorant, tying shoes, washing laundry, bathing • Food preparation—making small meals and snacks, using kitchen appliances, purchasing food, storing food, preparing a sack lunch • Home maintenance—cleaning home, tending outdoor spaces, changing air filters, replacing broken items	• In physical education class, practice to dress/undress is provided. • During lunch in a vocational setting, student learns to use the break room microwave to heat her lunch. • Student cares for outdoor class garden and indoor plants.
Recreation/leisure	• Things to do alone—work out at the gym/exercise, read, play computer games, do arts and crafts • Things to do with others—attend parties and social events, play on a team, hang out with friends	• Student engages in and charts his workout routine in the school or local gym. • Between classes, student interacts with friends in the hallway.
Community	• Traveling through the community—ride a public bus, walk routes, ride a bicycle to community locations • Shopping—use money, know clothing sizes, use a shopping list • Eating out—wear appropriate clothing for the restaurant, order from a menu, leave a tip, use manners • Interacting with others—at social events, at work, with store clerks, with emergency personnel	• During CBI, student uses the public bus to travel to community site. • Student follows a picture list at the grocery store. • Student wears rubber-sole shoes when attending a CBVI restaurant site. • Student uses an augmentative and alternative communication device to converse with cashier at department store.
Vocational	• Working autonomously or with co-workers • Using break room facilities • Working until task completion • Transitioning between work tasks • Setting an alarm clock to get up for work or school • Dressing appropriately for workplace	• Student remains on task when stocking shelves at a CBVI site. • Student receives support provided in operating snack machines and returning to work within the break time limit. • Student works for delayed reinforcement in school and CBVI settings. • Student uses a self-operated prompting system to transition between tasks at school and in CBVI settings. • Student learns to set different types of alarm clocks in the classroom. • Student selects and dresses in appropriate attire for different work sites (restaurant, hospital, recycling center, office).

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TABLE 12.7 Alignment of Secondary Life Skills With Content Areas

CONTENT AREA	LIFE SKILLS	HOW TO EMBED
English	• Writing—uses e-mail, writes and sends text messages, writes a shopping list, writes a chore list • Reading—reads simple instructions for cooking, reads and understands warning labels, reads e-mails and text messages • Vocabulary—uses age-appropriate terminology when at the doctor's office, at work, and across home and community settings; interprets and recognizes sarcasm, euphemisms, and oxymorons • Speaking and listening—actively listens and adjusts use of spoken language to effectively communicate with different audiences; communicates information with supporting evidence in emergencies • Media literacy—differentiates between accurate and inaccurate information presented in the media including visual and verbal messages	• During an essay writing activity in class, student uses her iPad to write and send an e-mail to the teacher. • On library research day, student locates cookbooks and identifies recipe ingredients. • During group activity, students identify and translate common euphemisms. • When acting out scenes from a play literature text, student rehearses and uses correct dialogue along with classmates. • When conducting Internet research for a writing project, student questions the accuracy of information provided via various websites.
Social Studies	• History—celebrates national holidays and understands their meanings such as the Fourth of July, Memorial Day, Labor Day, and Martin Luther King Day • Civics and government—knows *Miranda* rights, participates in voting for class officers • Geography—identifies locations on a map or globe, follows travel directions in the community • Economics—saves money, pays taxes when making a purchase, understands the concept of interest when purchasing using a credit card	• Student maintains a personal calendar with holidays and participates in class discussion about their meanings. • During a mock trial, student is able to recite his rights as a citizen. • When examining current events in the newspaper, student identifies the event location on the map for classmates. • Student prepares a simple savings budget during class exercise about saving for the future.

Mathematics	• Number sense—examines receipt to evaluate if charges are correct • Computation—calculates taxes, tips, or interest • Algebra and functions—calculates the amount of time to travel between two distances • Geometry and measurement—cuts enough wrapping paper to wrap a gift, measures ingredients to bake brownies • Data analysis—prepares for the weather according to the local weather chart • Statistics and probability—calculates calories for daily consumption	• When solving number sense problems, target student examines sample prices to determine if the cost is too high ($100 or $0.50 for a banana). • While class is solving algebraic problems, target student uses a calculator to determine percentages. • In a lesson examining lines and line segments, student works with a group to determine the fastest travel routes on a map. • Student records completion of task steps using an electronic device during class activities. • During a lesson on interpreting data, student reviews weather predictions and identifies clothing needed each day.
Science	• Earth and space—recycles materials in the home, at work, and at school • Life science—plants vegetables, flowers, and herbs • Science, technology, and engineering—packs boxes, suitcases, and other containers so that all necessary items are included within	• Student uses a calculator to determine amount of recycling materials produced per science class period. • Student grows different plants in biology class lab under different environmental conditions. • Student stores class materials in original containers.

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Conclusion

The educational focus for secondary students with intellectual disability is to meet their post-school wants and needs. These may include postsecondary education, employment, community living, or recreational and leisure pursuits. The instructional curriculum in place in secondary school must be flexible enough to ensure that these individuals continue to gain access to the general education curriculum and their typically developing peers while concurrently learning and practicing the life skills they will need as adults who participate in an integrated community. When this occurs, young adults with intellectual disability are better prepared to be active and participating citizens in their neighborhoods and communities.

Chapter Summary

- A primary instructional focus for students with intellectual disability at the secondary level is meeting transition outcomes and preparing for postsecondary education and employment.

- Secondary students with intellectual disability are served across a variety of instructional settings including grade-level content classes, general community environments, and vocational sites.

- As individuals with intellectual disability progress through secondary programs, they spend increasing amounts of time in community-based settings.

- Transition planning is critical for ensuring that each student with an intellectual disability has an educational experience that is developed that focuses on making him or her ready to meet his or her post-school wants and needs.

- Self-determination components include autonomy, self-regulation, psychological empowerment, and self-realization. Instruction that facilitates each individual's mastery of these elements will contribute to his or her ability to live a self-determined life.

Review Questions

1. Why is a life skills focus important for students with intellectual disability at the secondary level?

2. Why are the elements of social role valorization important to consider when planning instruction for secondary students with intellectual disability?

3. How are transition services aligned with each student's IEP goals? Provide an example.

4. How should a life skills curriculum be determined for each secondary student with an intellectual disability?

5. What is self-determination, and how is instruction for these skills embedded within a life skills curriculum?

Key Terms

social role valorization (SRV), (page 337)

criterion of ultimate functioning (page 337)

dignity of risk (page 338)

competency–deviancy hypothesis (page 339)

community-based instruction (CBI) (page 340)

community-based vocational instruction (CBVI) (page 340)

principle of partial participation (page 341)

transition services (page 341)

individualized transition plan (ITP) (page 342)

transition assessment (page 344)

self-determination (page 345)

autonomy (page 345)

self-regulation (page 345)

psychological empowerment (page 345)

self-realization (page 345)

simulation (page 350)

technology-based strategies (page 352)

natural supports (page 354)

Organizations Concerned With Secondary Students With Intellectual Disability and Life Skills

National Association of Councils on Developmental Disabilities

www.nacdd.org

National Center on Secondary Education and Transition

www.ncset.org

PACER Center

www.pacer.org

The Arc

www.thearc.org