CHARTING THE COURSE

Supporting the Career Development of Youth with Learning Disabilities

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Information on NCWD/Youth can be found at http://www.ncwd-youth.info/.

Information about ODEP can be found at http://www.dol.gov/odep/.

Related information is also available at http://www.disability.gov/, the comprehensive Federal website of disability-related government resources.

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Table of Contents

Charting the Course: Supporting the Career Development of Youth with Learning Disabilities

Acknowledgements iii
Preface iv
Why this Guide was Developed iv
How to Use this Guide iv

Chapter 1: An Overview of Learning Disabilities

In this Chapter 1-1
What are Learning Disabilities? 1-1
The Prevalence and Impact of Learning Disabilities 1-2
Some History 1-4
Legal Definitions and Functional Skills 1-4
New Perspectives on Supporting Individuals who have a Learning Disability 1-6

Chapter 2: The Guideposts Framework

In this Chapter 2-1
Youth Development and Positive Adult Outcomes 2-1
The *Guideposts for Success* 2-2
Development Strategies for Youth with Learning Disabilities—A Focus on Skills 2-6

Chapter 3: Strategic Learning for the Workplace

In this Chapter 3-1
Defining Strategic Learning 3-2
Why the Focus on Strategic Learning for the Workplace? 3-2
Backdrop—Beyond Remediation 3-2
Design Elements of Strategic Learning for the Workplace 3-3
Table 3.1—Assessment Domains and Testing 3-4
Tool 3.1—Points to Consider for Inclusive Teaching Using Universal Design 3-8
Tool 3.2—Types of Learning Strategies and Supports: Cognitive and Metacognitive 3-11
Tool 3.3—Work-Related Processing Challenges and Strategies to Address Them 3-13
Tool 3.4—Possible Compensatory Strategies for Youth with Learning Disabilities 3-15
The Importance of Job Fit 3-18
Exhibit 3.1—Research Findings 3-20
Exhibit 3.2—Learning Needs Screening Tool 3-25
Exhibit 3.3—Strategic Learning Resources 3-28

Chapter 4: Building and Integrating Individual Development Strategies — A Focus on Self-Determination and Leadership Skills

In this Chapter 4-1
Defining Individual Development Strategies 4-1
Why the Focus on Individual Development Strategies? 4-1
Backdrop—Common Experiences 4-2
Table 4.1—Five Framing Areas of Youth Leadership and Development 4-3
Design Elements of Individual Development Strategies 4-3
Tool 4.1—Strategies and Activities that Encourage Individual Development Skills 4-6
Tool 4.2—Checklist of Desired Interpersonal Skills 4-10
Exhibit 4.1—Research Findings 4-13
Exhibit 4.2—Individual Development Strategies Resources 4-16

Chapter 5: Disclosure and Accommodations Strategies

In this Chapter 5-1
Defining Disclosure and Accommodations 5-1
Why the Focus on Disclosure and Accommodations? 5-2
Backdrop—Current Trends 5-2
Design Elements of Disclosure and Accommodations Strategies 5-3
Tool 5.1—Factors to Weigh Before Disclosure 5-4
Tool 5.2—Responding to Employer Concerns 5-6
Tool 5.3—Examples of Accommodations for Specific Classroom or Work-Related Tasks 5-10
Tool 5.4—Accommodations for Specific Processing Difficulties 5-11
Exhibit 5.1—Research Findings 5-13
Exhibit 5.2—Resources for Disclosure and Accommodations Strategies 5-15

Chapter 6: Charting a New Course

In this Chapter 6-1
Integrating Design Elements into Youth Programs 6-2
Emerging Solutions 6-4
Building Institutional Capacity to Support Those with Learning Disabilities 6-8
Final Thoughts 6-13
Exhibit 6.1—An Index of Selected Postsecondary Programs Specifically for Youth with Learning Disabilities and Related Conditions 6-14

Appendices

Appendix A: Types of Learning Disabilities and Common Co-existing Conditions A-1
Co-existing Conditions A-3
Appendix B: Civil Rights Laws Pertaining to Disabilities B-1
Appendix C: Federal Legislation that Funds Access to Services for the LD Population C-1
References R-1

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The Office of Disability Employment Policy (ODEP) at the U.S. Department of Labor has funded a variety of pilot projects for the purpose of increasing the chances of youth with disabilities becoming self-sufficient adults. A key strategy in all the projects was to build bridges among workforce development organizations (e.g., schools, rehabilitation agencies, youth development organizations, One-Stop Centers) for the purpose of providing a set of quality services to youth based on person-centered planning.

In the course of these projects, it became clear that workforce development organizations desired material support to meet the needs of transition-age youth with disabilities as they entered the workforce. Together, staff from ODEP and NCWD/Youth began an ambitious effort to improve systems capacity to provide comprehensive transition services for all youth, including youth with disabilities, and to promote the need for and further grow a professional development system for youth service professionals.

This Guide's focus on learning disabilities came from an understanding that many young people are reaching adulthood without adequate skills needed to be successful in the workplace. It was developed in recognition that youth service professionals can best support young people with learning disabilities entering the workplace if a lesser focus was placed on academic remediation and a stronger emphasis was placed on developing skills and competencies integral to their success in the workplace.

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Preface

Why this Guide was Developed

The transition from adolescence to adulthood is not an easy one. Making decisions and dealing with challenges in academic, vocational, and social settings are difficult but essential parts of life. Young people need to nurture interpersonal relationships, to find their place in groups, and to establish their identity as adults. Support from caring adults can ease this transition, and this is particularly true for young people with learning disabilities. This Guide was developed to help youth service professionals better understand issues related to learning disabilities so that they can help youth with learning disabilities develop individual strategies that will enable them to succeed in the workplace.

This Guide was developed by the National Collaborative on Workforce and Disability for Youth (NCWD/Youth), an organization charged with assisting education and workforce development organizations to improve the successful transition of youth with disabilities into the workplace. NCWD/Youth prepared this Guide, in collaboration with the U.S. Department of Labor's Office of Disability Employment Policy (ODEP), in response to the overrepresentation of youth and young adults with learning disabilities in a wide array of government-supported programs—adult education, vocational rehabilitation, welfare, corrections, and others. Many of these young people may not even be aware that they have a learning disability, although they may know that they have not done as well as many of their peers in traditional classrooms and in work and social settings.

In researching this Guide, the authors found few resource materials that blend successful strategies from various service delivery systems (in-school, out-of-school, and workforce development) into one easy-to-use document. The available research on effective practices for this population, albeit limited, suggests that success for youth with learning disabilities, both diagnosed and undiagnosed, will require such an approach. This Guide brings together effective techniques from both educational and workforce systems in an effort to foster a different way of thinking to support young people.

This Guide also focuses on addressing the needs of youth with learning disabilities from a "disability rights" perspective—a model that concentrates less on remediation and more on skill acquisition through accommodated approaches. This includes ensuring appropriate and timely access to assistive technology; learning how to disclose one's disability effectively; and understanding how to access civil rights protections in educational, vocational, and social settings. This perspective stems from provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, which build upon the social model of disability, one which views disability as a normal part of life experience.

This Guide is intended to help practitioners, administrators, and policymakers in secondary and postsecondary education programs, transition programs, One-Stop Career Centers, youth employment programs, and community rehabilitation programs to improve services and outcomes for youth, ages 14 to 25, with diagnosed and undiagnosed learning disabilities. This range of ages reflects the various settings and systems that serve transition-age youth with disabilities.

How to Use this Guide

This Guide includes numerous quick reference charts, tables, and tools for counselors, career advisors, and other professionals who work directly with youth. Quick reference tools are of limited use without an understanding of learning disabilities, so in-depth information is provided on a variety of topics including the types and impact of learning disabilities, needed supports, and research-based interventions. This Guide is intended to increase awareness of the fact that the workforce development system serves many youth who have learning disabilities that may never have been identified and many others who may know they have a learning disability but choose not to disclose. Although focusing primarily on youth with learning disabilities, many of the strategies and approaches advocated in this Guide, which are premised on universal design, may be of practical use for other youth.

CHAPTER 1

An Overview of Learning Disabilities

This chapter provides an introduction to learning disabilities and includes definitions of terms used in education and vocational rehabilitation settings. It also provides statistical context by describing the prevalence and impact of learning disabilities across various settings and describes the implications of learning disabilities for transition-age youth in terms of academic, vocational, and social development.

In this Chapter

- **What are Learning Disabilities?**
- **The Prevalence and Impact of Learning Disabilities**
- **Some History**
- **Legal Definitions and Functional Skills**
- **New Perspectives on Supporting Individuals who have a Learning Disability**

What are Learning Disabilities?

Learning disabilities refer to a

> *heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. (National Joint Committee on Learning Disabilities, 2008)*

Although primarily thought of as academic in nature (as their name implies), learning disabilities can profoundly impact the vocational and social development of youth and young adults, and often require support and interventions above and beyond those typically provided in many educational, employment, and social settings. Because learning disabilities are processing disorders, low intelligence quotient (IQ) is not an indicator or diagnostic component. In fact, many people with learning disabilities have above average or superior IQs but may have difficulties in one or more of these areas:

- attention span and impulsivity
- memory and recall
- following directions
- discriminating between/among letters, numerals, or sounds
- reading comprehension and/or writing
- spelling and decoding
- eye-hand coordination or motor skills
- sequencing
- mathematical concepts and calculations
- expressive language processing
- receptive language processing
- organization
- social judgment and social interaction

The limited ability to process certain information in certain learning contexts is at the core of a learning disability. This Guide will focus on activities and strategies that aim to mitigate some of the effects that processing difficulties may have on the success of older youth and young adults entering the workplace.

Throughout this Guide, the term "learning disabilities" or its acronym "LD" will be used. When discussing legislative acts that use the term "specific learning disabilities," that term or its acronym "SLD" will be used. The qualifier "specific" refers to how the learning disability significantly affects a relatively narrow range of academic and performance outcomes.

The Prevalence and Impact of Learning Disabilities

Learning disabilities involve disorders of learning and cognition that are neurological in nature, intrinsic to the individual, and not the result of inconsistent or insufficient instruction or other outside factors (National Joint Committee on Learning Disabilities, 2008). Learning disabilities are also fairly common—the National Institutes of Health (2007) estimates that 15-20% of the general population has some form of a learning disability (many of which are not diagnosed). No doubt spurred on by the recognition that learning disabilities impact youth in all kinds of settings, a growing number of national longitudinal surveys and studies have examined the prevalence and significance of learning disabilities within society.

Learning disabilities manifest themselves differently depending on the environment or setting, the supports provided, and the developmental stage of the individual. Some individuals with learning disabilities may do well in elementary school, only to struggle in secondary or postsecondary schools, the workplace, or in interpersonal relationships. While today there is a greater understanding of learning disabilities than in the past, in practical terms, significant issues remain as individuals with learning disabilities:

- are often undiagnosed, misdiagnosed, or diagnosed late in childhood, in adolescence, or even in adulthood;
- are often wrongly perceived as being lazy, dumb, anti-social, or purposely immature;
- may be treated as though they have other cognitive disabilities such as developmental disabilities, autism, or traumatic brain injury;
- often hide their disability; and
- may have other co-occurring conditions that interfere with school, work, and social interactions, such as attention deficit hyperactivity disorder, emotional and mental health disorders, or physical disabilities.

In addition to the above, there are strong correlations between learning disabilities and limited postsecondary options, chronic unemployment or underemployment, illegal behaviors, and chemical use. Here are some recent research findings about learning disabilities and their potential consequences.

Within the K-12 Years

- In the latest available data, approximately 5% (2.9 million) of the public school population and just under half of all children and youth who receive special education services have a primary classification of learning disability (U.S. Department of Education, 2005). There are many more youth with LD as a secondary or tertiary classification.
- The National Center for Health Statistics estimates that 8.6% of children ages 6-17 have a diagnosed learning disability. Of these, 3.7% also have attention deficit hyperactivity disorder (Pastor & Reuben, 2008).
- The majority of all individuals with diagnosed learning disabilities have difficulties in the area of reading. Two-thirds of secondary students with learning disabilities are reading three or more grades levels behind; 20% are reading five or more grade levels behind (Wagner et al., 2005b). Poor readers have difficulties in vocabulary development and in gaining skills for understanding what they read, and thus "they frequently avoid reading and assignments that require reading" (Lyon, 2005).
- The National Longitudinal Transition Studies (NLTS I and II), begun in 1987 and 2001, respectively, compared the prevalence of various disabilities in

youth ages 15-17. These studies found that males made up 73% of youth with LD in 1987 and 68% in 2001. The same studies found that the number of students who did not speak English at home and had a learning disability rose from 1% of the 15-17 age group to 15% of that age group between 1987 and 2001 (Cortiella, 2009).

- According to the National Center for Health Statistics (2007), in families with an income of less than $35,000, the percentage of children with a learning disability was twice that of children in families with an income of $100,000 or more (10% and 5%, respectively).

- Although the dropout rate of youth with disabilities decreased by 17 percentage points between 1987 and 2003 (Wagner et al., 2005), more than 24% of youth (ages 14 and older) with learning disabilities drop out of high school, compared to 11% of the general student population (U.S. Department of Education, 2005).

- According to Reschly and Christenson (2006), students with learning disabilities are consistently found to have among the highest dropout incidence among special education students and students in general: 38.7%.

In Postsecondary Education

- Only a small percentage of students with LD, estimated at between 25% and 35%, are being provided with assistive technology to support their instruction and learning (Cortiella, 2009).

- In recent years, there have been dramatic increases in the number of students with learning disabilities attending college, and more colleges and universities than ever understand the need for specialized supports for their students with learning disabilities. Despite this, the retention and graduation rates for these students remain low (American Educational Guidance Center, 2006; Getzel, McManus, & Briel, 2004).

In the Workplace

- People with learning disabilities are more likely than those without learning disabilities to be unemployed or underemployed. In 2005, 55% of adults with LD (ages 18-64) were employed compared to 76% of those without LD, 6% were unemployed vs. 3% of those without LD, and 39% were not in the labor force vs. 21% of those without LD (Cortiella, 2009).

- Studies show that skills in applied mathematics, information retrieval, and reading for information directly correlate with earning power (ACT Research, 2004). By definition, these are some of the skills people with learning disabilities are likely to struggle with.

- The non-academic characteristics of learning disabilities—deficits in attention, reasoning, processing, memory, communication, coordination, social competency, and emotional maturity—may have a greater adverse impact on achieving and maintaining employment and on social interactions than those characteristics of learning disabilities associated with poor academic performance (Gerber, 1998).

In Other Service Delivery Systems

- People with learning disabilities comprise the largest number of vocational rehabilitation (VR) consumers. According to Rehabilitation Services Administration records for 2002-2006, 31.9% of transition-age (16-25) youth served by VR had learning disabilities (National Council on Disability, 2008).

- Although the Department of Justice's Bureau of Justice Statistics does not regularly track disabilities among our nation's prison populations, one study found that over 30% of inmates who did not complete high school or pass the Tests of General Educational Development (GED) had a learning disability (Harlow, 2003).

- Gagnon (2007) reports that in a year, approximately 144,000 delinquency cases result in youth being committed to out-of-home placements. Surveys have shown that over one-third of these youth have an identified disability, primarily emotional disturbance and/or learning disabilities.

- The National Council on Disability reports that three states have looked at the extent of learning disabilities among welfare recipients. Studies have found that somewhere between one-fifth and one-half of welfare recipients in Kansas, Washington, and Utah have learning disabilities (2003).
- According to Broatch (n.d.), young people with learning disabilities often have "strong feelings of frustration, anger, sadness, or shame [that] can lead to psychological difficulties such as anxiety, depression, or low self-esteem, as well as behavioral problems such as substance abuse or juvenile delinquency."

While all of these findings may be dramatic, there is evidence that progress is being made.

- More students with LD are graduating with a regular high school diploma—61% in 2007—up from 51% a decade earlier (Cortiella, 2009).
- Wagner et al. found that 82% of youth with learning disabilities successfully engage in school, work, or preparation for work after high school (2003).
- In 2007, 59% of students with LD spent 80% or more of their in-school time in general education classrooms. In 2000, that figure was just 40% (Cortiella, 2009).

Recent research has provided educators and practitioners with greater knowledge and understanding to better help individuals with learning disabilities, and more youth than ever are receiving some critical interventions. While Federal legislation, state initiatives, and efforts by school districts and other interested groups have focused attention on improving the lives of individuals with learning disabilities, it is clear that more must be done.

Some History

Interestingly, the Elementary and Secondary Education Act Amendments of 1966 (P.L. 70-150), which established the first Federal grant program for the education of children with disabilities at the school level, did not include learning disabilities as one of the categories of conditions eligible for special education assistance. In fact, a broadly accepted definition of learning disability did not exist until 1975, when Congress passed P.L. 94-142, the Education for All Handicapped Children Act, landmark legislation that affirmed that individuals with disabilities had a civil right to a free and appropriate public education; only then were learning disabilities officially recognized as a category of disability eligible for funding of direct services.

Two years later, when P.L. 94-142 was implemented, the Federal government promulgated regulations that included an operational definition of learning disabilities that centered on the concept of an ability-achievement discrepancy. Under this definition, a student would be found to have a "specific learning disability" if he or she had a severe discrepancy between achievement and intellectual ability in one or more areas (e.g., oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematics calculations, or mathematics reasoning) and if the student was not achieving at his or her age or expected ability level when provided with learning experiences designed for that age and ability level. By the 1990s, a majority of states had adopted this discrepancy model as the primary means of identification of learning disabilities. However, researchers soon began to question it because of the emphasis it puts on eligibility rather than instruction (Lyon et al., 2001).

Legal Definitions and Functional Skills

Two pieces of current Federal legislation greatly affect the provision of services to individuals with learning disabilities. The first, pertaining to education through secondary school, is the Federal special education act, now known as the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. The second, pertaining to employment and rehabilitation, is the Rehabilitation Act of 1973. This section discusses the definitions of learning disabilities in these laws.

Education

IDEA 2004 defines "specific learning disability" as

> *a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think,*

> *speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.*

Individuals in public schools who have a diagnosed learning disability and would benefit from special education services receive educational planning that provides resources and interventions aimed at minimizing the disability's effects. Because learning disabilities are specific, they impact an individual's ability to process information in specific areas. Types of learning disabilities include reading (dyslexia), mathematics (dyscalculia), writing (dysgraphia), sensory integration disorder (dyspraxia), central auditory processing disorder, visual processing disorder, auditory processing disorder, non-verbal learning disorders, visual perceptual/visual motor deficits, and language disorders (aphasia/dysphasia). See Appendix A for more complete definitions and descriptions of these learning disabilities and common co-existing conditions.

IDEA includes language permitting the use of data from a process (known as Response to Intervention or RTI) that determines if the child responds to research-based intervention as part of the evaluation process for eligibility for special education services as an alternative to the ability–achievement discrepancy model. While IDEA does not mandate that schools use RTI, it strongly encourages it. At present, most research on RTI focuses on younger students but studies on RTI and adolescents are currently being conducted as well.

Preparing for Work

The Federal legislation found in the Rehabilitation Act of 1973 provides for services to individuals with disabilities to help them prepare for work or find and keep a job. It is designed to support and provide services to individuals with significant barriers to employment. A person with a specific learning disability may qualify for services if they are

> *an individual who has a severe physical or mental impairment which seriously limits one or more functional capacities (such as mobility, communication, self-care, self-direction, interpersonal skills, work tolerance, or work skills) in terms of an employment outcome; whose vocational rehabilitation can be expected to require multiple vocational rehabilitation services over an extended period of time; and who has one or more physical or mental disabilities or combination of disabilities known to cause comparable substantial functional limitation.*

The Rehabilitation Services Administration (RSA; 2005), which administers the Rehabilitation Act, states that a specific learning disability (SLD)

> *can be diagnosed by the discrepancy between intellectual potential and academic performance. Other cognitive, behavioral, and emotional deficits are also frequently associated with SLD such as developmental delays in language and a higher rate of developmental coordination disorder. SLD may also be associated with problems with cognitive processing, such as visual perception, linguistic processes, attention, memory, or combinations of these; and adults with SLD may have significant difficulties in employment or social adjustment.*

The Rehabilitation Act promotes a rehabilitative approach, focusing significantly less on academic intervention and much more on mitigating the vocational (and the social) aspects of learning disabilities. Eligibility for services, however, is not guaranteed. It is based on an assessment of the individual's functional limitations as well as available funding. Eligible persons may receive training on self-advocacy, accommodations, and assistive technology, as well as vocational or other types of counseling. The settings for services and supports in this model include community-based organizations, training programs, independent living centers, rehabilitation centers, detention centers, One-Stop Career Centers, and colleges and universities.

It is important to note that due to limited funds, many states have implemented what is referred to as an "order of selection." Under this structure, people with the most severe disabilities receive services first. However, individuals with learning disabilities who are not eligible for rehabilitation services may receive

The IDEA and Rehabilitation Act definitions of learning disability are not mutually exclusive, and components of the Rehabilitation Act functional skill areas can and should be incorporated into academic and vocational planning.

similar services through programs funded by the Workforce Investment Act of 1998 (see Chapter 5 for more information).

The Rehabilitation Act recognizes seven functional capacities considered relevant to success for adults in the workplace:

1. *Mobility* refers to the capability of moving efficiently from place to place.
2. *Communication* refers to accurate and efficient transmission and/or reception of information, either verbally (spoken or written) or non-verbally.
3. *Self-care* refers to the skills necessary to fulfill one's basic needs, such as those related to health, safety, food preparation and nutrition, hygiene and grooming, and money management.
4. *Self-direction* refers to the capacity to organize, structure, and manage activities in a manner that best serves the objectives of the individual.
5. *Interpersonal skills* refer to the ability of the individual to interact in a socially acceptable and mature manner with co-workers, supervisors, and others to facilitate the normal flow of work activities.
6. *Work skills* refer to the specific job skills required to carry out work functions as well as the capacity for an individual to benefit from training in these work functions.
7. *Work tolerance* refers to the ability to carry out required physical and cognitive work tasks in an efficient and effective manner over a sustained period of time.

Functional limitations refer to activities or behaviors that an individual cannot perform or performs with difficulty. For individuals with learning disabilities, functional limitations may also result from activities that the individual can perform but fails to perform with sufficient frequency, adequate intensity, in the appropriate manner, or under socially expected conditions.

The IDEA and Rehabilitation Act definitions of learning disability are not mutually exclusive, and components of the Rehabilitation Act functional skill areas can and should be incorporated into academic and vocational planning. Students who receive special education services must have an Individualized Education Program (IEP) that includes an Individualized Transition Plan (ITP) in place by the time they are 16. The IEP and ITP are legal documents that detail the student's short- and long-term goals and the related responsibilities of the entities that support him or her. These documents, which foster skills development, represent categories relevant to the adult workplace, and may help guide planning for youth whether they are in school or in workforce preparation programs.

New Perspectives on Supporting Individuals who have a Learning Disability

In the course of a 20-year longitudinal study of 41 individuals with learning disabilities, Goldberg et al. (2003) measured the relative success achieved by research subjects in many domains: employment, education, independence, family relations, social relationships, crime/substance abuse, life satisfaction, and physiological health. They found that about half of the group was successful across these domains, and identified specific factors that led to this success—

including "self-awareness/self-acceptance of their learning disability, proactivity, perseverance, emotional stability, appropriate goal setting, and the presence and use of effective social support systems."

The study also showed how learning disabilities affected many functional components of the study participants' lives, including family and social relationships, employment, and community involvement. Based on their findings, Goldberg et al. (2003) concluded

> *it would seem that much of the LD field's view of the challenges faced by individuals with LD has been shortsighted, focusing primarily on educational contexts. Based on the current research, individuals with LD need to learn to develop "strategies for success" across the lifespan, and in multiple contexts…[and] at the least, the field needs to evaluate its current position and emphasize the development of success attributes to the same degree that we do academic skills (emphasis added).*

This Guide seeks to address the development of these success attributes. Programs that serve youth must focus on helping them navigate within the environments in which they function. Many young people need support to mitigate their disability as they enter adulthood. Youth service professionals working with young people with diagnosed and undiagnosed learning disabilities can help to identify and address areas where some youth may need extra assistance using available research-based information on:

- *academic, social, and vocational experiences and opportunities* that all youth, including youth with learning disabilities, need;
- *specific functional skills and abilities* that individuals with learning disabilities need to develop in order to maximize vocational potential and to respond to employers' needs; and
- *specific strategies* (e.g., use of compensatory techniques) that youth can employ to lessen the impact of their learning disabilities.

These strategies are examined at length in later chapters:

Chapter 3—Design Elements of Strategic Learning for the Workplace

- Using assessments to diagnose or identify learning disabilities, to identify effective interventions, and to increase a young person's capacity to make informed choices about education and careers
- Integrating universal design for learning at school and work
- Providing strategy instruction centered on teaching the young person "how to learn" in postsecondary academic and work-based settings
- Teaching compensatory techniques which build upon a youth's strengths

Chapter 4—Design Elements of Building and Integrating Individual Development Strategies

- Supporting self-determination and the related capacities of self-awareness, goal setting, and self-advocacy
- Promoting the development of the interpersonal skills necessary for success in the workplace

Chapter 5—Design Elements of Disclosure and Accommodations

- Supporting appropriate and reasoned disability disclosure in various settings
- Supporting the integration of accommodations in educational, vocational, and independent living settings

This Guide envisions a holistic approach for supports, focusing on academic, vocational, and social development which are applicable throughout an individual's life. This is particularly important because many young people reach adulthood without all the skills needed to reach their potential.

CHAPTER 2

The Guideposts Framework

This chapter provides a framework that can help youth service professionals bridge multiple institutional boundaries to support youth development during the transition to adulthood. It also describes the underlying principle that successful adult outcomes are predicated on leveraging individual strengths and proactively minimizing difficulties in academic, social, and employment settings.

In this Chapter

- **Youth Development and Positive Adult Outcomes**
- **The *Guideposts for Success***
- **Development Strategies for Youth with Learning Disabilities—A Focus on Skills**

Youth Development and Positive Adult Outcomes

Youth development prepares young people to meet the challenges of adult life through a coordinated, progressive series of activities and experiences that help them to become competent adults. In today's complex world, the transition to adulthood does not end when a student leaves school. Rather, it continues until at least the mid-20s. During this period, broad patterns of cognitive, emotional, interpersonal, and physical development common for youth and young adults ideally lead to:

- the development of social competencies;
- the building of supportive relationships;
- engagement in the community; and
- the establishment of independence.

This Guide's emphasis on employment outcomes recognizes that the "workplace" is found within a labor market system which has one major objective—to fill vacant jobs with skilled individuals. Employers have numerous ways of screening, evaluating, and selecting new employees and commonly use interviews, testing, work trials, internships, observations, resume reviews, and references to determine which applicant is the best fit for a job. When youth and young adults enter the workforce, those with high educational achievement and relevant work experiences usually have an advantage over others.

The nature of what employers demand in the 21st century workplace is also changing. High school and college graduates not only must master basic academic skills, but also must master more advanced "applied skills" such as teamwork, critical thinking, and communication. Furthermore, according to a recent

survey of hundreds of employers conducted by the Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resources Management, many new entrants to the workforce have had limited opportunities to develop these important applied skills. These business leaders reported that while basic skills are still fundamental to every employee's ability to do a job, such applied skills are even more important (2006).

Knowledge and Skills Needed for Success

Basic Knowledge and Skills

- English Language (spoken)
- Reading Comprehension
- Writing
- Mathematics
- Science
- Government and Economics
- Humanities and the Arts
- Foreign Languages
- History and Geography

Applied Skills

- Critical Thinking and Problem Solving
- Oral Communications
- Written Communications
- Teamwork and Collaboration
- Diversity
- Information Technology Use
- Leadership
- Creativity and Innovation
- Lifelong Learning and Self-Direction
- Professionalism and Work Ethic
- Ethics and Social Responsibility

Acquiring such skills usually occurs over time and in multiple venues, including the workplace itself. The question can be asked, "What strategies are most effective in ensuring that youth with learning disabilities acquire the academic, functional, applied, and social skills they will need in the workplace?"

The *Guideposts for Success*

Building on 30 years of research and experience, the National Collaborative on Workforce and Disability for Youth (NCWD/Youth), in collaboration with the U.S. Department of Labor's Office of Disability Employment Policy (ODEP), created the *Guideposts for Success,* a comprehensive framework that identifies from a developmental perspective what all youth, including youth with disabilities, need to succeed during the critical transition years.

The *Guideposts* resulted from an extensive review of research, demonstration projects, and effective practices covering a wide range of programs and services—including lessons from youth development, quality education, workforce development, and the child welfare system—which identified commonalities across the disciplines, programs, and institutional settings. The review pointed out that all youth achieve better outcomes when they have access to:

- high quality standards-based education;
- information about career options and exposure to the world of work, including structured internships;
- opportunities to develop social, civic, and leadership skills;
- strong connections to caring adults;
- access to safe places to interact with their peers; and
- support services and specific accommodations to allow them to become independent adults.

The *Guideposts* framework is built on the following basic values:

- high expectations for all youth, including youth with disabilities;
- equality of opportunity for everyone, including nondiscrimination, individualization, inclusion, and integration;
- full participation through self-determination, informed choice, and participation in decision-making;
- independent living, including skills development and long-term supports and services, where necessary;
- competitive employment and economic self-sufficiency, with or without supports; and
- transition planning that is individualized, person-driven, and culturally and linguistically appropriate.

This last point cannot be overemphasized. In developing strategies and programming to meet the needs of youth with disabilities, service providers should insist on culturally responsive service systems that respect differences among individuals.

Within the overall Guideposts framework, programs and policymakers should emphasize youth with learning disabilities acquiring skills related to the following: 1) strategic learning for the workplace, 2) individual development strategies, and 3) disclosure and accommodations strategies. Additionally, the research consistently points out that particular attention must be given to the appropriateness of the diagnostic assessments used to determine the type and severity of learning disabilities due to the large numbers of misdiagnosed or undiagnosed individuals in this group.

The *Guideposts* are grouped into five areas.

1. School-Based Preparatory Experiences

In order to perform at optimal levels in all education settings, all youth need to participate in educational programs grounded in standards, clear performance expectations, and graduation exit options based upon meaningful, accurate, and relevant indicators of student learning and skills. These should include the following:

- academic programs that are based on clear state standards;
- career and technical education programs that are based on professional and industry standards;
- curricular and program options based on universal design of school, work, and community-based learning experiences;
- learning environments that are small and safe, including extra supports such as tutoring, as necessary;
- supports from and by highly qualified staff;
- access to an assessment system that includes multiple measures; and
- graduation standards that include options.

In addition, youth with disabilities need to do the following:

- use their individual transition plans to drive their personal instruction, and use strategies to continue the transition process post-schooling;
- have access to specific and individual learning accommodations while they are in school;
- develop knowledge of reasonable accommodations that they can request and control in educational settings, including assessment accommodations; and
- be supported by highly qualified transitional support staff that may or may not be school staff.

Because of the strong correlation between school-based preparatory experiences and positive employment outcomes, youth with learning disabilities benefit from staff and experiences that help them understand how the strategies they use to learn in classroom settings can be applied to the workplace. They benefit from access to individualized assessments for school and work, practice requesting reasonable accommodations to ease the effects of the environment on their disability, and practice incorporating instructional strategies centered on "learning how to learn" outside of the classroom.

2. Career Preparation & Work-Based Learning Experiences

Career preparation and work-based learning experiences are essential in order for youth to form and develop aspirations and to make informed choices about careers. These experiences can be provided during the school day or through after-school programs, and will require collaborations with other organizations. *All youth need information on career options, including the following:*

- career assessments to help identify students' school and post-school preferences and interests;
- structured exposure to postsecondary education and other life-long learning opportunities;
- exposure to career opportunities that ultimately lead to a living wage, including information about educational requirements, entry requirements, income and benefits potential, and asset accumulation; and
- training designed to improve job-seeking skills and workplace basic skills (sometimes called "soft skills").

Youth with learning disabilities need exposure to work-based learning and vocational activities that focus on their individual interests, skills, and aptitudes.

In order to identify and attain career goals, youth need to be exposed to a range of experiences, including the following:

- opportunities to engage in a range of work-based exploration activities such as site visits and job shadowing;
- multiple on-the-job training experiences, including community service (paid or unpaid), that are specifically linked to the content of a program of study and school credit;
- opportunities to learn and practice their work skills (so-called "soft skills"); and
- opportunities to learn first-hand about specific occupational skills related to a career pathway.

In addition, youth with disabilities need to do the following:

- understand the relationships between benefits planning and career choices;
- learn to communicate their disability-related work support and accommodation needs; and
- learn to find, formally request, and secure appropriate supports and reasonable accommodations in education, training, and employment settings.

Because experience gained from career preparation and work-based learning experiences often informs later decisions regarding employment options, youth with learning disabilities need exposure to work-based learning and vocational activities that focus on their individual interests, skills, and aptitudes. They also need a clear understanding of how their processing difficulties may impact their career options, how accommodations can minimize many barriers, and how disclosure of their disability to others can facilitate success in employment.

3. Youth Development & Leadership

Youth development is a process that prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them gain skills and competencies. Youth leadership is part of that process. *In order to control and direct their own lives based on informed decisions, all youth need:*

- mentoring activities designed to establish strong relationships with adults in formal and informal settings;
- peer-to-peer mentoring opportunities;
- exposure to role models in a variety of contexts;
- training in skills such as self-advocacy and conflict resolution;
- exposure to personal leadership and youth development activities, including community service; and
- opportunities that allow youth to exercise leadership and build self-esteem.

In addition, youth with disabilities need:

- mentors and role models including persons with and without disabilities; and
- an understanding of disability history, culture, and disability public policy issues as well as their rights and responsibilities.

Because youth development and leadership opportunities are effective and lead to successful outcomes for youth with disabilities, youth can learn how to effectively access accommodations needed in the workplace, and access activities that promote self-determination, self-advocacy, and goal setting. This includes instruction in and opportunities to practice interpersonal skills and to develop functional work capacities. It can also be particularly useful for young people to meet and spend time with successful adults (and peers) who also have learning disabilities.

4. Connecting Activities

Young people need to be connected to programs, services, activities, and supports that help them gain access to chosen post-school options. *All youth may need one or more of the following:*

- mental and physical health services;
- transportation;
- housing;
- tutoring;
- financial planning and management;
- post-program supports thorough structured arrangements in postsecondary institutions and adult service agencies; and
- connection to other services and opportunities (e.g., recreation).

In addition, youth with disabilities may need:

- acquisition of appropriate assistive technologies;
- community orientation and mobility training (e.g., accessible transportation, bus routes, housing, health clinics);
- exposure to post-program supports such as independent living centers and other consumer-driven community-based support service agencies;
- personal assistance services, including attendants, readers, interpreters, or other such services; and
- benefits planning counseling, including information regarding the myriad of benefits available and their interrelationships, so that they may maximize those benefits in transitioning from public assistance to self-sufficiency.

Because having access to healthcare, housing, and transportation is fundamental to being a reliable member of the workforce, young people with learning disabilities, in part due to their processing difficulties, may require additional training and support in order to understand how to obtain these services. They also need to know that their eligibility to receive certain services may terminate when they exit school or reach a specific age. Therefore, the youth may require assistance in planning to avoid gaps in services as they transition from youth service systems to adult service systems.

5. Family Involvement and Supports

Participation and involvement of parents, family members, and/or other caring adults in a youth's life promotes the social, emotional, physical, academic, and occupational growth of youth, which leads to better post-school outcomes. *All youth need parents, families, and other caring adults who have:*

- high expectations which build upon the young person's strengths, interests, and needs and foster their ability to achieve independence and self-sufficiency;
- been involved in their lives and assisting them toward adulthood;
- access to information about employment, further education, and community resources;
- taken an active role in transition planning with schools and community partners; and
- access to medical, professional, and peer support networks.

In addition, youth with disabilities need parents, families, and other caring adults who have:

- an understanding of their youth's disability and how it affects his or her education, employment and/or daily living options;
- knowledge of rights and responsibilities under various disability-related legislation;
- knowledge of and access to programs, services, supports, and accommodations available for young people with disabilities; and

Schools, community-based programs, and post-school programs must collaborate to design and align their service strategies to assist these youth.

- understanding of how individualized planning tools can assist youth in achieving transition goals and objectives.

Because youth with learning disabilities need access to educational, vocational, technological, and social supports including accommodations in order to be able to navigate effectively in some environments, they need families who are aware of and adept at accessing available resources and able to share their knowledge with their youth. At the same time, youth with learning disabilities need family members who demonstrate a great deal of understanding as the youth alternate between wanting a lot of support and wanting virtually no support.

Development Strategies for Youth with Learning Disabilities—A Focus on Skills

As noted above, workforce system partners, including schools and youth development programs, need to help youth build not only academic skills but also vocational and social competencies, supportive relationships, community engagement, and independence. No one institution has the charter or the capacity to provide all of the needed supports to help those with diagnosed or undiagnosed learning disabilities become successful. Thus, schools, community-based programs, and post-school programs must collaborate to design and align their service strategies to assist these youth.

For many youth with learning disabilities, ongoing support has tended to focus on improving academic skills (e.g., reading, writing, and mathematics) with too little attention being paid to developing the applied and social skills needed in the workplace. While many resources exist to help young people with learning disabilities improve their academic skills, there is a lack of practical information about navigating from school to work and about the skills, accommodations, supports, and strategies they will need to successfully enter and remain in the workforce. It is our hope that the materials in this Guide will help to fill this gap.

Successful Workplace Outcomes

Inherent in the term "transition to adulthood" is the recognition that an individual will likely spend less time in educational settings and more time pursuing career interests as their transition unfolds. Nearly everyone has a time when they stop thinking of themselves as a student and start thinking of themselves as part of the workforce. For some, this happens quickly; for others, it is a gradual process that may take years. Whenever it happens, success will hinge on several elements including the individual's knowledge, skills, and abilities; the availability of employment-related supports; and the individual's capacity to respond to the employer's needs.

The dilemma for many people with learning disabilities is how to present themselves and their disability (if they choose to disclose) in such a manner that potential employers understand how the individual will meet their needs if they are hired. The *Guideposts for Success* can help these youth obtain the skills they will need to be valued as prospective employees.

The next three chapters of this Guide will focus on utilizing the *Guideposts* to support youth with learning disabilities in the acquisition of new skills and strategic approaches to maximize their employability. Chapter 3 begins with a discussion of strategies that optimize an individual's ability to learn and understand new material or skills in the context of the workplace; to integrate this new information with what they already know in a way that makes sense; and to be able to apply the new information to a different situation or place.

CHAPTER 3

Strategic Learning for the Workplace

Youth with learning disabilities, like their peers without disabilities, must acquire the knowledge, skills, and strategies—academic and non-academic—necessary to maximize their ability to function independently on a day-to-day basis in our society. Learning to learn and engaging in lifelong learning are particularly important components of employment success, since the nature of work is changing at an ever-increasing pace.

In this Chapter

- Defining Strategic Learning
- Why the Focus on Strategic Learning for the Workplace?
- Backdrop—Beyond Remediation
- Design Elements of Strategic Learning for the Workplace
- The Importance of Job Fit
- Research Findings and Exhibits

Defining Strategic Learning

Strategic learning is the process of incorporating specific tools and techniques to understand and learn new material or skills, to integrate new information with what is already known in a way that makes sense, and to recall the information or skill later, even in a different situation or place. "Strategic learning for the workplace" is the application of these tools and techniques for obtaining the knowledge, skills, and abilities needed to succeed in the employment context.

Rather than focusing on remedial approaches to processing difficulties, this chapter emphasizes strategic learning techniques that youth with learning disabilities can use to take control of their own learning, and the use of compensatory strategies which can help them to utilize their strengths to meet the demands of the work world confidently and effectively. The rationale for this approach can be found in research. For example, Robinson (1999) identified two factors that successful adults with learning disabilities feel contribute to their success. The first is knowledge of their own strengths and weaknesses; the other is a change in their perception of themselves and their learning characteristics—from one of failure to a more positive and balanced perception of a person with both strengths and weaknesses. These factors of self-efficacy and self-directed learning are key areas that should be emphasized by youth service professionals in preparing youth and young adults for the future (Little, 2001). Successful employment outcomes for adults with learning disabilities have also been associated with their gaining increased control of their lives (Gerber, Ginsberg, & Reiff, 1992).

Why the Focus on Strategic Learning for the Workplace?

Many people with learning disabilities become highly successful members of the workforce and society. Former Vice President Nelson Rockefeller, actress Whoopi Goldberg, Hewlett-Packard co-founder William Hewlett, Cisco Systems president and CEO John Chambers, and activist Erin Brockovich are prominent individuals with learning disabilities who developed effective strategies that ultimately allowed them to reach high levels of success. In adulthood, and specifically in the workplace, individuals who cannot read well, who struggle with writing or math, or who have general processing difficulties frequently leverage other strengths and skills to be successful.

To support the needs of older youth and adults with reading difficulties, the National Institute for Literacy (NIFL) engages in research and provides technical support to the adult education field focused on learning disabilities. In the 1990s, NIFL recognized that adult basic education programs had high attrition rates (around 50% nationally). They set out to help educators improve these poor outcomes (1999). Their research showed that up to half of the individuals requiring adult basic education services probably had learning disabilities. This led, in 1991, to the establishment of the National Adult Literacy and Learning Disabilities Center (ALLD)—the first national technical assistance center focused on learning disabilities. At the same time, NIFL launched a long-term effort to establish content standards for adult education and other workforce development programs. These content standards, although aimed at improving literacy, are also useful in any learning setting for older youth or adults and form the basis for not only improving literacy, but also developing work-focused learning strategies. Much of the material that follows originated from concepts and policies developed at NIFL and ALLD.

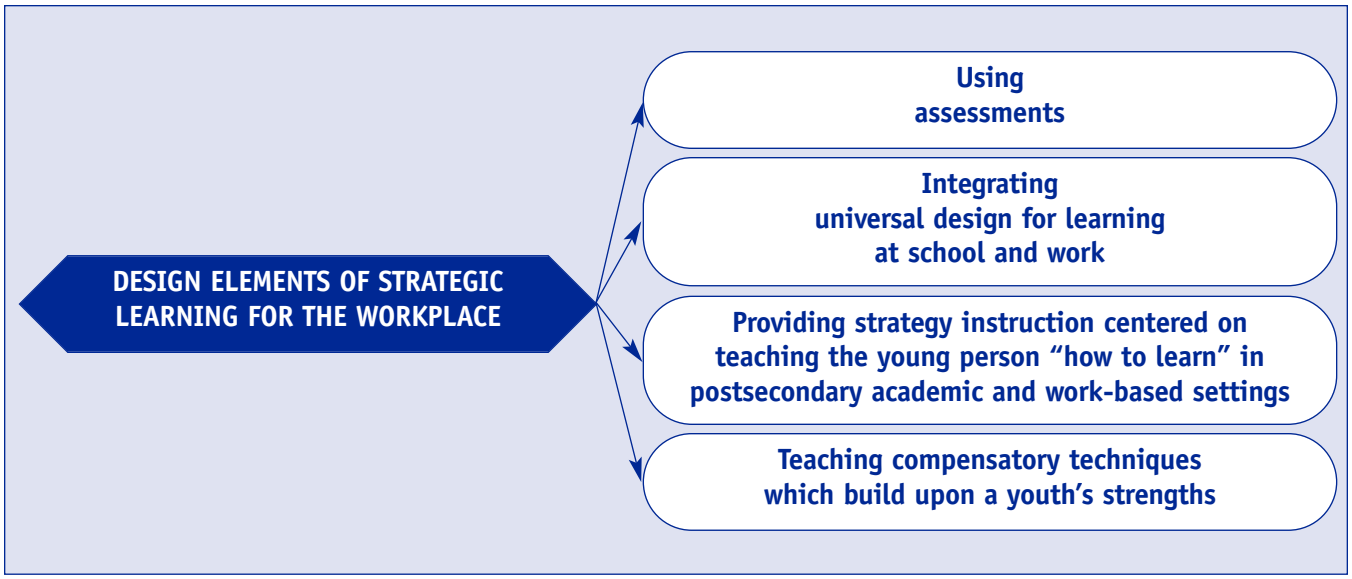
Professionals who work with transition-age youth with diagnosed and undiagnosed learning disabilities can position them for success by equipping them with strategic learning techniques to master work-related skills. These skills can be mastered by helping them to understand the importance of "job fit" and to learn how to identify and utilize compensatory techniques which allow them to perform work-related tasks in a manner which best utilizes their strengths.

Backdrop—Beyond Remediation

Remediation is at best a partial solution. Typically, school-age children with learning disabilities are provided with a variety of instructional interventions, including additional instructional time, one-on-one tutoring, and remediation techniques in an effort to strengthen certain academic skills. Unfortunately, even with the use of evidence-based practices and instruction by the most qualified teachers, some of these youth show little academic growth. As a result, many youth and young adults with LD either believe that they cannot learn or that learning is just too difficult or not worth it.

In the information age where things move so quickly, it is important that all youth know "how to learn" and have a toolbox of strategies to help them solve problems in adult environments. A focus on learning-to-learn is important because it leads to "intentional learning"—higher-level learning or metacognition that leads to self-regulation and increased understanding (Black et al., 2006). Hautamaki et al. (2002) define learning-to-learn as "the competence and the willingness to adapt to novel tasks [and that] a task is seen to activate a complex system of interrelated competencies and beliefs, leading to learning action."

Knowing that certain techniques and strategies can be used to support learning, which techniques are useful in which situations, and how to use these techniques effectively can be empowering for all youth and young adults, including those with learning disabilities. While some youth with learning disabilities are able to independently develop these strategies, many others must be provided opportunities to build and integrate strategic learning in academic, vocational, and social settings.



Design Elements of Strategic Learning for the Workplace

Strategic learning and compensatory techniques relate predominantly to the first three *Guideposts:* School-Based Preparatory Experiences, Career Preparation and Work-Based Learning, and Youth Development and Leadership. These *Guideposts* are intertwined and ideally build upon each other. In the classroom setting, youth with learning disabilities can benefit from access to disability-related assessments and qualified staff who can help them become active self-regulated learners proficient in the use of compensatory techniques. In preparing for work, youth with learning disabilities may benefit from further assessment focused on their post-school interests and preferences as well as from having opportunities for work-based experience to help them learn how to utilize these strategies effectively to negotiate the workplace. In addition, the fifth *Guidepost,* Family Involvement, is important for youth with learning disabilities as they learn to frame their disability in new environments, ideally with the support of their family.

Design Element 1: Using assessments

Assessment is "the process of collecting data for the purpose of making decisions" (Salvia & Ysseldyke, 2004, p. 5). Assessments can provide understanding and insight into a young person's skills, abilities, and interests as they relate to employment. In the course of transition, all youth should have access to a variety of vocational assessments such as interest inventories, aptitude testing, and functional capacities testing, as well as general work experiences that provide feedback on performance. Formal assessment for transition-age youth may occur across four domains—academic, vocational, psychological, and medical—and may include formal and informal components and four types of activities: interviews, observations, review of records, and testing or performance reviews. Table 3.1 shows the major areas of testing and performance reviews commonly used in the assessment of youth and young adults in career planning.

Assessment in educational and vocational domains is often done by teachers, counselors, trainers, or others with the appropriate training and expertise. Assessment in psychological and medical domains must always be done by a licensed psychologist, therapist, or physician. Non-licensed professionals may be involved in screening individuals for health and disability-related conditions, but diagnosis must only be made by those with specific training and licensure.

Assessment Specific to Learning Disabilities

Youth with diagnosed or suspected learning disabilities may benefit from access to high-quality assessment in all four domains, including psychological and medical (even though they may be more expensive or difficult to arrange than academic or vocational assessments). It is quite possible that a full medical assessment may show that a youth has a visual impairment rather than a suspected learning disability.

TABLE 3.1

Assessment Domains and Testing

Assessment Domain	Major Area of Testing	What is Being Measured or Ascertained	Assessment Instrument Types
Educational	Academic performance or achievement	Reading skills Writing skills Mathematics skills Spelling skills	Academic testing
			Achievement testing
			Curriculum-based assessment
			Tests of General Educational Development (GED) (writing, reading, math, science, and social studies)
			ACT or SAT
	Cognitive abilities	Intelligence	Intelligence testing (IQ)
Psychological	Cognitive abilities	Neuropsychological involvement	Neuropsychological testing
		Learning disabilities	Diagnostic testing
	Behavioral Social Emotional	Behavior	Behavioral analysis
		Social skills	Social adaptation and work-related behaviors
		Mental health	Mental health screening and assessments
		Chemical health	Screening for drug and alcohol usage
			Chemical dependency assessment
Vocational	Vocational and career interests	Interests, preferences, values, and temperaments	Interest testing
			Personality inventory
			Career exploration experiences
			Work values assessment
	Job aptitudes and skills	Job aptitudes	Assessing potential to learn and occupational abilities
		Work behaviors	Situational work assessment
			Job-seeking and -keeping skills assessment
		Work skills	Work samples
			Community-based or on-the-job assessment
	Occupation-specific certification	Mastery of knowledge, skills, and abilities in specific occupations	Tests or assessments given at the end of apprenticeships, college programs, and other job training programs focused on one specific job or career area, and based on industry-validated skill standards
	Physical and functional capabilities	Work capacities	Work tolerance
			Physical capacities scales, work samples, and community-based assessments
			Assistive technology
			Work accommodations
Medical	Physical and functional capacities	The need for diagnoses and medical therapies	Occupational therapy assessment
			Physical therapy assessment
			Speech and language assessment
			Hearing assessment
			Vision assessment

This table is adapted from the NCWD/Youth publication, *Career Planning Begins with Assessment—A Guide for Professionals Serving Youth with Educational and Career Development Challenges.* It is available at http://www.ncwd-youth.info/career-planning-begins-with-assessment

Specific assessments are done to:

a) identify the presence or scope of a learning disability;

b) determine which compensatory strategies and learning strategies are most likely to be effective for an individual in a particular training or work setting;

c) determine eligibility for program participation, and secure protection from discrimination and access to reasonable accommodations;

d) assist in identifying vocational interests and strengths; and

e) measure program effectiveness.

To identify the presence or scope of learning disabilities
Since learning disabilities are unique to each individual, proper assessment may be useful in determining whether and which specific processing difficulties exist. Although the actual diagnosis of a learning disability must be done by licensed professionals, youth service professionals also have an important role to play through informal observations. They may suspect the presence of a learning disability if they notice youth who are:

- taking a long time to complete a task;
- making frequent mistakes;
- having difficulties with time management or directions;
- struggling to read or fill out applications; or
- seeming to under-perform or procrastinate.

Additionally, subsequent interviews with the youth (and/or their family members and friends) may provide insight into past experiences with special education or other supports related to learning disabilities. Youth may recall prior assessments and may know whether they are available for review. If they are, prior to planning any additional assessments, it is useful to review what has been done previously after securing appropriate releases.

Youth service professionals can also use formal screening tools in classrooms, at One Stop Career Centers, and at other community agencies that work with youth. Screening activities are not diagnostic, however, and should only be used to determine if an individual should be referred for further diagnostic testing by qualified individuals. Exhibit 3.2 at the end of this chapter is an example of a screening tool that can be used to determine if further testing and diagnosis is warranted. Caution must be used to avoid labeling a youth based on screening results. If screening indicates that a youth may have a learning disability, the service provider needs to be prepared to follow up with arrangements for diagnostic testing.

Without screening and diagnosis, youth may miss out on needed assistance and access to reasonable accommodations. Diagnosing any type of disability, however, has ramifications that should be carefully considered by both the practitioner and the client. Emotional support may be needed as the newly-diagnosed individual adjusts to this new element of his/her identity.

To determine which compensatory techniques and learning strategies are most likely to be effective for an individual in a particular training or work setting:
The most important outcome of assessment for older youth and young adults with learning disabilities may be that assessments can help them identify and individualize the compensatory techniques and learning strategies that are most likely to be beneficial for them in a particular work or training setting. As detailed below under Design Element 2, supporting the youth in the development of such techniques moves the conversation away from remediation toward providing the young person with tools he or she can use to navigate and succeed in the work environment.

To help youth identify vocational interests and strengths
The knowledge gained from assessment activities should provide a basis from which youth and young adults, with support from service providers and families, can make informed decisions. *Informed choice* is the concept that all youth have the right and responsibility to make decisions for themselves, that they are empowered to do so, and that support systems and programming (including assessment activities) are understandable to them.

Assessment is only useful, however, to the extent that it helps people with LD to live more fully. Accordingly,

testing alone should never be used as the sole basis for making employment or career decisions or to limit an individual's options. Rather, it is important that the person with learning disabilities receive information about his or her goals and learning strengths and weaknesses. Not only is this information itself important, but shifting the process from testing to discovery and problem-solving may increase an individual's engagement and decrease the negative outcomes of testing (Lowry, 1990). Regardless of what the testing reveals, youth with learning disabilities should be provided broad opportunities for educational and career exploration, since many have had limited experiences in work settings and accordingly may know little about postsecondary education and training options.

To determine eligibility for program participation and secure protection from discrimination and access to reasonable accommodations

Youth who have received special education services in public schools are likely to have had numerous assessments for the purpose of determining eligibility for those services. Many found the assessment experience to be unpleasant and something they would rather not repeat. This can be a significant problem

Selected Formal Assessment Instruments Used to Diagnose Learning Disabilities

When selecting a battery of tests, it is critical to consider the technical adequacy of instruments, including their reliability, validity, and standardization on an appropriate norm group. The professional judgment of an evaluator in choosing tests is important. Whenever feasible, the most recent version of the test should be used. The following list includes a variety of popular standardized measures for diagnosing LD and/or LD/ADHD. It is meant to be a helpful resource to evaluators but not a definitive or exhaustive listing.

Tests of Intellectual Functioning

- Kaufman Adolescent and Adult Intelligence Test
- Reynolds Intellectual Assessment Scales
- Stanford-Binet 5
- Test of Non-Verbal Intelligence
- Wechsler Adult Intelligence Scale — III
- Woodcock-Johnson III — Tests of Cognitive Ability

Attention, Memory, Learning

- Brown Attention Deficit Disorder Scale
- California Verbal Learning Test II
- Conners' Adult ADHD Rating Scale — Self Report
- Conners' Continuous Performance Test II
- Detroit Test of Adult Learning Aptitude
- Detroit Test of Learning Aptitude 3
- Halstead-Reitan Neuropsychological Test Battery
- Integrated Visual and Auditory Continuous Performance Test
- Test of Variable Attention
- WAIS-III Working Memory Index
- Wide Range Assessment of Memory and Learning — Second Edition
- Wechsler Memory Scales III
- Wender Utah Rating Scale (for ADHD)

Executive Functioning

- Delis-Kaplan Executive Function System
- Stroop Color and Word Test
- Trail Making Test Parts A and B
- Wisconsin Card Sorting Test

Visual, Perceptual, Motor

- Bender Visual Motor Gestalt Test
- Brief Visual-Spatial Memory Test
- Finger Tapping Test
- Grooved Pegboard Test
- Purdue Pegboard Test
- Rey-Osterrieth Complex Figure Drawing Test

Language Skills

- Boston Naming Test
- Comprehensive Test of Phonological Processing
- Peabody Picture Vocabulary Test III
- Test of Adolescent and Adult Language 3

Tests of Achievement

- Gray Oral Reading Test
- Nelson-Denny Reading Test
- Scholastic Abilities Test for Adults
- Stanford Diagnostic Mathematics Test
- Stanford Test of Academic Skills
- Test of Adolescent and Adult Word Finding
- Test of Written Language 3
- Wechsler Individual Achievement Test II
- Woodcock-Johnson III - Tests of Achievement
- Woodcock Reading Mastery Tests — Revised

Specific achievement tests are useful instruments when administered under standardized conditions and when the results are interpreted within the context of other diagnostic information.

(Adapted from ETS, 2007)

because when youth with learning disabilities leave the K-12 system, they will need recent documentation of their disability to be eligible for certain services and financial supports in the workplace. Documentation of an official diagnosis of a learning disability can be extremely important to the success of the person with a learning disability in post-school work settings since such documentation entitles the individual to protection against discrimination and to reasonable accommodations under Federal laws such as the Americans with Disabilities Act, the Rehabilitation Act, and the Workforce Investment Act.

Because assessments can be expensive and difficult to schedule (due in part to the limited number of qualified professionals who can administer them), agencies that serve youth may be reluctant to arrange needed testing. Public schools and other agencies will sometimes waive assessment activities and provide services based on previous diagnoses. While this may be appropriate for some individuals, because the impact of the disability on an individual may change over time, obtaining updated assessments can be critical to identifying appropriate effective interventions and/or needed supports.

Assessment findings from high school generally may only be used in adult service and postsecondary educational settings if they reflect the individual's current needs, are based on adult indicators, and were administered within the past three years. Colleges are not obligated to pay for assessments and diagnostic services but will usually require current documentation if an individual requests accommodations in the classroom.

Design Element 2: Integrating universal design for learning at school and work

As discussed previously, many youth and young adults with learning disabilities who participate in job training programs and/or enter the workplace may never have been diagnosed or may choose not to disclose their disability. Accordingly, universal design for learning (UDL) is one strategy that providers and employers should utilize in any employment-related training they provide. UDL is an approach that addresses the needs of all kinds of learners and all kinds of learning styles. According to CAST (n.d.), UDL calls for:

- multiple means of representation, to give learners various ways of acquiring information and knowledge;
- multiple means of expression, to provide learners alternatives for demonstrating what they know; and
- multiple means of engagement, to tap into learners' interests, offer appropriate challenges, and increase motivation.

UDL is an outgrowth of universal design (UD)—"the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Center for Universal Design, 1997). UD means that rather than designing facilities and services for the average user, designing them for people with a broad range of abilities, disabilities, ages, reading levels, learning styles, native languages, cultures, and other characteristics. The intent of UD is to simplify life for everyone by making products, communications, and the built environment more usable by more people at little or no extra cost. The concept of UD can be applied to all aspects of the workplace, not just the physical realm, and can make life easier for everyone, not just those with disabilities. The UD concept targets people of all ages, sizes, and abilities (Center for Universal Design, 1997). The seven principles of universal design are:

1. *Equitable Use:* The design is useful and marketable to people with diverse abilities—for example, a Web site that is designed so that it is accessible to everyone, including people who are blind.
2. *Flexibility in Use:* The design accommodates a wide range of individual preferences and abilities. An example is a museum that allows a visitor to choose to read or listen to the description of the contents of a display case.
3. *Simple and Intuitive Use:* Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. Science lab equipment with control buttons that are clear and intuitive is a good example of an application of this principle.

4. *Perceptible Information:* The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. An example of this principle is when television programming projected in noisy public areas like academic conference exhibits includes captions.

5. *Tolerance for Error:* The design minimizes hazards and the adverse consequences of accidental or unintended actions. An example of a product applying this principle is an educational software program that provides guidance when the user makes an inappropriate selection.

6. *Low Physical Effort:* The design can be used efficiently and comfortably, and with a minimum of fatigue. Doors that are easily opened by people with a wide variety of physical characteristics demonstrate the application of this principle.

7. *Size and Space for Approach and Use:* Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility. A flexible science lab work area designed for use by students with a wide variety of physical characteristics and abilities is an example of this principle.

UD benefits students with disabilities but also benefits others. For example, while captioning course videos provides access to deaf students, it also benefits students for whom English is a second language, some students with learning disabilities, anyone who learns

TOOL 3.1

Points to Consider for Inclusive Teaching Using Universal Design

Tool 3.1 can be used by those providing instruction to youth with and without disabilities to begin laying the foundation for universal design for learning and instruction. It was adapted from a checklist developed by the DO-IT Project at the University of Washington. Although it was originally designed for secondary and postsecondary educational institutions, it can guide employers and service providers in making employment-related courses and training instruction universally accessible.

Class Climate *Adopt practices that reflect strong values with respect to both diversity and inclusiveness.*	
Demand and demonstrate mutual respect	Create a welcoming environment for all students. Encourage the sharing of multiple perspectives.
Be approachable and available	Learn students' names. Maintain regular office hours. Consider making a student-instructor meeting a course requirement. Be available for online communication as well.

Interaction *Encourage regular and effective interactions between students and the instructor and ensure that communication methods are accessible to all participants.*	
Encourage cooperative learning	Assign group work for which learners must support each other and employ different skills and roles. Encourage different ways for students to interact with each other (e.g., in-class discussion, group work, Web-based communications). Also, require that small groups communicate in ways that are accessible to all group members.

Physical Environments and Product *Ensure that facilities, activities, materials, and equipment are physically accessible to and usable by all students, and that all potential student characteristics are addressed in safety considerations.*	
Ensure physical access to facilities	Use classrooms, labs, workspaces, and fieldwork sites that are accessible to individuals with a wide range of physical abilities.
Ensure that everyone can use equipment and materials	Minimize nonessential physical effort and provide options for operation of equipment, handles, locks, cabinets, and drawers. Use large print to clearly label educational aids, using symbols as well as words.

Delivery Methods *Use multiple, accessible instructional methods that are accessible to all learners.*	
Select flexible curriculum	Choose textbooks and other curriculum materials that address the needs of students with diverse abilities, interests, learning styles, preferences, and other characteristics. Consider technology-based materials that provide prompting and feedback opportunities.
Provide cognitive supports	Summarize major points, give background and contextual information, deliver effective prompting, and provide scaffolding tools (e.g., outlines, class notes, summaries, study guides, copies of projected materials with room for note-taking) and other cognitive supports. Deliver these materials in printed form and in a text-based electronic format. Encourage and support students to develop their own scaffolding materials.
Provide multiple ways to gain knowledge	Use multiple modes to deliver content, when possible allow students to choose from multiple options for learning, and motivate and engage students—consider lectures, collaborative learning options, small group discussions, hands-on activities, Web-based communications, online review materials, educational software, fieldwork, etc.
Use large visual and tactile aids	*Use manipulatives to demonstrate content. Make visual aids as large as reasonable* (e.g., use large, bold fonts on uncluttered overhead displays; use a computer to enlarge microscope images).

Information Resources and Technology *If your course uses computers as information resources, ensure that these systems employ accessible design, that you are aware of accessibility options, and that systems are in place to make accommodations.*	
Select materials early	Choose printed materials and prepare a syllabus early to allow students the option of beginning to read materials and work on assignments before the course begins. Allow adequate time to arrange for alternate formats, such as books in audio format or in Braille (note that it can take more than a month to render a book in Braille).
Provide all materials in accessible formats	Use textbooks that are available in a digital, accessible format with flexible features. Provide the syllabus and other teacher-created materials in a text-based, accessible electronic format. Use captioned videos and provide transcriptions for audio presentations. Apply accessibility standards to Web sites.

Feedback *Provide specific feedback on a regular basis.*	
Provide regular feedback and corrective opportunities	Allow students to turn in parts of large projects for feedback before the final project is due. Give students resubmission options to correct errors in assignments or exams. Arrange for peer feedback when appropriate. Solicit feedback from students regarding course effectiveness.

Assessment *Regularly assess student progress using multiple accessible methods and tools, and adjust instruction accordingly.*	
Set clear expectations	Keep academic standards consistent for all students, including those who require accommodations. Provide a syllabus with clear statements of course expectations, assignment descriptions, and deadlines, as well as assessment methods and dates. Include a straightforward grading rubric.
Provide multiple ways to demonstrate knowledge	Assess group and cooperative performance, as well as individual achievement. Consider using traditional tests with a variety of formats (e.g., multiple choice, essay, short answer), papers, group work, demonstrations, portfolios, and presentations as options for demonstrating knowledge. Provide students choices in assessment methods when appropriate.

Accommodation *Plan for accommodations for students whose needs are not met by the instructional design.*	
Know how to arrange for accommodations	Know protocols for getting materials in alternate formats, rescheduling classroom locations, and arranging for other accommodations for students with disabilities.

(Adapted from Burgstahler, 2007).

better visually, and those watching the tape in a noisy environment. Delivering content in redundant ways improves instruction for students with a variety of learning styles and cultural backgrounds. Giving all learners access to class notes/training materials and assignments on a Web site also benefits everyone.

Universal design of instruction (UDI)—where universal design principles are applied in selecting and developing curriculum, choosing and implementing teaching methods, and developing assessments—is gaining increased attention from educational researchers and practitioners at the K-12 and postsecondary levels (Burgstahler, 2009). UDI can be described as a process, as a set of strategies applied to specific aspects of instruction, or as a goal.

Design Element 3: Providing strategy instruction centered on teaching the young person "how to learn" in postsecondary academic and work-based settings

The most effective way to facilitate learning for all learners, including youth and young adults with learning disabilities, is by combining direct instruction (e.g., lecture, discussion, book learning) with strategy instruction. Strategy instruction involves teaching the young person about learning strategies and about how and when to use particular strategies. It also includes instruction aimed at increasing the young person's ability to engage in self-regulated planning, monitoring, and evaluating of their learning. This latter technique, also known as metacognition, is of particular importance to success in postsecondary settings (Lowry, 1990). Specific learning strategies (e.g., repetition, verbal elaboration, organization techniques, paraphrasing, association) gradually come under the control of efficient learners through executive function processes or self-regulation. Competent learners are proficient in their capacity to choose strategies according to the demands of a task, monitor strategy usage, and adapt or devise strategic behavior using a problem-solving paradigm (Borkowski & Burke, 1996).

The most effective strategy interventions combine the use of both cognitive and metacognitive strategies. Cognitive strategies are concrete action-based strategies that tend to be task-specific, including visualization, verbalization, making associations, chunking, questioning, scanning, underlining, accessing cues, using mnemonics, sounding out words, paraphrasing, and self-checking and monitoring.

Metacognition, or awareness of the process of learning, includes being planful before engaging in a learning task, being active and efficient during learning by using strategies and monitoring comprehension and performance, and being self-aware in evaluating one's learning and making adaptations to increase the odds of success when faced with a similar task (Corley & Taymans, 2002).

The North Central Regional Educational Laboratory (1995) details these three basic elements:

1) Developing a plan of action

- What in my prior knowledge will help me with this particular task?
- What should I do first?
- Do I know where I can go to get some information on this topic?
- How much time will I need to learn this?
- What are some strategies that I can use to learn this?

2) Maintaining/monitoring the plan

- Did I understand what I just heard, read, or saw?
- Am I on the right track?
- How can I spot an error if I make one?
- How should I revise my plan if it is not working?
- Am I keeping good notes or records?

3) Evaluating the plan

- Did my particular strategy produce what I had expected?
- What could I have done differently?
- How might I apply this line of thinking to other problems?

With regard to cognition and metacognition, youth service professionals should understand that all young people learn, though they may not necessarily learn what adults want them to learn or in the way that they want them to learn. Adults should ask young people to reflect on a time that they learned something new and

TOOL 3.2

Types of Learning Strategies and Supports: Cognitive and Metacognitive

Tool 3.2 can be used by instructors, trainers, or coaches in school or work settings. Learning aids/strategies facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings. They help individuals understand and learn new material or skills, integrate this new information with what is already known in ways that makes sense, and recall the information or skill later.

Cognitive Strategies

These assist a student with processing and manipulating information (e.g., taking notes, asking questions); in other words, these strategies function to produce learning. The list below contains examples of cognitive strategies.

Strategy: Rehearsal	Strategy: Organization
• Definition: Reciting items to be learned from a list • Benefit: Believed to influence the attention and encoding process. It does not seem to help students connect current information with prior knowledge	• Definition: Outlining • Benefit: Helps learners select appropriate information and make the connections to be learned
Strategy: Elaboration	**Strategy: Analyzing**
• Definition: Summarizing or paraphrasing • Benefit: Believed to improve a student's ability to store information into the long-term memory by building internal connections between items to be learned and assisting with the integration of new information with prior knowledge	• Definition: Problem-solving, critical thinking • Benefit: Assists students with applying previous knowledge to new situations in order to solve problems and/or reach decisions

Metacognitive Strategies

These strategies help students think about thinking. Metacognition is an important concept in cognitive theory. It consists of two basic processes occurring simultaneously:

- Monitoring your progress as you learn
- Making changes and adapting your strategies if you perceive that you are not doing as well as you could

Basic Metacognitive Aids/Strategies

- Connecting new information to existing knowledge
- Selecting thinking strategies deliberately
- Planning, monitoring, and evaluating thinking processes

Metacognition, or awareness of the process of learning, is a critical ingredient to successful learning. Learning how to learn and developing thinking processes that can be applied to solve problems is a major goal of education. Over time, the acquisition and use of metacognitive strategies help students build confidence in their ability to learn. As this confidence builds, independent learning is fostered.

It is important to understand the relationship between metacognitive and cognitive strategies. Metacognitive activities usually occur before or after a cognitive activity. An example of the relationship between metacognitive and cognitive strategies is a learner who uses self-monitoring when reading. The learner, through self-monitoring, can sense that he or she does not comprehend what was read (metacognitive) and recognizes that they will understand the text better if they create an outline (cognitive).

Strategies to develop metacognition include:

- Share and model self-monitoring processes (e.g., proofreading)
- Explain and provide handouts regarding particular strategies that may be helpful
- Identify and model when particular strategies are appropriate
- Clarify why particular strategies are helpful and useful

(Adapted from Job Corps, n.d.)

enjoyed it. They should watch youth work on a task that motivates them and see how they do it. Strategy instruction recognizes that learners need to be engaged, approach tasks actively, and work with others to enhance understanding (Hutchinson, 1993).

Literacy Programs and Learning Strategies

The Office of Special Education Programs, U.S. Department of Education, has compiled a *Tool Kit on Teaching and Assessing Students With Disabilities*. In it, they highlight two adolescent literacy programs that use compensatory learning strategies. Collaborative Strategic Reading (CSR) and the Strategic Instruction Model (SIM) engage students in reading and writing instruction that combines group work guided by teachers with significant learning time devoted to analysis of text, clarification of word meanings, prediction of what is ahead, and contextual summarizations.

CSR incorporates cooperative learning and utilizes four distinct strategies:

- Preview (students brainstorm about the topic and predict what will be learned; occurs before reading);
- Click and Clunk (students identify parts of a passage that are hard to understand, then use strategies to break difficult words or phrases apart);
- Get the Gist (students identify the most important information in a passage); and
- Wrap Up (students ask and answer questions that demonstrate understanding, and review what was learned) (Klingner & Vaughn, 1998).

SIM strategies incorporate "Content Enhancement Routines" that help teachers manage and present content through organization, understanding, recall, and application using:

- Paraphrasing (students express the main idea and details in their own words);
- Self-questioning (students develop questions concerning reading passages and read to find the answers);
- Visual imagery (students visualize scenes in detail); and
- Word identification (students decode unfamiliar words by using context clues and word analysis) (Clapper, Bremer, & Kachgal, 2002).

For more information about CSR or SIM, see the Resource Section at the end of this chapter.

Strategy instruction is *direct* in that the instructor makes explicit what is to be learned and *indirect* in that the learners themselves make the connection between thinking skills and problem solutions. The service provider serves as a guide by helping youth activate prior knowledge and see how the pieces fit together and can be applied in different settings. Individuals with learning disabilities who lack basic skills or struggle with information processing may not get to higher levels of cognition, even if they have average or above average intelligence, unless these skills are expressly taught.

One approach to strategy instruction uses an information-processing theory approach that addresses "the multifaceted processes involved in learning information and higher-order thinking skills" (National Institute for Literacy, 1999). These processes fall into five areas, each of which has associated implications:

- *Input* – for most individuals, and especially individuals with learning disabilities, the more modalities that are used, the better the chance that the input will be remembered.
- *Attention* – it is critical to identify clearly what the learner should specifically pay attention to.
- *Perception* – based on a person's specific learning disability, [an] individual may have difficulty correctly interpreting information from one or more of the sensory input channels.
- *Working Memory* – working [or short-term] memory has a limited capacity, and functions most efficiently when the perceived information is immediately acted upon.
- *Long-Term Memory* – optimally, instructors and trainers help individuals take new information and connect it with what they already know, naturally building on their long-term memory knowledge networks.

Information processing theory is "particularly useful when working with individuals with learning disabilities because it helps practitioners think about how information can most clearly and explicitly be presented so that the learner is actively and appropriately involved in the learning process" (National Institute for Literacy, 1999).

Strategic Instruction in Work-Based Settings: Work settings do differ from classrooms, and employers are less likely than school staff to understand the needs of youth generally and the needs of youth with learning disabilities in particular. Youth may not know the culture, rituals, and professional expectations of a given workplace and they may not know how to go about discovering them in a mature manner. *Guidepost 2: Career Preparation & Work-Based Learning Experiences* emphasizes providing opportunities to try out and practice skills in workplace settings through internships, mentoring, trial work experiences, job shadowing, informational interviewing, and other related work skill development activities. Tool 3.3 may be useful to those who provide training for employers and providers who work with youth in helping the young person to become a more actively involved and effective learner in employment settings.

In addition to the instructional techniques described in Tool 3.4, employers, trainers, and others working with individuals with learning disabilities may also find it useful to have a basic understanding of the characteristics of effective instruction, both generally and in relation to work-related settings.

TOOL 3.3

Work-Related Processing Challenges and Strategies to Address Them

Tool 3.3 can be used by service professionals to alleviate specific processing challenges in the workplace and incorporate self-regulating strategies.

Processing Challenges in Work Experiences or Training Settings	Long-Term Instructional Goals	How Trainers, Coaches, and Managers Can Facilitate Learning	Strategies Young People Can Use
Job tasks and training materials that require substantial abstract reasoning	Learners should be taught how to seek more examples, explanations, and interpretations through questioning and research.	• Provide concrete examples • Provide analogies • Provide alternate interpretations • Provide hands-on experiences	Graph, draw, or build physical representations of abstract concepts using • photographs • models • alternate media
Complex job tasks or training materials that are not clearly organized	Learners should be taught how to survey materials and identify text organization, read to confirm organization of ideas, and reorganize information for personal understanding and use. Learners should be taught how to chunk tasks, graphically represent complex information, ask clarifying questions, and work collaboratively in teams to attack complex tasks.	Break down information or tasks and present them more explicitly and in ways that facilitate remembering	Organize and transform information by • outlining • summarizing • rearranging materials • highlighting • using flashcards/index cards • drawing pictures, diagrams, charts • making webs or maps Structure environmental components by • selecting or arranging the physical setting • isolating/eliminating or minimizing distractions • breaking up study periods and spreading them over time

TOOL 3.3 (CONTINUED)

Processing Challenges in Work Experiences or Training Settings	Long-Term Instructional Goals	How Trainers, Coaches, and Managers Can Facilitate Learning	Strategies Young People Can Use
Job tasks or training materials that require basic academic skills or cognitive strategies beyond those of the individual	Learners should have intensive instruction required for mastery of specific content; this should be presented in small, manageable chunks and should be related and applied to the specific content. Learners who do not know how to approach and complete tasks should have intensive instruction in learning strategies.	• Provide instruction in the prerequisite basic skills • Learn to develop accommodations • Provide cues and guidance about how to approach and complete learning and performance tasks	Rehearse and memorize (written or verbal; overt or covert) by • using mnemonic devices • teaching someone else the material • making sample questions • using mental imagery • using repetition Set goals and plan by • sequencing, timing • using time management and pacing strategies
Job tasks and training materials that may not have a connection with an individual's previous experiences, do not connect with current life activities, or are not initially interesting	Learners should be able to gather relevant materials from a variety of information sources and to ask questions of these sources to gain knowledge and insights. They should be taught to search for personal connections and explore other ways to make content relevant. They should also be taught self-management strategies for maintaining attention in boring situations and how to take advantage of options and choices provided in assignments to make work more interesting.	• Make connections between information and life situations more explicit • Provide information and assignments in ways that build on an individual's attention span, participation, strengths, and interests	Do "homework" and learn about work outside of work by • conducting and performing informational interviews • conducting library or internet research Participate in workplace mentoring
Job tasks and training materials that may seek responses and look for outcomes that are unfamiliar to youth and young adults	Learners should be taught to independently check and redo work, review information, seek help, ask clarifying questions, and inform others when they need more or different types of instruction before instruction in more content begins. They should be taught how to identify expectations and goals embedded in materials or to create and adjust goals based on previous experiences. They should be taught how to demonstrate competence, identify and take advantage of performance options offered, and request appropriate accommodations on evaluations.	• Provide additional or alternative instructional activities, activity sequences, or practice experiences to ensure mastery at each level of learning • Provide information concerning expectations for learning and performance • Provide opportunities to demonstrate what they know in different ways	Seek social assistance by • soliciting help from peers • soliciting help from teachers or other adults • emulating exemplary models Self-evaluate (checking quality or progress) by • analyzing the task (What does the instructor or my manager want me to do? What do I want out of it?)

Design Element 4: Teaching compensatory techniques which build upon a youth's strengths

All people, with and without disabilities, have both strengths and weaknesses. Compensatory techniques or strategies are tools which youth and young adults with learning disabilities can use to capitalize on their strengths in a variety of settings, including the workplace. One way to think of compensatory techniques is as tools that the young person can use to self-accommodate his/her own disability. Central to the effective use of these techniques is self-awareness of one's strengths and weaknesses and knowledge regarding which types of modifications and accommodations work best for the individual in a particular setting. While some learners naturally develop compensatory strategies, others will need to be taught these strategies.

Using Compensatory Techniques to Address Executive Functioning Issues: Executive functioning skills are those cognitive processes that enable individuals to engage in goal-directed or problem-solving behaviors. They involve tasks that help people learn new information,

TOOL 3.4

Possible Compensatory Strategies for Youth with Learning Disabilities

Tool 3.4 describes ways in which youth service professionals can help young adults with learning disabilities capitalize on their talents through the development and utilization of compensatory techniques in work settings.

If a person with a learning disability has this issue	Coupled with this strength	Try and teach this possible compensatory strategy
Perseverates: has trouble moving onto new tasks	Can follow strict time schedule	• Specify a time limitation for each activity • Have the individual check off tasks completed and keep charts of tasks to do • Give feedback to the individual (e.g., if work is accurate, give extra credit for completion within allotted time)
Learns erratically: sometimes knows, sometimes does not know	Has good short-term memory	• Keep a model of the finished product near the individual • Tape-record instructions from prior time periods, which are prerequisites to doing a given activity
Is easily distracted; cannot sustain attention on task	Functions well in a quiet environment Works well when given short time periods to do specific tasks	• Locate the individual in a stimulus-free environment, possibly a carrel or small office • Give the individual a time chart to complete with expected time to finish and his/her finish time • If possible, have the individual do a task one step at a time • Tell the individual to focus on the speaker's eyes when listening to instructions
Is easily frustrated; lacks self-confidence	Responds to positive reinforcement Is responsive to keeping track of work quality	• Assign short tasks and have the individual self-rate the quality of work and interest in individual types of tasks • Have the individual keep track of work productivity • Give feedback on the activity and an overview of progress to date from the beginning of the program • Repeat work that the individual enjoys and can succeed at

TOOL 3.4 (CONTINUED)

If a person with a learning disability has this issue	Coupled with this strength	Try and teach this possible compensatory strategy
Has difficulty following and/or staying on time	Tells time accurately	• Recommend that the individual wear a watch with an alarm or use a stopwatch to time tasks • Give time limitations for tasks and monitor time at the onset of training, then progressively have the individual monitor his/her own time • Use a timer to complete tasks within a set time limit
Directionality confusion (left vs. right, north vs. south, etc.)	Has good communication skills Copies visual model or demonstration well	• Motivate the individual to ask questions when confused with directions • Show the model; then have the individual copy it • Use a distinguishing feature on the individual's body or area as a landmark (e.g., if a person is confused by right and left, place an "R" in the upper-right-hand corner of his/her desk)
Experiences poor spatial judgment (interferes with focusing on key reading material)	Has good finger dexterity	• Have the individual use a ruler as a guide to hold his/her place in a text • Use highlighters to outline specific information to focus on • Use color transparency overlays that will reveal needed information while blocking background data
Is impulsive; rushes through tasks, making many errors	Responds well to clear, concise directions	• Emphasize intent of task, such as accuracy being more important than time
Cannot copy close work	Can copy blackboard work Can read written work	• Have the individual copy blackboard notes • Duplicate teacher's notes or another student's notes
Has difficulty integrating parts of items into whole unit (finished product)	After visualizing whole unit, can see how parts integrate into it	• Show the individual finished products so he/she can see how parts integrate into a meaningful whole (e.g., show an individual in electronics assembly a harness before he is given directions to make it himself)
Forgets information presented visually	Remembers information presented orally	• When possible, use tape recording and verbal instructions to relay information
Has difficulty functioning when people or environment change	Functions well in familiar environment	• Put the individual in a highly structured and, if possible, familiar area where change and distractions are minimal
Has difficulty functioning in large open spaces with noisy backgrounds	Functions well in quiet closed areas	• Have the individual work in small quiet office or room or wear earplugs or headphones
Has difficulty reading directions	Has strong listening comprehension and visual comprehension	• Tape or read written directions • Demonstrate work and have the individual imitate demonstration
Has difficulty remembering basic math facts	Understands basic math concepts Has good finger dexterity	• Have the individual use a calculator to do basic math functions • Utilize a math "fact sheet"

TOOL 3.4 (CONTINUED)

If a person with a learning disability has this issue	Coupled with this strength	Try and teach this possible compensatory strategy
Has difficulty telling time	Can read digital watch Socializes well	• Buy a digital watch • Pair the individual with another individual keeping a similar schedule
Lacks social judgment	Learns well in concrete situations	• Use group activities, like role-playing, to reinforce positive behavior • Whenever possible, give immediate feedback to reinforce positive behavior
Has poor visual memory	Has good auditory memory Functions well when model stays in sight	• Explain written directions orally • Present information orally, not only visually • Have the individual use a talking calculator or spell corrector to check accuracy of work • When required to perform a task, have the model of the finished product available to the individual
Has poor auditory memory	Has strong visual memory	• Draw or write directions • Tape-record directions if visual presentation is unavailable • Simplify oral directions

remember and retrieve information that they've learned previously, and use this information to solve problems in everyday life. At its best, executive functioning allows the individual to be mentally and behaviorally flexible to all sorts of task demands, adjust his/her thinking to accomplish goals (even in the face of changing conditions), and appropriately adapt his/her reflexes and responses (Horowitz, 2007).

While many people perform these types of tasks quickly, subconsciously, and almost instinctively, people with executive functioning problems, including some people with learning disabilities, are not able to perform these types of tasks spontaneously. Rather, they may experience problems with

- planning, organizing, and managing time and space;
- working memory;
- concrete thinking;
- inhibition and judgment;
- grasping cause;
- delaying gratification;
- multi-step directions;
- changing strategies or thinking of things in a different way (i.e., perseveration); or
- applying knowledge to new situations (Cook, 2009).

In addition, they may have difficulty reading social cues and may feel overwhelmed in large-group situations.

People who experience such difficulties must be taught compensatory strategies explicitly and systematically, and must be made aware of how, when, and why specific strategies should be used. It is equally important that opportunities be provided to practice such strategies in various venues, and that the learner be made aware that effective use of compensatory tools and strategies can greatly improve the likelihood of success throughout their life span.

Youth and young adults with learning disabilities who experience executive function difficulties, as well as the employers who hire them, may find the following compensatory strategies useful in the workplace:

Persons with learning disabilities who work in environments that are compatible with their abilities may not differ from colleagues without LD in occupational success (Witte, Philips, & Kakela, 1998).

- Obtaining detailed written instructions, if possible
- Developing a color-code organizational system
- Using planners, organizers, computers, timers, or software such as the Franklin Day Planner, Microsoft Outlook calendar and task lists, or Palm Pilot
- Using a weekly chart to identify daily work activities
- Providing visual schedules and reviewing them at least every morning, after lunch, and in the afternoon
- Pairing written directions with spoken instructions and visual models whenever possible
- Using a daily routine, if possible
- Creating checklists and "to do" lists
- Using self-adhesive notes as reminders
- Working with a mentor and having the mentor provide verbal and non-verbal cues
- Using a voice-activated recorder to record verbal instructions
- Using a flow chart to describe steps in a complicated task
- Breaking long assignments into smaller tasks and assigning mini-timelines for each task
- Creating a flow-chart of tasks that must be performed concurrently, and labeling and coding each task in sequential or preferential order
- Removing or reducing visual and auditory distractions from the work area
- Using noise-reduction headphones or white noise machines
- Using visual calendars or wall planners at to keep track of long-term assignments, deadlines, and activities
- Obtaining a "cheat sheet" of high-priority activities, projects, people, etc.
- To the extent feasible, withholding a new assignment until the previous project is complete
- Organizing the work space, and minimizing clutter on a weekly basis
- Having separate work areas with complete sets of supplies for different activities
- Keeping strategies consistent across school, home, and in the workplace. People with executive functioning disorders are more likely to do well when their routines are similar in different settings.

The Importance of Job Fit

Through the acquisition of strategic learning and compensatory techniques; the use of universal design for learning to accommodate a wider range of human abilities, preferences, and limitations; and the provision of accommodations tailored to meet the individual's needs (see Chapter 5), youth and young adults with learning disabilities can succeed in the workplace. Another extremely important factor in employment success for both people with and without disabilities is having a good job fit.

Persons with learning disabilities who work in environments that are compatible with their abilities may not differ from colleagues without LD in occupational success (Witte, Philips, & Kakela, 1998). A major goal of workforce development professionals who help youth and young adults with learning disabilities enter the workplace should therefore be to assist them in addressing the personal and work environmental factors that might hamper their success. By having knowledge of the young person's likely work-related responsibilities, youth service professionals can help the individual effectively explore possible work accommodations or compensatory training. Similarly, the identification of work environment factors (e.g., job structure, work pacing, work equipment) that may pose barriers to successful work performance could support organizational interventions (e.g., job analysis for essential functions, ergonomic modifications of equipment or work procedures) aimed at enhancing individual productivity and work satisfaction.

The capacity of persons with learning disabilities to succeed in the workplace is ultimately a function of the interaction between the impact of the individual's learning disability, the demands of the work situation (e.g., task structure and pacing), and the individual's experience in similar work settings (Mpofu, Watson, & Chen, 1999). For instance, an individual with a learning disability involving reading may do better if they receive work instructions orally (e.g., via tape recording) rather than in written form, whereas another person may perform satisfactorily with appropriate modifications in the presentation of written instructions (e.g., bold, capitalized, or colored lettering of critical words or phrases). The severity of the reading-related disability, the extent of work components requiring reading, the availability of alternative non-reading ways of meeting the task demands (through accommodations and/or compensatory strategies), and prior training and experience all contribute to the fit in a particular work setting.

Job fit can be an issue for a person whose learning disability impacts his/her visual-spatial skills. The youth may experience difficulties with a job requiring accurate depth perception and estimation in a fast-paced work environment. However, the same individual may be quite successful in a job with a lower level of visual-spatial demands, slower pacing, or appropriate assistive devices (Mpofu, et al., (1999). In occupational settings, individuals with visual-spatial difficulties may also be less successful at tasks requiring them to visually manipulate numbers (as in calculations), shapes (e.g., space utilization, reading diagrams), and written text. Clerical jobs involving significant computations, storage facility management, and copy editing may therefore not be a good fit. Through the use of assistive devices such as simple calculators and computers with optical scanning and voice facilities, however, many individuals with visual-spatial problems can successfully perform such clerical tasks.

Limitations in performing work requiring depth perception or three-dimensional visual discrimination also may affect individuals with visual-spatial perceptual challenges (Anderson, 1994). Structured assembly production line work with predictable work cycles may be suitable for such persons, as may auditory cues that mark the various stages of a work cycle and help them to self-monitor. Individuals who compensate for visual-spatial limitations with auditory skills may do well in jobs where these capabilities are more important for success (e.g., tour guide, receptionist, information clerk).

Employment fit begins and ends with a person with a learning disability knowing his/her strengths and weaknesses, vocational interests, and motivations. The chapter on youth development and leadership that follows provides information on helping youth with learning disabilities develop that understanding, as well as other skills necessary to achieve employment success.

Research Findings

Response to Intervention for Younger Students

Much research has been devoted to helping young students learn how to read, and it is now understood that those who receive early intervention are much more likely to keep up with their peers as they proceed through school (Shaywitz, 2003). Unfortunately, many students with learning disabilities, primarily in reading, are in third grade or above when they are first identified by their school as having a learning disability. Research shows that children identified as having a reading learning disability after second grade rarely catch up to their peers (Lyon et al., 2001) and that reading disabilities diagnosed after third grade are much more difficult to remediate (Shaywitz, 2003). Accordingly, the "wait to fail" or IQ-achievement discrepancy approach is being replaced in many elementary schools by a model called Response to Intervention (RTI), a method of providing early intervention to all youth who appear to be at risk for school failure.

RTI offers intense, individualized academic intervention to prevent a child from unnecessarily acquiring a special education designation. Students receiving RTI get more teacher-centered, systematic, and explicit instruction, and this instruction is delivered by experienced instructors, in smaller groups, more frequently, and for longer time periods than traditional instruction. The student's progress is continuously evaluated to ensure that the intervention is yielding adequate academic growth in a general education setting. Students whose RTI warrants additional or intensive ongoing interventions are referred for special education services.

Although there has been little published research regarding the use of RTI for older students, researchers have begun to look at using RTI for intervention and diagnosis in middle school and beyond. An RTI approach may prove especially useful in addressing the learning deficits of young adults that have never been formally diagnosed with a learning disability. For youth who have not had the opportunity to learn to read at grade level through initiatives such as RTI, the catching-up process can be arduous. Some youth will never catch up and will never become highly proficient readers.

Learning Strategies for Older Youth

Since adolescents with learning disabilities often do not receive strategic learning skills training, they frequently have difficulty responding to curriculum demands and the need to effectively process content information. Deshler (2006) describes this "achievement gap" and the sometimes confusing roles played by special education teachers:

> How special education teachers define their role in relation to adolescents with LD greatly affects the ultimate outcomes these students achieve. The primary role of any support teacher (e.g., a resource or an LD teacher) should be to teach specific skills and strategies to enhance students' effectiveness as learners in their core curriculum classes. By doing so, we optimize students' chances of truly gaining access to the general education curriculum. Regrettably, support teachers often get caught in the trap of "tutoring" adolescents with LD in subject matter. This can be an extremely costly and fatal error because it is generally done at the expense of teaching valuable strategies that will enable students to function independently in the content classroom. Thus, in the absence of this type of instruction, students with LD will not change as learners. Although they may "get by" and even be promoted socially, they will leave the educational system grossly underprepared to face the harsh realities of the postsecondary world.

Beckman (2002) notes:

> it has been demonstrated that when struggling students are taught strategies and are given ample encouragement, feedback, and opportunities to use them, students improve in their ability to process information, which, in turn, leads to improved learning. Because not all students will find it easy to embed strategy use in their learning schema, differentiation of strategies instruction is required, with some students needing more scaffolding and individualized, intensive instruction than others.

Beckman (2002) also suggests five steps to be used in teaching these strategies:

- Describe the strategy. [Learners] obtain an understanding of the strategy and its purpose—why it is important, when it can be used, and how to use it.
- Model its use. The [instructor] models the strategy, explaining to the students how to perform it.
- Provide ample assisted practice time. The [instructor] monitors, provides cues, and gives feedback. Practice results in automaticity so the student doesn't have to "think" about using the strategy.

- Promote student self-monitoring and evaluation of personal strategy use. Students will likely use the strategy if they see how it works for them; it will become part of their learning schema.
- Encourage continued use and generalization of the strategy. [Learners] are encouraged to try the strategy in other learning situations.

Swanson (2009) in a National Institute for Literacy report, finds

> that effective instructional models followed a sequence of events: State the learning objectives and orient the students to what they will be learning and what performance will be expected of them followed by these components:

- Review the skills necessary to understand the concept.
- Present the information, give examples, and demonstrate the concepts/materials.
- Pose questions (probes) to students and assess their level of understanding and correct misconceptions.
- Provide group instruction and independent practice. Give students an opportunity to demonstrate new skills and learn the new information on their own.
- Assess performance and provide feedback. Review the independent work and give a quiz. Give feedback for correct answers and reteach skills if answers are incorrect.
- Provide distributed practice and review.

Content Enhancement

"Content enhancement" is one method of integrating cognitive strategies. Bulgren, Deshler, and Schumaker (1997) highlight three important teacher activities in their model of content enhancement:

- Teachers evaluate the content they cover.
- Teachers determine the necessary approaches to learning for student success.
- Teachers teach with routines and instructional supports that assist students as they apply appropriate techniques and strategies.

In this way, the teacher emphasizes what the students should learn, or the "product" of learning. In addition, the teacher models the "how" or "process" of learning.

Literacy and Strategic Instruction

Swanson (1999) writes:

> The most effective form of teaching children with learning disabilities combines components of direct instruction (teacher-directed lecture, discussion, and learning from books) with components of strategy instruction (teaching ways to learn such as memorization techniques and study skills).

Swanson (2009) also writes that direct instruction is based on

- Breaking down a task into small steps
- Administering probes
- Supplying repeated feedback
- Providing students with diagrammatic or pictorial presentations
- Allowing independent practice and individually-paced instruction
- Breaking instruction down into simpler phrases
- Instructing in a small group
- Teacher modeling of skills
- Providing set materials at a rapid pace
- Providing instruction for individual children
- Having the teacher ask skill-related questions
- Having the teacher provide new materials

Swanson (2009) also says that strategy instruction includes

- Elaborate explanations
- Teacher modeling of processes
- Reminders to use certain strategies
- Step-by-step prompts
- Teacher-student dialogue
- Teacher asks process-oriented questions
- Teacher provides only necessary assistance

The National Institute for Literacy (1999) research on intervention practices has yielded twelve characteristics of effective instruction, or LD-appropriate instruction, for adults with learning disabilities. This instruction directly addresses learning difficulties that may result from a learning disability or other learning problems and can be used in many settings.

1. *Structured instruction* involves systematically teaching information that has been chunked into manageable pieces. Many adults with learning disabilities have

difficulty processing large amounts of information, such as complex concepts and multi-step procedures. Information should be broken into smaller "chunks" and/or steps, and then these chunks should be taught systematically in sequential stages designed to promote mastery at each level.

2. *Connected instruction* shows the learner how information in and among units and lessons are linked to the learning process and to the learner's goals.
3. *Informative instruction* involves making sure that the learner is informed about how the learning process works, what is expected during the instructional situation, and how he/she can improve learning and performance.
4. *Explicit instruction* involves providing detailed explanations and models to the learner about how to approach, think about, perform, and evaluate learning and performance.
5. *Direct instruction* is characterized by high rates of [instructor] leadership and control during the initial stages of information acquisition, followed by careful monitoring of the learner's performance as he/she gradually assumes control of and masters the information.
6. *Scaffolded instruction* involves the frequent use of connected questions and collaboratively constructed explanations to create a context for learning based on the learner's prior knowledge. The learner's prior knowledge can be used as a foundation to which new information can be linked.
7. *Intensive instruction* involves helping learners to maintain a high degree of attention and response during instructional sessions that are scheduled as frequently as possible.
8. *Process-sensitive instruction* involves reshaping the activities within the instructional sequence to take into consideration various cognitive barriers that might inhibit learning.
9. *Accommodating instruction* involves providing specific and general adaptations that are…required to reduce or eliminate the impact of a learning disability on successful learning and performance.
10. *Evaluated instruction* involves adapting instruction based on an assessment of the learner's progress and his/her response to previous attempts at instruction.
11. *Generalizable instruction* involves using activities before, during, and after information has been mastered both to ensure continued application of the information and to increase the learner's success outside of the literacy setting.
12. *Enduring instruction* means that program providers acknowledge and commit the time necessary to ensure that learners master the information and use it to increase their successes in life.

According to Corley and Taymans (2002):

> Engaging in metacognition allows learners to become self-directed, self-regulated learners….Instructors can help students become metacognitive by teaching them how to analyze tasks and to select from various strategies for accomplishing those tasks.
>
> Self-regulation depends on prior beliefs and knowledge. Learners need to develop a repertoire of learning strategies from which to choose for various learning tasks, and they need to build an experience base of successful learning in order to believe that they can be successful. Successful learning is dependent on instruction that is offered at the learner's current level of performance.

Effective Adult Education

To make connections with adult learners and to minimize barriers to learning, instructors who work in adult settings must consciously attend to their specific needs. To this end, Flint developed these Principles of Effectiveness for Serving Adult Learners (2005):

- Conduct outreach to adult learners by overcoming barriers of time, place, and tradition in order to create lifelong access to educational opportunities.
- Address adult learners' life and career goals before or at the onset of enrollment in order to assess and align capacities to help learners reach their goals.
- Define and assess the knowledge, skills, and competencies acquired by adult learners both from the curriculum and from life/work experience.
- Use multiple methods of instruction (including experiential- and problem-based methods) for adult learners in order to connect curricular concepts to useful knowledge and skills.
- Assist adult learners using comprehensive academic and student support systems in order to enhance students' capacities to become self-directed, lifelong learners.
- Use information technology to provide relevant and timely information and to enhance the learning experience.
- Engage in strategic relationships, partnerships, and collaborations with employers and other organizations in order to develop and improve educational opportunities for adult learners.

EXHIBIT 3.1: RESEARCH FINDINGS

Job Fit

Mpofu, Watson, & Chan (1999) write that

> the inactive learner hypothesis (Kolligian & Sternberg, 1987; Torgensen, 1988) proposes that individuals with LD lack ability, strategy, or volition. For instance, persons with LD may have significant deficits in essential job-related abilities such as self-questioning (e.g., What is my task? What specific actions will enhance successful performance of this task?), self-monitoring (e.g., Am I still performing requisite activities for success on this task? How shall I know when I have performed the task successfully?), and self-evaluation (How well have I achieved the task objectives? How can I maintain or improve on my current performance?). These problem-solving abilities have been referred to as metacognitive strategies, or one's knowledge about knowing (Kolligian & Sternberg, 1987), and are linked to a sense of personal agency. Persons with LD may have a poor sense of self-efficacy due to deficits in self-regulation strategies essential for successful work performance. They may also be less able to match the appropriate work strategy (e.g., matching column and row totals) to the requirements of specific tasks (e.g., compiling a simple balance sheet). Finally, persons with LD may have the repertoire of skills required for success in specific jobs but may be unmotivated to use them (e.g., due to poor self-efficacy, low self-esteem, incompatible job structure).
>
> Challenges in basic psychological processes may result in failure to achieve beneficial interpersonal and vocational interactions. Personal adjustment challenges may include poor self-esteem and learned helplessness (Little, 1995). Repeated failures may lead to lack of self-confidence, low frustration tolerance, poor social competence and associated vocational adjustment challenges (Brown & Gerber, 1994; Geist & McGrath, 1983). Persons with LD may be challenged in the communication and interpretation of their own and others' socio-emotional content or experiences (Chadsey-Rusch, 1985). Deficits in social skills are associated with short job tenure, lower job satisfaction, and poor networking skills (Chadsey-Rusch, 1985; Hinkebein, Koller, & Kunce, 1992). Superior social skills are more predictive of occupational success than level of academic or vocational preparation in the general population (Chan et al., 1997).

Universal Design

The concept of UD, first described by Ron Mace in the 1970s, is defined as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Center for Universal Design, 1997). According to the Center for Universal Design, "the intent of universal design is to simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost" (2007). Because universal design is an approach to designing course instruction, materials, and content to benefit people of all learning styles without adaptation, it is an important strategy for meeting the needs of youth and young adults with learning disabilities in the workforce development system, including those who are undiagnosed or who choose not to disclose.

Common examples of universal design include curb cuts, lever door knobs, focused lighting in public spaces, telephones with volume control, and Web sites that let the user select the font size. Many employers today are beginning to incorporate elements of universal design that support the needs of individuals with disabilities and increase efficiency of all employees. Examples include putting printed material into audio formats; drafting publications with clear, uncluttered design; using easy-to-use software to schedule meetings; installing task lighting that reduces glare; having quiet work areas for certain projects; and providing flexible work hours for all staff. These types of design changes benefit many people with learning disabilities.

In universal design for learning (UDL), rather than designing instruction for the average learner, the focus is on designing for learners with a broad range of abilities, disabilities, ages, reading levels, learning styles, native languages, races, ethnicities, etc. Examples of how UDL-related instructional methods can be utilized to make employment and training and related services accessible include the following:

- Inclusiveness—Create a training environment that respects and values diversity. Put a diversity statement on your outreach-related materials and advertise the availability of accommodations and alternate formats to address individual learning needs and preferences.
- Physical Access—Ensure that classrooms, training facilities, and job shadowing and internship experiences are accessible to individuals with a wide range of physical abilities and disabilities. Make sure equipment and activities minimize sustained physical effort, provide options for operation, and accommodate right- and left-handedness as well as people with limited physical

abilities. Assure the safety of all students, as well as the availability of public transportation.

- Delivery Methods—Provide instruction utilizing multiple delivery methods, including lectures, discussion, hands-on activities, Web-based interaction, and fieldwork. Make sure each is accessible to students with a wide range of abilities, disabilities, interests, and previous experiences. Ensure that the environment is comfortable and free from distractions. Provide printed materials that summarize content delivered orally, and make printed training materials available in audio and electronic formats.
- Information Access—Caption videotapes and make printed materials available in audio as well as electronic formats. Provide text descriptions of graphics presented on Web pages. Provide printed materials in advance to allow students to prepare for the topic to be presented. Create printed and Web-based materials in simple, intuitive, and consistent formats. Arrange content in order of importance.
- Interaction—Encourage different ways for students to interact with each other and with you. These methods may include questions and answer formats, discussion, group work, and Web-based communications. Strive to make them accessible to everyone.
- Feedback—Provide effective prompting during an activity and feedback after the assignment is complete.
- Demonstration of Knowledge—Provide multiple ways for students to demonstrate knowledge. For example, besides traditional tests and papers, consider group work, demonstrations, portfolios, and presentations as options for demonstrating knowledge

(Adapted from Job Corps, n.d.)

Gregg (2009) writes

> it appears that, in the future, the best solution to provide adolescents and adults with LD access to equal opportunities for learning and work would be universal test designs (UTD) and universal design [for] learning (UDL) environments that would make accommodations unnecessary (Cohen et al., 2005; Sireci et al., 2005). The universal design (UD) concept was created to reflect the approach of proactively including accessible design features, while minimizing the need for individually retrofitted accommodations in learning and work environments. (p. 136)

Learning Needs Screening Tool

Exhibit 3.2 should be used by youth service professionals only to determine if a formal diagnostic assessment should be performed by trained and qualified teachers, psychologists or psychometricians. Ideally, it will be used in conjunction with other assessment information and in the context of an overall program plan.

Background & Development

The Learning Needs Screening Tool is a brief oral interview developed through an intensive authentic research project for the State of Washington Division of Employment and Social Services Learning Disabilities Initiative (1994-1997) under contract with Nancie Payne, M.S., Senior Consultant, Payne & Associates, Inc., Olympia, Washington.

Funded by Federal and state resources, the Learning Needs Screening Tool and the research on which it is based are in the public domain and can be accessed by anyone. However, prior to its implementation or use in a program or system, several facts must be noted:

- The research was conducted with a welfare clientele; thus the tool may not be valid with other populations. Use with other populations not having the same or similar characteristics as the research study could lead to misinterpretation of information and put the client screened by the Tool at risk as well as the entity using the Tool.
- The Learning Needs Screening Tool has not been validated and is not an appropriate tool to use in its present form with populations who have limited English proficiency (LEP).
- Criteria for implementation and use must be explored and clearly established in order to minimize discrimination or perceived bias when providing services. A set of standards for services should be established to ensure protection of the client and the entity using the Tool.
- All individuals should be screened for health-related needs (physical, vision, hearing, etc.) as well as other impacts (mental and emotional health) that may manifest as learning disabilities. This may mean adopting a more intensive interview protocol as a next step after initial screening. Simply screening for a condition does not allow the user to make the assumption that the individual has the condition for which he/she is being screened.
- Appropriate referrals and resources must be put into place prior to implementation. An organization or program cannot simply screen individuals without having the next steps in place. The Tool has been validated through the research and in using the Tool, the user accepts the responsibility associated with using a valid screening tool.
- Protocols for confidentiality and disclosure of information must be established.
- The organization or system's capacity to serve individuals with learning disabilities and other cognitive disorders must be evaluated.
- The Tool is most effective when proper training, implementation, and evaluation protocols are put into place.

The Learning Needs Screening Tool is not a diagnostic tool and should not be used to determine the existence of a disability.

Learning Needs Screening Tool—Page 1

Client Name:	Vocational Goal:
Interview Date:	Related Experience:
Interviewer Name:	What makes it hard for you to get or keep this kind of job?
Date of Birth:	
Social Security #:	What would help?
Gender:	
Diplomas/Degrees Earned: HS____ GED____ Voc/Tech____ AA____ Other:	Years of schooling:

BEFORE PROCEEDING TO THE QUESTIONS, READ THIS STATEMENT ALOUD TO THE CLIENT:

The following questions are about your school and life experiences. We're trying to find out how it was for you (or your family members) when you were in school or how some of these issues might affect your life now. Your responses to these questions will help identify resources and services you might need to be successful securing employment.

DIRECTIONS

1. Ask the client each question in each section (A, B, C, D) and question #14.
2. Record the client's responses, checking "Yes" or "No."
3. Count the number of "Yes" answers in each section.
4. Multiply the number of "Yes" responses in each section by the number shown in the section subtotal. For example, multiply the number of "Yes" responses obtained in Section C by 3.
5. Record the number obtained for each section after the "=" sign in the section subtotal.
6. To obtain a total, add the subtotals from Sections A, B, C, and D.

IF THE TOTAL FROM SECTIONS A, B, C, AND D IS 12 OR MORE, REFER FOR FURTHER ASSESSMENT.

Section A	
1. Did you have any problems learning in middle school or junior high school?	Yes No
2. Do any family members have learning problems?	Yes No
3. Do you have difficulty working with numbers in columns?	Yes No
4. Do you have trouble judging distances?	Yes No
5. Do you have problems working from a test booklet to an answer sheet?	Yes No
Count the number of "Yes" responses for Section A X 1 =	
Section B	
6. Do you have difficulty or experience problems mixing arithmetic signs (+/x)?	Yes No
7. Did you have any problems learning in elementary school?	Yes No
Count the number of "Yes" responses for Section B X 2 =	

EXHIBIT 3.2: LEARNING NEEDS SCREENING TOOL (CONTINUED)

Section C	
8. Do you have difficulty remembering how to spell simple words you know?	Yes No
9. Do you have difficulty filling out forms?	Yes No
10. Did you (or do you) experience difficulty memorizing numbers?	Yes No
Count the number of "Yes" responses for Section C X 3 =	
Section D	
11. Do you have trouble adding and subtracting small numbers in your head?	Yes No
12. Do you have difficulty or experience problems taking notes?	Yes No
13. Were you ever in a special program or given extra help in school?	Yes No
Count the number of "Yes" responses for Section D X 4 =	
Total "Yeses" multiplied by factor indicated for A, B, C, D (IF THE TOTAL FROM SECTIONS A, B, C, AND D IS 12 OR MORE, REFER FOR FURTHER ASSESSMENT.)	
14. Check to see if the client has ever been diagnosed or told he/she has a learning disability. If so, by whom and when?	

It is recommended that interviewers ask an additional set of medical/health-based questions to gather more complete background information.

Additional questions that may be asked			
Vision		**Hearing**	
Does the client need/wear glasses?	Yes No	Does the client need/use hearing aid?	Yes No
Optometric exam within last 2 years?	Yes No		
Medical/Physical: Has the client experienced any of the following?			
Multiple, chronic ear infections	Yes No	Severe allergies	Yes No
Multiple, chronic sinus problems	Yes No	Diabetes	Yes No
Serious accidents resulting in head trauma	Yes No	Frequent headaches	Yes No
Prolonged high fevers	Yes No	Concussion or head injury	Yes No
Serious health problems	Yes No	Convulsions or seizures	Yes No
Medications that affect functioning	Yes No	Long-term substance abuse problems	Yes No
Medications:			
Does client need medical or follow-up services?	Yes No		
Referrals needed/made:			

EXHIBIT 3.3

Strategic Learning Resources

Age Appropriate Transition Assessment Guide

This guide produced by the National Secondary Transition Technical Assistance Center (NSTTAC) provides information on what transition assessments are, why to conduct transition assessments, and how to select and conduct age-appropriate transition assessments. In addition, it includes sample formal and informal assessment instruments.
http://www.nsttac.org/products_and_resources/tag.aspx

Career Planning Begins with Assessment: A Guide for Professionals Serving Youth with Educational and Career Development Challenges

The best decisions made by transitioning youth are based on sound information including appropriate assessments that focus on the talents, knowledge, skills, interests, values, and aptitudes of each individual. This guide serves as a resource for multiple audiences within the workforce development system. Youth service professionals will find information on selecting career-related assessments and determining when to refer youth for additional assessment; it also addresses additional issues such as accommodations, law, and ethics. Administrators and policymakers will find information on developing practical and effective policies, encouraging collaboration among programs, and designing interagency assessment systems.
http://www.ncwd-youth.info/resources_&_Publications/assessment.html

Center for Research on Learning at the University of Kansas

The Center's goal is to study learning problems in education and work and to place solutions that make a difference into the hands of educators, learners, employers, and policymakers. The Center also houses the National Research Center on Learning Disabilities.
http://www.kucrl.org/

Collaborative Strategic Reading: Strategies for Improving Comprehension

This guide, published by Sopris West Educational Services, provides step-by-step instructions, lesson plans, sample teacher-to-student dialogues, whole-class activities, and all the necessary reproducibles for implementing Collaborative Strategic Reading in the classroom.
http://www.sopriswest.com/default.aspx?site=sw

Evidence for Education: The Power of Strategic Instruction

This brief guide, published by the National Dissemination Center for Children with Disabilities, focuses on these issues: Early Studies of the Good Learner, The Strategic Instruction Model (SIM), Self-Regulated Strategy Development (SRSD) for Writing, Combining Strategy Instruction with Direct Instruction, and "Promise Beyond LD".
http://www.nichcy.org/Research/EvidenceForEducation/Documents/NICHCY_EE_Strategy.pdf

The National Institute for Literacy: Learning To Achieve—A Research-Based Training on Serving Adults with Learning Disabilities

Learning to Achieve is a training program designed to help adult education and vocational training practitioners, social workers, and other human service providers improve their knowledge of learning disabilities (LD) in adults. The program offers instruction on how to actively support adults with LD in educational and workplace settings, and prepares participants to share what they have learned with interested colleagues who did not attend the training.
http://www.nifl.gov/programs/learningtoachieve/learningtoachieve.html

Tool Kit on Teaching and Assessing Students with Disabilities

This Tool Kit, by the Office of Special Education Programs at the U.S. Department of Education, provides up-to-date guidance on designing and implementing high-quality assessments for students with disabilities. It also includes a set of technical assistance products that offer practical, research-based approaches to the challenges schools are facing in the areas of assessment, instruction, behavioral interventions, and use of accommodations for students with disabilities. In addition, the Tool Kit describes research now underway to further expand our knowledge about how best to support teaching, learning, and assessing.
http://www.osepideasthatwork.org/toolkit/ovr_letter.asp

EXHIBIT 3.3

The U.S. Department of Labor's O*Net Resource Center

The O*NET Resource Center includes career exploration tools designed for use by students who are exploring the school-to-work transition. The assessment instruments, which are based on a "whole-person" concept, include an ability profiler, an interest profiler, and a work-importance locator and profiler. In addition, users of the tools may link to the more than 800 occupations described in the O*NET database. The database includes summaries of the work and requirements of the work.
http://www.onetcenter.org/tools.html

Paving the Way to Work: A Guide to Career-Focused Mentoring

Mentoring is recognized as one of the most important strategies for helping youth make a positive transition into adulthood. Despite all of the information available on mentoring, there is very little information available about mentoring youth with disabilities or about career-focused mentoring of older youth. This Guide was developed specifically to address the needs of youth with disabilities during their transition from school to work.
http://www.ncwd-youth.info/resources_&_Publications/mentoring.html

Project Eye-to-Eye

Project Eye-To-Eye is a national mentoring program that matches college and high school students with LD/ADHD—acting as tutors, role models, and mentors—with elementary, middle, and high school students with LD/ADHD in order to empower younger students and help them find success.
http://www.projecteyetoeye.org/

CHAPTER 4

Building and Integrating Individual Development Strategies—

A Focus on Self-Determination and Leadership Skills

Youth with learning disabilities need guidance and opportunities to build and integrate individual development strategies in academic, vocational, and social settings. These strategies allow youth to develop functional and interpersonal skills needed for the workplace. They also help them to become self-determined individuals in charge of their own lives, by building skills in self-awareness, goal-setting, and self-advocacy. This chapter describes two approaches or design elements that professionals can use to assist youth, and highlights how reinforcing functional or "soft" skills can lead to improved real-life outcomes for all youth.

In this Chapter

- Defining Individual Development Strategies
- Why the Focus on Individual Development Strategies?
- Backdrop—Common Experiences
- Design Elements of Individual Development Strategies
- Research Findings and Exhibits
- Individual Development Resources

Defining Individual Development Strategies

Individual development strategies focus on processes, techniques, and practices that build skills in *aspects of identity* including: a sense of safety and structure; high self-worth and self esteem; feelings of mastery and future; belonging and membership; a perception of responsibility and autonomy; and a sense of self-awareness and spirituality. These strategies also address *areas of ability* including physical, mental, and intellectual health; employability; and civic and social involvement (Newman, Smith, & Murphy, 2000). In addition, individual development strategies also focus on developing social competence in interpersonal relationships that require give and take. This is a set of skills that many adults take for granted which can be more challenging for some individuals with learning disabilities.

Why the Focus on Individual Development Strategies?

Responding to employers' needs is central to all employment. In the 21st-century workplace, employers seek employees with not only technical skills, but also with functional and interpersonal skills (such as the ability to manage time and workloads, to work well with others, and to serve clients or customers). To meet these requirements, in addition to the strategic workplace learning strategies and compensatory techniques discussed in Chapter 3, young people with learning disabilities need individual development strategies to strengthen their ability to interact well with others and to set and pursue personal goals effectively.

Individual development strategies apply across all five of The *Guideposts for Success:* School-Based Preparatory Experiences; Career Preparation and Work-Based Learning Experiences; Youth Development and Leadership; Connecting Experiences; and Family Involvement. Use of the strategies discussed in this chapter can lead to improved outcomes and increased confidence in the different domains that youth negotiate as they transition to adulthood.

Backdrop—Common Experiences

In school, segregation and isolation are frequent concerns for youth with learning disabilities. Processing difficulties may make social situations difficult, and peers may avoid youth with learning disabilities or they may bully or tease them. These same youth are often cut off from typical youth development activities such as extracurricular activities, after-school activities, and athletics. Additionally, negative academic (such as an overload of remedial coursework) or social experiences can lead youth to lower their self-expectations and they can become resigned to dependency and passivity as a way of life. The end result is that many young people with learning disabilities become disengaged academically and socially and are then more likely to drop out of school, become involved in the juvenile or adult justice system, and/or have relatively poor employment outcomes.

Individual development activities in school, after school, or in the community can turn the tide for many individuals by increasing self-esteem, raising expectations, and increasing the individual's ability to set positive personal goals. These activities can build an internal "locus of control" in the individual and lead to more satisfactory transition outcomes. Locus of control refers to how an individual determines where responsibility lies when events happen or when decisions are made. People with a strong internal locus of control believe that they are responsible for the things that happen to them and that success or failure is due primarily to their own efforts. People with an external locus of control feel that events are determined by luck, chance, or others with power (Mearns, 2008). By developing a strong internal locus of control, individuals with learning disabilities can focus on their knowledge, skills, and aptitudes—the empowering attributes that determine success in adulthood.

Closely connected to a sense of internal control is the concept of informed choice or the process by which an individual arrives at a decision based upon access to, and full understanding of, all necessary information from the individual's perspective. The process should result in a free and informed decision by the individual about what he/she needs. For a youth with learning disabilities, a significant component of informed choice is understanding his/her rights and responsibilities under laws such as IDEA, ADA, and WIA (including the Federal and state vocational rehabilitation laws) and how these laws can help one attain desired goals.

Research shows that successful adults with learning disabilities have certain positive attributes connected to individual development. As discussed in Chapter 3, Gerber and colleagues (Gerber, Ginsberg, & Reiff, 1992; Reiff, Gerber, & Ginsberg, 1997) found that the over-riding factor leading to employment success was the ability of the individual to take control of his or her life. They identified two areas that are key to this control:

Internal Decisions that include

- Desire (taking a stand and making a decision to move ahead)
- Goal orientation (setting explicit goals to work toward)
- Reframing (reinterpreting the learning disability experience from something negative to something positive)

External Manifestations – or how the person adapts that include

- Persistence (willingness to sacrifice and persevere toward goals)
- Goodness of fit (finding environments where their strengths are optimized and weaknesses minimized)
- Learned creativity (creating strategies and techniques to enhance the ability to perform well)
- Social ecologies (seeking and utilizing the support of helpful people)

Successful adults (with or without disabilities) tend to be self-aware and self-determined. They can make decisions about where they are headed, can self-advocate and engage in conflict resolution effectively,

and can set realistic short-term and long-term goals. Successful adults also know their limits, have a plan for overcoming surmountable barriers, and have confidence that they can be successful in academic, social, and vocational settings. They learn to accept support and assistance from others, and they have coping mechanisms related to stress and uncertainty in new situations. In addition, they learn from experience and develop new approaches to solving problems.

Doing well in the workplace is just one aspect of a satisfying adult life. Adults with learning disabilities must also learn how to function effectively in other adult roles such as parent, spouse, student, friend, and neighbor. Each of these roles requires understanding of appropriate behavior and speech, and benefits from the ability to respond to both verbal and non-verbal cues.

The Forum for Youth Investment, in building a context for successful transition to adulthood, has identified five cornerstone areas of youth leadership and development: *working, learning, thriving, connecting,* and *leading* (described in Table 4.1 below). For all youth, including those with learning disabilities, it is important to have the opportunity to explore and gain experience in activities that develop competency in these five areas. These competencies, which have parallels to the categories in the *Guideposts,* are important components of individual development strategies that can assist youth with disabilities with learning the skills they need to function effectively in the adult world.

Design Elements of Individual Development Strategies

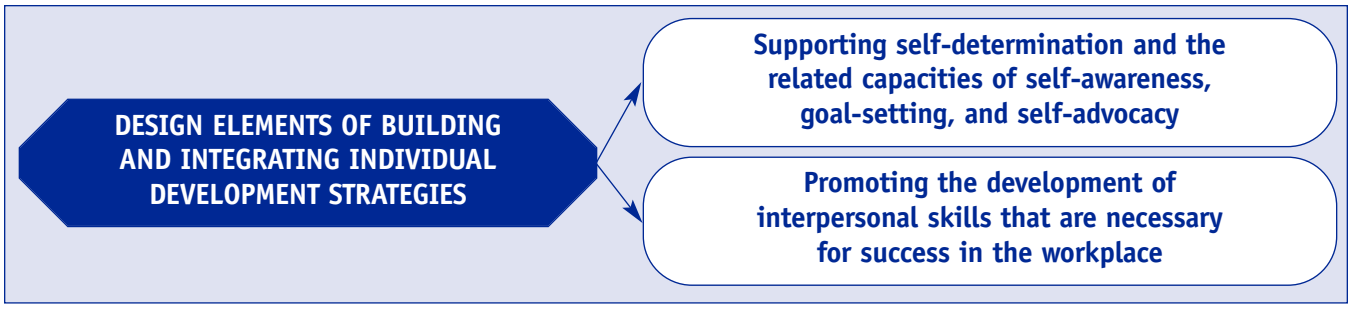
All programs (whether academic, vocational, or community-based) that seek to successfully meet the needs of youth transitioning to the workplace should incorporate activities that support youth in learning individual development strategies, including those contained in the youth leadership and development framing areas described below in Table 4.1. Research and practice strongly suggest that these two design elements are particularly important in fostering the development of these strategies for youth and young adults with learning disabilities.

Individual development strategies cannot be learned in a week-long course or during an orientation session for a new job. Rather, like all youth development and

TABLE 4.1

Five Framing Areas of Youth Leadership and Development

Working	Refers to the development of positive attitudes, skills, and behaviors around occupational and career direction. Positive outcomes that fall under this area include demonstrated work readiness skills and involvement in meaningful work that offers advancement, satisfaction, and self-sufficiency. Activities such as career interest assessments and summer internships help youth achieve these outcomes.
Learning	Refers to the development of positive basic and applied academic attitudes, skills, and behaviors. Beneficial outcomes that fall under this area include rational problem-solving and critical thinking. Activities such as group problem-solving games and contextualized learning using academic skills to complete a project help youth achieve these outcomes.
Thriving	Refers to the development of attitudes, skills, and behaviors that are demonstrated by maintaining optimal physical and emotional wellbeing. Beneficial outcomes that fall under this include knowledge and practice of good nutrition and hygiene and the capacity to identify risky conditions. Activities such as workshops on nutrition and hygiene and role-playing adverse situations help youth achieve these outcomes.
Connecting	Refers to the development of positive social behaviors, skills, and attitudes. Positive outcomes that fall under this area include quality relationships, the ability to build trust, and effective communication. Activities such as adult mentoring, positive peer interactions, and team-building exercises help youth achieve these outcomes.
Leading	Refers to the development of positive skills, attitudes, and behaviors around civic involvement and personal goal-setting. Beneficial outcomes that fall under this area include a sense of responsibility to oneself and others and the ability to articulate one's personal values. Activities such as the opportunity to take a leadership role and participation in community service projects help youth achieve these outcomes.



leadership competencies, they are best integrated over the course of adolescence and are strengthened by deliberate linkages reinforced by family members, school staff, mentors, and youth service professionals who support workforce development. In the event that the young person is not provided with the opportunity to learn these skills while still in school, postsecondary and "second chance" providers will need to assume this responsibility.

Design Element 1: Supporting self-determination and the related capacities of self-awareness, goal setting, and self-advocacy

Self-determination is the intrinsic drive to exercise control over one's thoughts, feelings, and actions. The concept of self-determination combines informed choice with "skills, knowledge, and beliefs [to] enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination" (Field, Martin, Miller, Ward, & Wehmeyer, 1998). The three components of self-determination that will be discussed here are:

- Self-Awareness—high expectations and locus of control
- Goal Setting—decision-making, risk taking, and informed choice
- Self-Advocacy—problem-solving, conflict resolution, and self-esteem development

Self-Awareness: A major component of adolescence is the development of an adult concept of self. Through social interactions and introspection, young people develop a picture of who they are, how they look, and what abilities and interests they have. This is predicated on having opportunities to experience what the world has to offer. In adolescence, self-awareness is clouded by insecurities, lack of experience, and physical and emotional changes. When a young person has a learning disability, gaining self-awareness can be even more daunting.

Self-awareness requires personal assessment of skills and strengths. Encouragement and support for youth with learning disabilities can lead to a stronger internal locus of control and to a more positive understanding or awareness of self. For youth with learning disabilities, a major component of self-awareness is understanding whether and how to disclose information about themselves and their disability in appropriate settings and at appropriate times (as discussed in detail in Chapter 5).

Youth may need assistance in developing an understanding of what it means to have a learning disability. This experience in today's society may also cause distortion of self-image, sometimes due to conflicting feedback from others. For a variety of reasons, young people may not receive appropriate interventions or accommodations in school, resulting in a failure to advance academically, or the belief that they are not intelligent. Some parents may deny that their child has a learning disability or gloss over the impact it might have on him/her. Well-meaning individuals may provide misinformation or suggest that it is something that youth can outgrow, or overcome by increased effort. In some cultures, it is even taboo to talk about disability.

Goal Setting: To be active participants in the self-determination process, youth need to develop the skills necessary to plan, set, evaluate, and achieve goals. Successful efforts to promote goal-setting and attainment should focus on identifying specific long-term goals; breaking them down into smaller, short-term objectives; articulating the goals and the steps

needed to reach them; monitoring progress; adjusting strategies; updating goals; and setting new goals when appropriate (Schunk, 2002).

Youth service professionals need to expose youth with LD to the wide variety of things they may want to do so that they will not be limited by the negative experience they might have had in school. Often, families, service providers, and other influential adults may try to prevent a young person from trying new things and taking appropriate risks. All youth need to be able to take appropriate risks, fail, and learn from their mistakes.

Another component of goal setting is "informed choice," which empowers youth to gather the information to make the best decision for them at the time. Individuals making decisions must consider potential intended and unintended consequences and accept responsibility for outcomes resulting from their choices. It is important that the youth's goals reflect high expectations, that they think through concrete steps for achieving them, and that they develop ways to evaluate progress and determine whether a change of course or a new goal is needed.

Self-Advocacy: Self-advocacy refers to taking action on one's own behalf and includes seeking out options, deciding what is desired, determining one's rights and responsibilities, and knowing when and how to speak out. When individuals make decisions about their lives, they must have the skills to voice their decisions to others and act on them. Self-advocacy is essential to the success of youth with learning disabilities in any postsecondary setting, where accommodations will only be provided to those who choose to identify themselves as having a disability and who request support. Self-advocacy builds on the concepts of self-esteem and self-efficacy—the belief that one has skills and abilities.

Throughout transition planning, youth should be encouraged to express concerns, preferences, and conclusions about their options and to give their reasons. They will need to learn how to express their thoughts in a way that persuades others to listen to them and to respect their views. In order to learn these skills, youth need to practice them within a supportive environment. Role-playing activities and real-life experiences can be combined to develop self-advocacy skills.

Since conflict resolution skills are critical in the workplace, workforce professionals should help the youth draw parallels between the techniques they currently use to manage disagreements at home and in the classroom with strategies appropriate for employment settings. Youth should begin to understand that not only is it important for them to know what they want, it is also important for them to know how to negotiate and compromise.

Financial Literacy

One distinct form of self-advocacy involves financial literacy. Developing financial literacy skills allows youth with learning disabilities to become better self-advocates. For youth who receive or may be eligible to receive government supports, financial literacy is even more crucial. Youth who lack a clear understanding of their current and future financial needs and responsibilities cannot make sound decisions about work and independent living options. There are many curricula and resources that can be used to promote financial literacy. The National Endowment for Financial Education's (NEFE) High School Financial Planning Program or the Jump$tart Coalition for Personal Financial Literacy can be useful places to start (see Resources at the end of this chapter). Just because a youth may have a learning disability in mathematics does not mean that he/she cannot gain basic financial skills. When working with youth who may have processing difficulties in mathematics, care should be taken to accommodate their learning needs.

Activities that foster the development of self-determination and the related capacities of self-awareness, goal setting, and self-advocacy. During adolescence and young adulthood, having healthy interactions with adults who can provide appropriate feedback is important. Youth service professionals in all kinds of settings can help youth learn how to make career choices, prepare for a first job or career, establish and sustain peer networks, and participate in civic activities. Individual development strategies may be developed in conjunction with academic, extracurricular, and vocational experiences. For individuals with learning disabilities to thrive, supports for processing and handling difficulties and social and communication issues need to be present in the design of the activity.

TOOL 4.1

Strategies and Activities that Encourage Individual Development Skills

Tool 4.1 provides strategies and activities that service providers can use to support youth in acquiring the aforementioned individual development skills. In all cases, the role of the staff should be that of facilitator/guide and not spokesperson, in order to reinforce the youth's development of self-advocacy skills. The suggested strategies are applicable for any program, although the actual activities could vary by age. This tool can also assist youth service professionals in developing program activities that can be integrated into school, community, and vocational settings for youth who have limited experience or opportunities to try out emerging leadership and development skills. Youth need multiple opportunities to practice these skills, especially if they have diagnosed or undiagnosed learning disabilities.

Self-Awareness	
Strategies for Practitioners	*Activities for Youth*
Facilitate group discussions about individual hobbies, interests, volunteer work, community involvement, and social activities (such as sports).	Have youth consider how their strengths may match with potential job opportunities that interest them. Have youth with learning disabilities consider if they have developed any techniques to self-accommodate their disability in their interest area. For example, do they plan what they are going to say to a new coach before meeting him or her?
Facilitate opportunities for youth to learn how accessing accommodations can help them succeed in the workplace.	Have youth practice applying different learning strategies to discover what techniques work best for them on the job. Have youth with learning disabilities describe how they can use the strategies that helped them succeed in the classroom in the workplace. For example, in school when the teacher provided directions orally and in writing, the young person tended to perform better. Therefore in the workplace, the youth might request that his/her supervisor provide written and oral directions for new tasks.
Promote understanding and value of the use of accommodations and use of assistive technologies.	Help youth become comfortable with describing and communicating their disability to others. Also, assist them in thinking about academic-related accommodations and how they may translate into the workplace. For youth with learning disabilities, role-playing may aid in understanding this concept.
Explore choice-making by using real-life examples and gauging their consequences.	Have youth discuss situations they may have experienced at school, work, or home that have undesirable consequences and how to plan to avoid such situations. Provide youth with learning disabilities with a pre-discussion graphic organizer to help them organize their thoughts and to facilitate the discussion.
Facilitate the interaction of youth with successful role models with disabilities to enhance their disability-related knowledge and self-confidence.	Have speakers with a variety of characteristics, including those with learning disabilities, do presentations centered on strategies they used to overcome challenges as well as attain success in the workplace and in social settings.
Structure opportunities for youth to learn about national organizations and resources which provide support to students with learning disabilities, parents, and professionals, as well.	Have youth conduct research about learning disability organizations online. For youth with learning disabilities who have a hard time reading, this exercise could be conducted using software that reads text.

TOOL 4.1 (CONTINUED)

Goal Setting	
Strategies for Practitioners	*Activities for Youth*
Provide a financial literacy program of study to help youth learn to set goals related to saving money and purchasing desired items.	Select a community partner (e.g., Junior Achievement) or curriculum that assists youth in developing a financial management plan and budget. Consider teaching students with learning disabilities how to organize a budget using a spreadsheet to keep information stored and organized.
Promote active involvement in educational and vocational planning and decision-making, including structuring opportunities to identify career interests.	Have youth set up tours of colleges, apprenticeship programs, corporations, and government agencies. Use the Web or other information sources (i.e., visit to a One-Stop) to explore careers and identify the educational skill requirements and earning potential of jobs within particular industry sectors. Have youth with learning disabilities locate the appropriate office that provides support, accommodation, and assistive technology such as the Student Support Office on campus or the personnel office in the workplace. Also, have them explore services available through career services at the postsecondary level.
Facilitate the development of social activities and recreational opportunities.	Provide community-based social activities that make connections between youth, their peers, and caring adults in safe and supportive environments. Youth with learning disabilities may need to set personal goals for the ways they want to create and enlarge their social circle and networking opportunities to practice interpersonal skills.
Facilitate a series of reflection exercises to build the analytical skills necessary to make progressively more complex decisions.	Have each youth identify a short-term goal and prepare a plan for achieving it. Revisit the goal within a mutually agreed upon timeframe. Have the youth evaluate the pros and cons of the decisions made. Repeat the exercise with progressively more complex goals, including examination of past decisions to determine if the consequences were anticipated or desired. Teach youth with learning disabilities a goal-setting strategy and provide a checklist so students can begin to self-regulate the goal-setting process.
Facilitate linkages between the goals set by the youth and the daily decisions and choices they make, and teach them to break long-term goals into short-term objectives.	Have youth identify a well-known individual and analyze that person's accomplishments by hypothesizing about the short-term goals that person may have used which contributed to their long-term success. Provide youth with learning disabilities instruction on backwards planning and how it can be used in their life.
Revisit goals periodically for the purpose of instilling the importance of following through and reworking the goals. Engage the family in the review process.	Have both youth and family review the youth's goal statements to evaluate progress made and revise if necessary. Help youth with learning disabilities who are receiving special education services understand the role of their service coordinator/case manager and the importance of maintaining communication with that individual. Discuss how this technique can be applied to the work setting by keeping your supervisor informed of your work-related goals and the progress you are making in achieving them.

TOOL 4.1 (CONTINUED)

Strategies for Practitioners	*Activities for Youth*
Structure a decision-making exercise that requires gathering information, identifying options, predicting consequences, and taking action to implement the decision.	For example, have group plan a job-shadowing day/week including selecting types of businesses, contacting them, organizing logistics, and reporting on results. Help youth with learning disabilities develop a script for calling a business and role-play the calls.
Self Advocacy	
Strategies for Practitioners	*Activities for Youth*
Promote self-reflection and provide specific feedback to help youth understand how they learn best.	Use a range of individual and group activities to involve youth in evaluating their own performance and increase their self-monitoring and personal responsibility for learning. Provide youth with learning disabilities explicit instruction in learning styles and have the youth practice requesting the type of assistance they need to do their best work.
Provide opportunities for youth to express concerns, preferences, and conclusions about their future options.	Structure opportunity for both groups and individuals to practice communicating their concerns and preferences about the work world. Have youth with learning disabilities take a leadership role in planning how to manage their concerns.
Promote peer networking that encourages self-advocacy.	Provide students with opportunities to meet others with learning disabilities so they can learn from these individuals and understand how self-advocacy can take many forms. Have youth meet others with learning disabilities that represent an array of background experiences, racial and ethnic groups, and employment areas.
Facilitate understanding of disability disclosure in work and education settings.	Familiarize youth with the Americans with Disabilities Act and the Rehabilitation Act and help youth identify accommodations strategies and technologies that will help them perform at work. Have youth practice ways to disclose their learning disability and accommodation needs.
Promote active participation in extracurricular programs in school, work, and the community.	Structure learning sessions to expose youth to leadership roles (both personal and group) and provide role playing or other forms of practice. Help youth with learning disabilities connect with Youth Leadership Forums or community-based leadership programs.
Structure problem-solving exercises so that an individual or a group identifies common work or social problems and works through possible solutions.	Have the group/individual identify a problem in their school or larger community, gather information, list and consider options, consider advantages and disadvantages, identify potential conflicts, suggest or if possible implement a solution, and evaluate the effectiveness of the solution. Teach youth with learning disabilities a problem-solving strategy and provide a checklist so students can begin to self-regulate the problem-solving process.

Individual development is just that—individual. Accordingly, professionals assisting youth to stretch and grow should fully support their efforts at assertiveness and problem-solving. Allowing them, within reason, to learn by making mistakes and surviving the consequences is integral to successful development of self-determination, self-awareness, and goal-setting competencies.

Design Element 2: Promoting the development of interpersonal skills necessary for success in the workplace

All workers, no matter what their job, depend on two types of skills—technical skills particular to the job, and functional skills such as communication, working with and getting along with others, problem-solving, and using time and resources effectively. The same information processing difficulties that affect acquisition of technical skills can also cause difficulties with interpersonal skills, a subset of functional skills.

The Rehabilitation Services Administration refers to interpersonal skills as "the ability of the individual to interact in a socially acceptable and mature manner with co-workers, supervisors, and others to facilitate the normal flow of work activities" (2005). They list seven interpersonal skills needed in the workplace:

- interpreting and responding appropriately to the behavior and communications of others;
- interpreting subtle, non-verbal cues, such as body language, facial expressions, or tone of voice that provide feedback on work performance;
- making figurative and metaphorical interpretations of events and dialogue in the social context of the interaction and taking "kidding" for what it is;
- exhibiting social competency and emotional maturity by engaging in appropriate interactions with peers and supervisors;
- working collaboratively with others;
- accepting supervisory monitoring and criticism; and
- understanding acceptable types and levels of personal interaction.

For some youth with learning disabilities, social skills do not come easily. They may seem socially awkward, yet the people they are interacting with cannot quite pinpoint why. The youth may have a hard time focusing on what is being said, may switch topics at inopportune times, or may miss the overall gist of a conversation. Challenges with impulse control, distractibility, understanding cause and effect of actions, defining problems, and evaluating situations may lead them to make poor decisions in social settings.

Incorporating Interpersonal Skill Development into Programs
While learning disabilities do not go away with age, strategies for building interpersonal skills can be taught. Youth service professionals can integrate interpersonal skills development into other curricula already being used (such as in career exploration or technical education classes) or it can be taught as a stand-alone topic in schools, youth development programs, workforce education classes, or even in a well-structured work experience with cooperative employers. Extracurricular activities, clubs, athletics, or volunteer programs can add elements of interpersonal skills instruction either overtly or subtly. In any case, the goal is to provide applied or contextual learning opportunities for youth to practice interpersonal skills and receive constructive feedback. These opportunities should be based on an assessment of the individual's needs and abilities. It is important that youth gain an understanding of the importance of these skills, that the skills are demonstrated in real-life situations, and that opportunities are provided for observation, discussion, role-playing, evaluation, and further practice.

Language and social conventions, skills in asking for help effectively, organizational skills, body and personal space awareness, and understanding emotional responses to events are among the topic areas which should be discussed. For the purpose of this Guide, these skills have been classified into five areas: interpersonal relationships, problem solving skills, self-management, ethics and integrity, and customer service. Tool 4.2 is a checklist of interpersonal skills that youth can use to assess themselves, or that youth service professionals can use to assess any youth. It can also be used by administrators and policymakers in developing curriculum and programming to meet the needs of a wide variety of program participants.

TOOL 4.2

Checklist of Desired Interpersonal Skills

Tool 4.2 can be used by youth service professionals to measure the strengths and difficulties an individual brings to various social settings. If the youth is perceptive and understands the tool, it can be given to the individual to complete as a self-evaluation. These results can be compared with the perceptions of family members, teachers, employers, or other involved adults. In other instances, this checklist can be used in training situations using role play or demonstration to point out the value and necessity of these skills. These skills are generally developed in applied learning situations in classrooms, in the community, or in the workplace. They can also be integrated into the activities found in Tool 4.1 above.

1=Sounds like me **2=Sounds like me sometimes** **3=Does not sound like me** **4=Not applicable**	**1**	**2**	**3**	**4**
Interpersonal Relationships				
I show interest in others and exchange information with and request information from others appropriately				
I appreciate humor and respond appropriately to kidding and irony				
I join in conversations appropriately and make relevant contributions to ongoing activities				
I participate in groups in community and at work				
I approach others positively				
I take turns easily				
I show the capacity to empathize				
I draw positive attention to myself				
I am a courteous and interested listener and usually avoid interrupting when others are speaking				
I maintain a positive and cooperative attitude				
I work well with others from diverse ethnic and cultural backgrounds				
I use appropriate office etiquette				
I respect personal boundaries and relate positively to co-workers, supervisors, and customers				
Problem Solving Skills				
I express wishes and preferences clearly and give reasons for actions and positions				
I express frustrations and anger effectively				
I negotiate and compromise with others				
I identify problems and take initiative in finding solutions				
I learn and follow guidelines and procedures				
I know how to access resources and research information				
I seek help or support when negative situations occur				
I accept balanced, constructive criticism				
I understand the principles of conflict resolution and mediation				
I make suggestions or give feedback to co-workers and supervisors in an appropriate manner				

TOOL 4.2 (CONTINUED)

1=Sounds like me 3=Does not sound like me	2=Sounds like me sometimes 4=Not applicable	1	2	3	4
Self Management					
I follow instructions for new tasks					
I manage time effectively					
I adapt to corporate/business culture including etiquette, appearance, and decorum					
I actively seek to learn more about the job, expectations, the company, the mission, and advancement opportunities					
I am a self-starter and independent worker					
I come to work on time					
I work required hours (without constant monitoring)					
Ethics and Integrity					
I understand the concept of teamwork					
I handle valuable resources appropriately including equipment, products, money					
I take pride in my work, pay attention to details, and understand what quality at work means and its importance in the workplace					
I accurately and honestly describe knowledge, skills, and abilities in resumes, job applications, and interviews					
I handle proprietary information appropriately and am considerate of company image					
I leave personal problems out of the workplace					
Customer Service					
I listen to and anticipate customer needs and respond adequately, providing assistance to resolve problems					
I provide accurate information on products and services					
I understand work orders, instructions, and memos to carry out customer service activities correctly					

As noted above, opportunities to work on these skills can come in many forms and success is greatest when there are caring adults present who can provide guidance and feedback. Many of these skills take years to develop, and it is not expected that the youth will have mastered all of these traits. Rather, this is a list of what employers tend to desire in their employees and it can be used as a tool in goal-setting and self-awareness activities over the long term.

The Value of Mentoring

Mentoring relationships can be particularly advantageous to youth with learning disabilities who need to develop interpersonal skills. Mentoring can occur in schools, in workplaces, or within faith-based or community organizations and generally follows one of four models (or a combination of these):

- Traditional One-to-One Mentoring (an adult mentor and a young person)
- Peer Mentoring (usually an older youth mentor paired with a younger youth mentee)
- Group or Team Mentoring (one or more adult mentors and two or more youth mentees)
- Electronic or E-mentoring (use of e-mail for primary contacts, often combined with one of the three other types)

Many workplaces now use mentoring as a strategy to assimilate new employees. Mentors can be peers or older co-workers and are usually not the employee's supervisor. Workplace mentors help youth in getting oriented to the company, learning company culture, managing workload, and dealing with social issues. Workplace mentors can serve as role models, sounding boards, and contacts for networking opportunities. They can also answer questions about communication and the customs of the workplace, the understanding of which are often critical to managing conflict and related workplace dynamics. Individuals with learning disabilities who have difficulties with interpersonal skills can benefit from formal and informal mentoring relationships to provide objective and non-judgmental guidance on their interpersonal skills.

Youth who exhibit personal leadership and development skills, such as self-determination and interpersonal skills, have a better chance of succeeding in the work world. For youth with learning disabilities, this requires a realistic understanding of their disability and how it affects them. Chapter 5 builds upon this knowledge by taking a look at how accommodations and assistive technologies can improve functional and technical workplace skills. Youth service providers will gain an understanding of the relationship between the individual development strategies discussed in this chapter and effective disability disclosure, which is a prerequisite to accessing the accommodations that can help youth with learning disabilities succeed in the workplace.

Research Findings

Risk and Resiliency

Raskind (2006) cites "individual characteristics, and life situations and experiences that lead to successful life outcomes in persons with LD...a set of personal characteristics, attitudes, and behaviors that promoted life success":

- Self-awareness: awareness of their strengths and weaknesses in both academic and non-academic areas; acceptance of their disability; ability to compart-mentalize—not being overly defined by their learning difficulties and viewing them as only one aspect of themselves
- Proactivity: active engagement in the world around them and belief in the power to control their own destiny
- Perseverance: persistence in the face of adversity and flexibility in pursuing alternate strategies to reach a goal
- Goal-setting: setting specific yet flexible goals, including a strategy to reach them
- Presence and use of effective social support systems: seeking and using the help of others, and the ability to decrease dependence in early adulthood
- Emotional coping strategies: development of strategies for reducing stress and frustration

Youth Development

Effective youth programs are built on solid youth development principles. The growing consensus is that the most effective youth initiatives are the ones that focus on a wide range of developmental needs and give young people opportunities to take on new roles and responsibilities in the program and the community.

Youth development is a process which prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them to become socially, morally, emotionally, physically, and cognitively competent. Youth development encompasses a broad, holistic process of developmental growth that occurs during adolescence, focusing on the mastery of certain competencies that will determine both adolescent and adult behavior (National Collaborative on Workforce and Disability for Youth, 2007).

Self-Determination

Wehmeyer (2002) sees self-determination as having been a best practice in the education of adolescents with disabilities since the early 1990s, when the Individuals with Disabilities Education Act (IDEA) first mandated increased student involvement in transition planning. Promoting self-determination involves addressing the knowledge, skills, and attitudes students will need to take more control of and responsibility for their lives.

Field, Martin, Miller, Ward, and Wehmeyer (1998) describe self-determination as a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults.

Self-Awareness

According to West et al., "developing self-knowledge is the first step in self-advocacy skills. Learning about one's self involves the identification of learning styles, strengths and weakness, interests, and preferences" (1999). Youth with learning disabilities face many unique barriers to becoming self-determined. Many youth with learning disabilities do not acknowledge their "hidden" disability, nor do they understand the implications of their disability. Understanding one's strengths and weaknesses and developing self-awareness form the foundation of self-determination.

Gerber (2005) describes self-awareness using the terms "demystification" and "reframing":

> demystification involves taking the mystery out of the term "learning disabilities" by recognizing its manifestations in daily life. Reframing is a related process in which introspection and self-reflection guide the young person to make decisions that make use of her strengths, to create a fit between her LD and a task, a job, or an environment. Demystification and reframing [allow an individual] to gain authentic insights into her LD by providing a way to reflect on both achievements and setbacks associated with her LD. Over time, these insights provide a young person with knowledge of her strengths and weaknesses, and which compensations and accommodations she needs in order to perform well in school, training, or employment.

EXHIBIT 4.1: RESEARCH FINDINGS

Corley and Taymans (2002) describe self-knowledge as understanding one's learning disabilities, including specific information processing deficits (such as auditory processing, visual processing, attention, and memory) and how these deficits affect performance in daily life. This knowledge can lead to acceptance of one's disability—that is, the ability to view one's LD as limited or contained rather than all-encompassing. It is this internalization of information into a realistic self-appraisal that helps the individual make both the internal and external changes necessary to accommodate specific learning disabilities, ultimately resulting in a healthy sense of self (Thomas, 1991). Indeed, some highly successful adults with LD are able to move beyond understanding and acceptance to valuing their disability as something they can use to give themselves a competitive edge (Shessel & Reiff, 1999; Reiff et al., 1997).

Goal-Setting

Corley and Taymans (2002) reviewed the literature on adults with learning disabilities and concluded that

> goal setting is the basis for productive planning. Learning to differentiate between wants and needs, to make choices that match one's interests, preferences, and strengths, and to avoid one's areas of weakness is an important part of this process (Hoffman & Field, 1995). Goal setting and planning require organizational skills and the ability to follow a process—skills that can pose difficulties for many adults with LD who struggle with impulsivity, cause-and-effect thinking, and sequencing....Reiff et al. (1997) determined that a conscious goal orientation was often used to combat fear of failure and instill feelings of control.

Many youth with learning disabilities have not had the opportunity, or lack the skills, to set their own goals (Wehmeyer, Agran & Hughes, 1998). Researchers who have studied the effects of goal-setting on youth with disabilities suggest that:

- Self-selected goals are more effective at enhancing an individual's performance than goals selected by others.
- Establishing more stringent goals is associated with improved performance.
- Goal-setting focuses an individual's attention and provides direction in the decision-making process.
- Individuals with clear and realistic goals tend to be more persistent in their efforts to achieve their goals.
- Setting goals motivates individuals to search for strategies to accomplish their goals.
- Development of support networks for youth may facilitate goal attainment.
- Goal-setting is an effective procedure for developing youth's perceptions of competence.

(Balcazar, Keys, & Garate-Serafini, 1995; Butler, 1994; Kish, 1991; Lenz, Ehren, & Smiley, 1991)

Interpersonal Skills

One of the most important factors contributing to youths' achievement in school, in the world of work, and in their personal lives is their ability to communicate with, relate to, and work with peers, teachers, employers, and other adults (Van Reusen, 1999). In fact, Hayes (1994) states that "adults with learning disabilities find...that their successes or failures in their personal lives or jobs are often more affected by their social skills than by their academic learning."

Social skills also support the positive development of healthy relationships with family members and peers. Adequate social skills need to be acquired while students are in school and further supported and refined in postsecondary, community, and work settings. Gresham, Sugai, and Horner (2001) define social competence as "the degree to which students are able to establish and maintain satisfactory interpersonal relationships, gain peer acceptance, establish and maintain friendships, and terminate negative interpersonal relationships" (p. 331).

Hayes (1994) also finds difficulties with eight types of social skills affected the success of individuals with learning disabilities:

- perception of facial expression and vocal cues
- language and social conventions
- vocal monitoring
- skills in asking for help in receiving information
- body awareness skills
- organizational skills
- personal space awareness
- [behavior related to] mood swings, overreaction, and depression

Hair, Jager, and Garrett (2002) observe that adolescents who have strong social skills, particularly in the areas of conflict resolution, emotional intimacy, and the use of pro-social behaviors, are more likely to be accepted by peers, develop friendships, maintain stronger relationships with parents and

peers, be viewed as effective problem solvers, cultivate greater interest in school, and perform better academically.

Gresham, Sugai, and Horner (2001) also note that deficits in social skills are key criteria in defining specific learning disabilities. When social skills are absent, educators cannot fully engage students in learning experiences that require cooperative work. To participate fully in cooperative learning, some students with disabilities need training in skills such as giving and receiving feedback, listening, and appropriate self-disclosure. In community life, appropriate social behavior may be even more important than academic or job skills in determining whether one is perceived as a competent individual (Black & Langone, 1997).

The Secretary's Commission on Achieving Necessary Skills (SCANS) (1991) identify key competencies and foundation skills essential for workplace success:

Competencies that workers can use to become effective:

- resources—allocating time, money, materials, space, and staff;
- interpersonal skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds;
- information—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;
- systems—understanding social, organizational, and technological systems; monitoring and correcting performance; and designing or improving systems; and
- technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

Foundation Skills—competence requires:

- basic skills—reading, writing, arithmetic and mathematics, speaking, and listening;
- thinking skills—thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning; and
- personal qualities—individual responsibility, self-esteem, self-management, and integrity.

EXHIBIT 4.2

Individual Development Strategies Resources

AIR and ARC Self-Determination Assessments

The Zarrow Center for Enrichment, an organization that promotes self-determination instruction, has downloadable copies of the AIR Self-Determination Assessment and the ARC Self-Determination Assessment. The AIR Assessment measures two broad self-determination components. The ARC assessment is a 72-item scale that provides a score of the student's autonomy, self-regulation, psychological empowerment, and overall self-determination.
http://education.ou.edu/zarrow/?p=38

Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century Workforce

This report was sponsored by the Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management.
http://www.conference-board.org/pdf_free/BED-06-Workforce.pdf

Career-Focused Mentoring for Youth: The What, Why, and How

Career-focused mentoring provides young people the opportunity to get a glimpse of the world of work that may not otherwise be available to them. It also allows them to gain and practice skills that are useful in professional and other settings, and to prepare for life as an adult.
http://www.dol.gov/odep/pubs/fact/cfm.htm

Disability History: An Important Part of America's Heritage

Teaching students about the contributions of particular populations to our nation's history, such as women and people of various ethnic backgrounds, has been recognized as important through the declaration of dedicated months as well as other educational programs. Disability history, however, has been largely ignored in school curricula. This is particularly paradoxical since anyone, regardless of age, race, or heritage, may become a part of the population of people with disabilities at any time.
http://www.dol.gov/odep/documents/Disability%20History_508%20compliant_links.pdf

Disability Knowledge and Identity Self-Assessment

This self-assessment was adapted for programs empowering youth with disabilities through the study of the history of the disability rights movement to find out what students know already, what they want to know more about, and how they feel about their own disability.
http://www.ncld-youth.info/Resources_final.htm#guides

The Equipped for the Future Work Readiness Profile—What New Workers in Entry Level Jobs Need to Be Able to Do

The National Work Readiness Council is a group of work readiness innovators that have been studying work skills for several years. The Council has engaged in an applied research project with entry level workers and frontline managers, across industry sectors, to create a skills profile and assessment. Based on the SCANS Skills, this profile is used in conjunction with the National Work Readiness Assessment.
http://eff.cls.utk.edu/PDF/WRCProfileLink092005.pdf and http://www.workreadiness.com/nwrcred.html

High School/High Tech (HS/HT)

HS/HT is a national network of state and locally operated programs designed to provide young people with all types of disabilities the opportunity to explore jobs or further education leading to technology-related careers. HS/HT is considered to be a promising comprehensive model for preparing youth with disabilities to explore careers in math, science, and technology.
http://www.ncwd-youth.info/HSHT/index.html

Job Corps

Job Corps is a no-cost education and vocational training program administered by the U.S. Department of Labor that helps young people ages 16 to 24 get a better job, make more money, and take control of their lives. At Job Corps, students enroll to learn a trade, earn a high school diploma or GED, and get help finding a good job. Job Corps also provides career counseling and transition support to its students for up to 12 months after they graduate from the program.
http://jobcorps.dol.gov/

EXHIBIT 4.2: INDIVIDUAL DEVELOPMENT STRATEGIES RESOURCES

Jump$tart Coalition for Personal Financial Literacy

Jump$tart is a national coalition of organizations dedicated to improving the financial literacy of kindergarten through college-age youth by providing advocacy, research, standards, and educational resources. Jump$tart strives to prepare youth for lifelong successful financial decision-making.
http://www.jumpstartcoalition.org/

The National Endowment for Financial Education (NEFE) and the NEFE High School Financial Planning Program

NEFE is dedicated to helping Americans acquire the information and gain the skills necessary to take control of their personal finances. NEFE accomplishes its mission primarily by partnering with other concerned organizations to provide financial education to members of the public—in particular, to underserved individuals whose financial education issues are not being addressed by others.
http://www.nefe.org/

The National Secondary Transition Technical Assistance Center (NSTTAC)

Funded by the U.S. Department of Education, NSTTAC supports full implementation of IDEA, focusing on youth with disabilities attaining desired post-school outcomes. It does this by helping states build capacity to support and improve transition planning, services, and outcomes for youth with disabilities. It also disseminates information and provides technical assistance on scientifically-based research practices with an emphasis on building and sustaining state-level infrastructures of support and district-level demonstrations of effective transition methods for youth with disabilities.
http://www.nsttac.org/

Paving the Way to Work: A Guide to Career-Focused Mentoring

This Guide promotes effective research-based mentoring policies and practices to improve transition outcomes for youth with disabilities. It is intended for individuals designing mentoring programs to help youth transition to adulthood.
http://www.ncwd-youth.info/resources_&_Publications/mentoring.html

Plotting the Course for Success: An Individualized Mentoring Plan for Youth with Disabilities

This plan guides mentors and mentees through a number of activities to help them think about a young person's developmental needs and goals, and what sorts of activities, experiences, and connections can help him/her achieve them. Not only does this plan outline specific activities and action items for the mentee, but it also enables the mentor to have an opportunity to express how he/she would like to see him/herself grow in the relationship.
http://www.ncld-youth.info/Resources_final.htm#guides

Self-Determination for Youth with Disabilities: A Family Education Curriculum

This is a 15-module curriculum that teaches families skills to use in supporting self-determination in their transition-age member with a disability. It is designed to be presented by teachers, community agency personnel, or other facilitators in a series of two-hour sessions addressing topics that include futures planning, family meetings, values and goals, choice-making, solving problems, resolving conflicts, personal advocacy, connecting with community resources, persevering through difficulties, and participating in political systems.
http://ici.umn.edu/products/curricula.html#self

The Self-Determination Synthesis Project

This project was designed to conduct a review and synthesis of the knowledge base and best practices related to self-determination and self-advocacy interventions in order to improve, expand, and accelerate the use of this knowledge by professionals who serve children and youth with disabilities and their parents.
http://www.uncc.edu/sdsp/home.asp

Soft Skills: The Competitive Edge

What do employers look for in new employees? According to the 2006 report Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce, it may not be what some young job seekers expect. This in-depth survey of 461 business leaders conducted by the Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management reveals that while the three "R's" (reading, writing, and arithmetic) are still fundamental to every employee's ability to do the job, employers view "soft" skills as even more important to work readiness. The report also finds that younger workers frequently lack these skills, which include professionalism or work ethic, oral and written

communication, teamwork and collaboration skills, and critical thinking or problem-solving skills.
http://www.dol.gov/odep/pubs/fact/softskills.htm

The Student-Directed Transition Planning (SDTP)

SDTP is a series of lessons used to teach youth needed transition knowledge. A script is provided that they can take into their IEP meetings to join and perhaps lead the transition discussions. The titles of the SDTP lessons are:

- Awareness of Self, Family, Community, and Disability
- Terms and Concepts for Transition Planning
- Vision for Employment
- Vision for Further Education
- Vision for Adult Living
- Course of Study
- Connecting with Adult Supports and Services

Lesson PowerPoint files and a Teacher's Guide can be found at http://education.ou.edu/zarrow/?p=37&z=7

What is Your Learning Style?

This brief online assessment helps youth with learning disabilities identify their preferred learning style in order learn more effectively. Through identifying their learning style, youth will be able to capitalize on their strengths and improve their self-advocacy skills.
http://www.ldpride.net/learning-style-test.html

CHAPTER 5

Disclosure and Accommodations Strategies

In Chapter 3, we described how integrating strategy instruction and universal design for learning into academic and vocational settings can have a significant impact on the transition success of youth, including youth with learning disabilities. Many young people with learning disabilities, with or without the benefit of having learned these strategies, will also need to access accommodations to maximize their potential in postsecondary education and the workplace. They will also benefit from guidance and opportunities to build and integrate strategies connected to disclosure and accommodations in these settings. This chapter will provide youth service professionals with resources and information that will support youth in this strategy development.

In this Chapter

- Defining Disclosure and Accommodations
- Why the Focus on Disclosure and Accommodations?
- Backdrop—Current Trends
- Design Elements of Disclosure and Accommodations Strategies
- Research Findings and Exhibits
- Resources for Disclosure and Accommodations Strategies

Defining Disclosure and Accommodations

Disclosure refers to the process of discussing one's disability with others for the specific purpose of garnering understanding in school, work, and social settings. Disclosure may also lead to the provision and integration of accommodations in academic or vocational settings. There is no standardized form or set of requirements regarding what people must share about their disabilities. Rather, youth must decide individually what, if anything, they want to reveal. Disclosure skills can evolve through Guideposts activities in youth development and leadership experiences as well as school-based preparatory experiences and career preparation and work-based learning.

Accommodations are physical, environmental, or procedural changes made in a classroom, work site, or assessment activity that help people with disabilities learn, work, or receive services. Accommodations are designed not to lower expectations for performance in school or work but to lessen the impact of the environment on a disability—to level the playing field.

Accommodations may involve a different way to do a task or adjustments to how things are usually done, tailored to meet a person's individual needs. It is important to understand that accommodations are not designed to give an individual an advantage over other

people, to alter a fundamental aspect of a course or job, or to weaken academic rigor or lessen workplace productivity. In fact, incorporating accommodations into the workplace can build compensatory skills that may allow tasks to be completed in new or creative ways.

This chapter will provide youth service professionals with the knowledge and tools needed to address disclosure issues, identify when youth might benefit from accommodations, and help youth express their accommodation needs. This chapter can also be useful in supporting individuals who may not have a diagnosed learning disability but who may have more generalized problems with reading, writing, processing information, and keeping organized.

Legislative Building Blocks for Disability Rights and Funding for Supports

Federal legislation has established two categories of support for people with disabilities—rights-based laws that promote the civil rights of people with disabilities and laws that provide funding and resources for services.

Rights-Based Laws. Three primary pieces of Federal legislation protect the rights of individuals with disabilities—the Americans with Disabilities Act (ADA) and the ADA Amendments of 2008 (that also apply to the Rehabilitation Act), the Individuals with Disabilities Education Act (IDEA), and Section 504 of the Rehabilitation Act. They were passed because having a disability should not lead to discrimination in or prevent access to programs and public spaces. To be covered under these laws, the individual must disclose and document their disability. As noted earlier, the decision to disclose a disability is not to be taken lightly. In the period of transition out of public schools, many young people experience disability-based discrimination and decide to stop disclosing their disability, thereby curtailing their rights under these laws. Appendix B provides more detail about these aspects of laws.

Laws that Provide Funding for Programs. Congress has passed legislation that supports the needs of many groups of at-risk individuals, and many departments and agencies oversee the distribution of funds and measure outcomes of Federal programs. The Social Security Administration and the Departments of Education, Labor, Health and Human Services, and Justice each play an important role in supporting the needs of at-risk youth. Most funding flows to states, and state governments, in turn, are responsible for setting up services or for distributing resources to local agencies and organizations. The overarching consistent feature of most of these Federal programs is to help prepare individuals for the world of work. Appendix C provides more details about such laws.

Why the Focus on Disclosure and Accommodations?

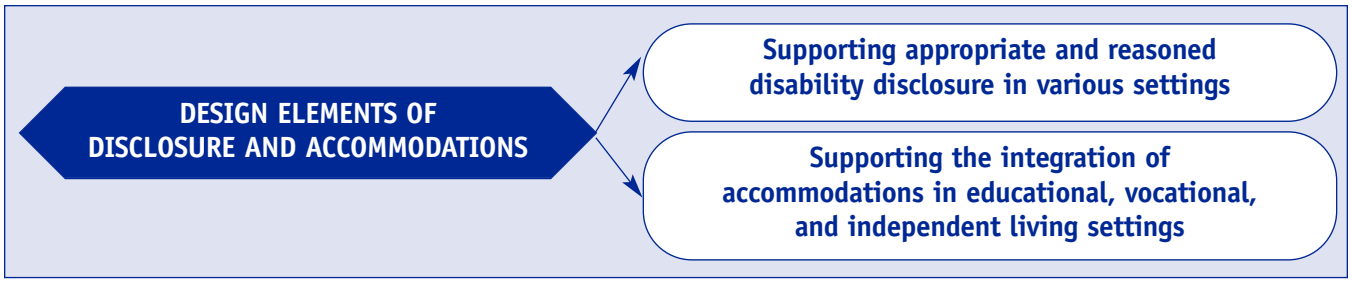
In addition to developing key learning strategies, successful adults with learning disabilities should be able to determine if, when, and how to disclose their disability to others. They should know how to choose and use accommodations to minimize certain aspects of their disability, and have a plan to request accommodations, if needed, in school or work settings.

This approach to disclosure is based on the idea that young people are in charge of what they choose to tell others about their disability. They have privacy rights and can decide what they wish to reveal and what they choose to keep to themselves. Youth service professionals can help young people make these decisions consciously by being prepared to help youth understand the advantages and disadvantages of disclosure and how to disclose effectively.

Backdrop—Current Trends

For individuals with apparent disabilities, disclosure is more straightforward than for those who have hidden disabilities like learning disabilities. Most people can understand visual impairments, mobility problems, and deafness and they can comprehend the need for Braille, a cane, a wheelchair, or American Sign Language. But many people find it difficult to understand why they should make adjustments for difficulties that they cannot see. This is compounded by the mistaken belief of many that if individuals with learning disabilities would just apply themselves, they would not have processing difficulties.

Regardless of whether the youth has received or benefited from strategy instruction and/or instruction in the use of compensatory techniques, accommodations frequently will be the key to their success in the workplace. For instance, an individual with dyslexia and ongoing reading problems may



benefit from putting text into speech using a personal computer. The accommodation supports the compensatory skill of listening to text rather than reading it.

Accommodations and compensatory skills can be powerful ways to increase academic and vocational success. Developing the skills needed to educate others about accommodation-related needs is therefore critical and can take a great deal of planning and practice.

Design Elements of Disclosure and Accommodations Strategies

The art of disclosing and requesting accommodations draws on Design Elements discussed in the previous chapters. As with other areas of development, transition-age youth with learning disabilities benefit from applied or contextual learning opportunities using role playing and engaging in real-life situations to practice their disclosure and accommodations-requesting skills. Doing so effectively takes practice and constructive feedback from adults and peers. Successful adults who have learning disabilities themselves can be especially effective in helping youth develop these skills.

Design Element 1: Supporting appropriate and reasoned disability disclosure in various settings

Disclosing a disability has elements of risk and loss of privacy that are very important for young people to be aware of. Youth service professionals can provide guidance and opportunities for youth to engage in role playing that will help them understand these issues. Practitioners can also review the advantages and disadvantages of disclosure with the youth and help them "fine tune" how to disclose when talking with others about their processing difficulties.

The decision as to whether or not to disclose should be made in the context of the requirements of a particular job or school task and should take into account the expectations of the teacher or employer and whether the individual with learning disabilities would benefit from having access to reasonable accommodations in that context which is discussed in Design Element 2 below. For example, if a job does not require the use of math skills, an individual who has dyscalculia would have no reason to inform an employer of that fact.

Tool 5.1 on page 5-4 can be used as a guide to help youth think through the disclosure process. NCWD/Youth also has a youth-oriented guidebook called *The 411 on Disability Disclosure* that can be used in classrooms and other instructional settings to help youth understand disclosure issues. Disclosure should only be done by the individual and not by youth service professionals or others involved with the young person.

School Settings: In secondary school, disclosure is usually done in the context of setting up an Individualized Education Program (IEP) or a Section 504 plan (from the Rehabilitation Act), both of which provide a legal basis for teachers and other staff to accommodate the needs of individuals with documented learning disabilities. Both IEPs and 504 plans should clearly detail the accommodations that are to be provided. These documents are intended to be shared only with teachers and staff who need to know about the disability. Students are encouraged to communicate often with these staff in order to ensure there is an ongoing understanding related to their disability issues. Case managers and school administrators should be available to intervene in case of disputes.

TOOL 5.1

Factors to Weigh Before Disclosure

Tool 5.1 can be used in individual or group conversations in school, training, or counseling settings to help youth understand the potential risks and rewards of disclosure. Including successful adults with learning disabilities in these discussions can be very valuable.

Advantages to Disclosure
• allows an individual to begin a dialogue with employers, educators, or others with regard to accommodations and to pursue work, school, or community activities more effectively
• provides legal protection against discrimination (as specified in the Americans with Disabilities Act)
• reduces stress, since protecting a "secret" can take a lot of energy
• gives an individual a clearer impression of what kinds of expectations people may have of them and their abilities
• ensures that an individual is getting what they need (e.g., accommodation or assistive technology) in order to be successful
• provides full freedom to examine and question health insurance and other benefits
• provides greater freedom for the individual to communicate his/her needs
• improves self-image through self-advocacy
• allows an individual to involve other professionals (e.g., educators and employment service providers) to help him/her learn skills and develop accommodations
• increases one's comfort level
• may help other people with learning disabilities if the young person is a role model
Disadvantages to Disclosure
• may cause an individual to feel excluded
• may cause an individual to become an object of unwanted curiosity
• may lead to blame of the individual if something doesn't go right
• may cause others to treat the individual differently
• may bring up conflicting feelings about self-image
• may lead to an individual being viewed as needy, not self-sufficient, or unable to perform on par with his/her peers
• may cause an individual to be legally or illegally rejected or overlooked for a job, team, group, or organization
In conversations about disclosure, an individual should be prepared to discuss the following:
• his/her strengths
• the characteristics of the learning disability
• how the learning disability affects academic or vocational performance
• the accommodations or modifications needed to be successful on the job
• examples of past successes using accommodations

In postsecondary academic settings, the ADA and Section 504 protect the legal rights of individuals with disabilities. Both laws require that individuals with disabilities be provided with reasonable accommodations if they disclose a disability. The institution is obliged to provide such assistance unless providing the accommodation would result in undue hardship. After high school, accommodations are usually provided after going through the college's disability support services office. Not all postsecondary programs have formal disability support services, but all publicly-funded programs must have some mechanism for meeting the accommodations needs of participants with disabilities.

Take-Away Documentation: Leaving the Public School

When a youth with a disability who has received special education or Section 504 services leaves the public school system, it is imperative that they obtain copies of these records for use as documentation in adult-focused programs or in postsecondary settings. For students receiving services under IDEA, Federal law requires the school to provide the youth with certain documents for this reason. These should include assessment results and documentation, reports and recommendations, portfolios and actual school work, and a "Summary of Performance" which:

> must include information on the student's academic achievement and functional performance and include recommendations on how to assist the student in meeting postsecondary goals. Congress intended for this summary to provide specific, meaningful, and understandable information to the student, the student's family, and any agency, including postsecondary schools, which may provide services to the student upon transition (National Transition Documentation Summit, 2005).

Although public schools may be obligated to pay for assessments, they may waive the need for them because of the time involved. This is especially common for individuals who are close to exiting the school system. (Formal assessments for learning disabilities can be costly and may or may not be covered by insurance or vocational rehabilitation.) When schools decline to provide further assessment, they will often continue to provide needed services nonetheless, based on ongoing input from teachers and parents. Parents can appeal the decision to waive assessments. Sometimes school documentation may not be accepted by adult service agencies or colleges because the documentation is be too old or is based on youth service needs or youth metrics.

Disclosure in college settings should be done early. This will ensure that faculty members and other staff have time to implement the reasonable accommodations needed. In addition to colleges and universities, Workforce Centers, Vocational Rehabilitation offices, and Adult Basic Education programs can also provide resources and information about supporting individuals with learning disabilities, and these can be accessed prior to any disability disclosure.

Work Settings: If an individual with a learning disability determines that it is advantageous to disclose in their work setting, it is essential that they understand the legal and practical issues involved. According to the ADA and many state statutes, employers are not allowed to discriminate against individuals with disabilities, but proving that discrimination has occurred is often difficult. Thus the timing of disclosure must be carefully considered. Three times when an individual may decide to disclose disability-related information:

- during a job interview,
- at the time of acceptance of a job offer, and
- at any time after employment has begun.

Understanding the scope and limitations of the ADA and related state regulations is the responsibility of the individual as much as it is of the employer. Individuals who disclose disability information must be able to answer questions as they arise (see http://www.ada.gov/ for more information). Self-awareness plays an important role in work-related disclosure. Young people with disabilities should have a clear understanding of their disability and be able to describe its impact clearly, using common language. Disclosure should be made only to those with a legitimate interest in the information, such as a supervisor or human resources manager. Many individuals practice disclosing ahead of time and use a pre-printed "fact sheet" in disclosure discussions.

Occasionally, an individual may choose to disclose information about a disability in a resume, cover letter, or job application. This is generally not recommended unless the individual believes that including this information supports his or her credentials (such as if he/she is applying for a job teaching special education or counseling at-risk youth) or if an accommodation is needed for an interview. One other caution: many companies and organizations require new employees to undergo drug testing. Individuals who are taking prescription medication related to their disability should be aware that certain medications can be discovered and reported in such tests, resulting in inadvertent disclosure. Job applicants should also be aware of background and reference checks that can be inadvertent sources of disclosure of personal information regarding disabilities, particularly in today's world of Facebook, MySpace, Twitter, and other social networking Web sites.

Social Settings: Aside from practical issues related to disclosure in school or work settings, young people with learning disabilities also must deal with disclosure issues in social settings—namely, whether or not to tell family members, friends, and acquaintances about their disability. Many young people, because of past teasing, bullying, or rejection, are reluctant to disclose in social settings for fear of further rejection or misunderstanding by others. In these instances, having relationships with others who have similar disabilities (through support groups, mentoring, or other activities) can help a young person understand the potential risks and rewards of disclosure.

Design Element 2: Supporting the integration of accommodations in educational, vocational, and independent living settings

Accommodations for individuals with learning disabilities are generally not difficult to incorporate into educational or work settings. Assessment and ongoing evaluation may be required to determine if the accommodations are effective. Accommodations are used specifically in these areas:

- presenting information to individuals with LD—such as providing materials in audio files instead of print,
- generating responses from individuals with LD—such as allowing them to input materials into a computer using voice recognition software instead of keyboarding,
- adjusting settings or the environment—such as providing quiet work areas with fewer distractions, and
- allowing for time flexibility—such as allowing extra time to study training materials.

TOOL 5.2

Responding to Employer Concerns

Tool 5.2 provides a short list of potential questions that a current or prospective employer is likely to ask after disclosure. Teachers or counselors can assist youth in developing appropriate answers. It is useful to write down and memorize the answers to such questions ahead of time.

Once a disability is disclosed, an individual with a disability should be able to answer these questions:	
What exactly is your disability?	What are some of your past successes in team work?
How will your learning disability impact your productivity?	How can you best be efficient on the job?
What does learning disability or dyslexia mean?	What are some of your past successes in leading others?
If we need to train you on specific job functions, how do you learn best?	What reasonable accommodations do you need? Why and how do you see them as 'reasonable'?
What kinds of modifications do you need in your work environment?	

Many accommodations require no special equipment but merely an adjustment in settings or conditions. Accommodations are usually the result of the individual suggesting what has worked well for them in the past. Other accommodations may require products such as hardware or software related to writing, reading, or computing. Such products are also known as assistive technology.

Assistive Technology as an Accommodation: Many individuals with learning disabilities benefit from technology-based accommodations. Federal law supports the use of such assistive technology, defined as "any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities" (Assistive Technology Act, 2004).

Whereas universal design alters the environment and the manner in which information is presented (such as closed captioning), assistive technology allows individuals to adjust an unaltered environment or information source so that it is accessible to them. A few examples of assistive technology devices that persons with learning disabilities may use include personal data assistants, screen readers, portable spell checkers, text readers, talking calculators, cell phones, and digital recorders.

It takes experimentation, practice, and patience to learn which accommodations and types of assistive technology are best suited for each person. School districts, colleges, and vocational rehabilitation agencies typically have staff with expertise in assistive technology and can provide support and resources to individuals and employers. Each state has an organization responsible for promoting and supporting the use of assistive technologies. A listing of these organizations can be found at the Rehabilitation Engineering and Assistive Technology Society of North America's Web site: http://www.resnaprojects.org/nattap/at/statecontacts.html.

In addition, there are numerous non-profit and for-profit organizations or companies that manufacture or sell assistive technology equipment, and nearly all of them have Web sites. Additional assistive technology resources can be found at the end of this chapter in Exhibit 5.2.

Incorporating Accommodations into the Schools: In secondary school settings, students who have IEPs or Section 504 plans have a legal right to accommodations that include modifications in presentation, response, time, and setting for both classroom instruction and testing activities. Accommodations are agreed to in program planning meetings and should be shared with (and explained to) appropriate school staff. Schools should have procedures in place to resolve issues that may come up concerning these modifications. Common classroom accommodations for students with learning disabilities include printed material read onto tape or CD, computer text that is read aloud, extra time for assignments or tests, clarified directions or assistance from another person, quiet areas in which to study or take tests, noise buffers, note takers, specialized lighting, and spell checkers. Tools 5.3 and 5.4 at the end of this chapter provide further resources about classroom accommodations.

Accommodations for testing can pose particular problems. Curriculum-based testing (measuring what is learned in the classroom) and norm-based testing (standardized tests) should allow individuals to use appropriate accommodations. However, problems arise because standardized methods of providing accommodations are difficult to implement and may not be appropriate for all individuals involved. Students, parents, and school staff all need to be knowledgeable about testing and accommodation issues.

Federal education laws (IDEA and NCLB) require that students with disabilities be included in state-wide and district-wide standardized testing. These laws also allow for accommodations, but individual states are allowed to set their own guidelines for allowing accommodations. According to a report published by the National Center for Learning Disabilities (2007):

> Although the new requirements have greatly improved the rate of participation for students with disabilities in state and district testing, the increased use of test accommodations has created tremendous variability of policies and guidelines—not only with regard to what accommodations can be used for what test, but also who can use them. These differences across states compromise the validity of what the test

results tell us. Results are further compromised by research showing a lack of knowledge by those who make important accommodation decisions as well as lack of consistent implementation of selected accommodations on test day.

This lack of access to appropriate accommodations can have catastrophic unintended consequences related to diploma options and college admissions. Young people and their families should advocate for fair and appropriate testing opportunities throughout K-12 schooling and seek clarification and guidance from school staff when testing accommodations are being discussed.

Accommodations in postsecondary settings require the involvement and cooperation of instructors, and it is up to the individual to make direct contact with these instructors in concert with the disability support services office. Responsiveness on the part of instructors varies considerably. Students are encouraged to be persistent in requesting supports.

It is interesting to note that elements of universal design are being incorporated on campuses in some interesting ways. Many college level instructors are sharing syllabi, class notes, and PowerPoint slides electronically so that they are more fully accessible for all students. Other schools, notably UCLA, have installed audio encoding devices in classrooms across campus and are "able to economically record lectures in high audio quality and place them on a Web site so that students can retrieve them as podcasts, or listen to them as streaming media on RealPlayer" (Nagel, 2007).

College Admissions Testing

The SAT and the ACT, along with graduate school admissions tests (such as the GRE, GMAT, LSAT, and MCAT), have provisions for certain, but not all, accommodations for test takers with documented disabilities. To ensure that individuals get the accommodations allowed, test-takers should register with the test publisher several months prior to the desired test date.

For the SAT and the GRE, visit:
http://www.ets.org

For the ACT, visit:
http://www.act.org

For the GMAT, visit:
http://www.mba.com

For the LSAT, visit:
http://www.lsat.org

For the MCAT, visit:
http://www.aamc.org/students/mcat/

Occupation-specific certification assessments (like those given to electricians, building contractors, lawyers, and health care professionals) are subject to the Americans with Disabilities Act's anti-discrimination components, but many professional associations and organizations have limited experience with accommodations. Thus, individuals who are considering entering a profession that requires competency testing should contact that profession's state or national licensing boards for more information about these issues before beginning training.

Incorporating Accommodations into the Workplace: People with disabilities can request an accommodation at any time during the job application process or while employed. To request an accommodation, the individual must inform the employer of the need for an adjustment or change at work and provide a reason related to his/her disability. There are no key words to use in making the request, and neither the ADA nor the phrase "reasonable accommodation" needs to be mentioned. Taking a proactive approach to accommodation is much more effective than reacting to significant problems later.

Effective job accommodations are based on examining the structure, environment, and management of an organization, as well as the performance capability and actual needs of the employee. A job accommodation assessment begins with an examination of whether any adjustments or modifications in the work environment, or in the way things are customarily done, are necessary. This process and the subsequent development of an accommodation plan should be an interactive process. Both the employee and employer must collaborate and formulate an accommodation that benefits and is acceptable to both parties. Sometimes trial and error is necessary and there may be a need or desire to change the accommodation over time. If necessary, technology specialists or rehabilitation professional may be included in the accommodation discussion. The Office of Disability Employment Policy

Effective job accommodations are based on examining the structure, environment, and management of an organization, as well as the performance capability and actual needs of the employee.

funds and supports the Job Accommodation Network, an online resource for "workplace productivity enhancements and reasonable accommodation solutions"; see http://www.askjan.org.

To make the accommodations process go smoothly, it is helpful for individuals with disabilities to engage in early discussions with their employers regarding their accommodation needs and preferences. Involved parties should understand that not every accommodation request should or will be acceptable, and certainly not every acceptable request or suggestion needs to be implemented simultaneously. Small, thoughtfully planned steps will provide the best opportunity for review, modification, and successful implementation of each accommodation.

The following tools provide examples of what can be used in developing an accommodation plan for specific skill areas related to reading, writing, spelling, mathematics, communication, concentration, drawing conclusions, processing, organizing, and memory. Many of the accommodations presented rely on assistive technologies.

It is important to note that many of the accommodations discussed above and in what follows can be used not only to maximize the abilities of individuals with diagnosed learning disabilities but also by any student or employee who appears to be having difficulties in reading, writing, computing, and/or processing information.

By incorporating strategic learning techniques, compensatory strategies, personal development strategies, and by promoting the understanding of disclosure and accommodations, youth service professionals can be instrumental in supporting and guiding youth with learning disabilities down the road to productive employment. The following chapter describes promising systemic practices to meet youth needs and describes the need for both additional resources and the development of exemplary programs that are holistic, accessible, and affordable to those who need them.

TOOL 5.3

Examples of Accommodations for Specific Classroom or Work-Related Tasks

Tool 5.3 focuses on specific tasks that an individual may have in a classroom or worksite. This table is not exhaustive but rather should be used as a starting point. As can be seen here, compensatory skills can be developed very easily in many situations.

Accommodations for Reading Text from a Paper Copy	
Large print or closed circuit television system	Double-spaced text
Color overlays on top of material printed on white paper	Handheld devices that scan a word or words and provide auditory feedback
Converting text to audio	Color-coded manuals, outlines, and maps
Another person reading texts aloud	Recording for the Blind and Dyslexic books on tape
Accommodations for Reading Text from a Computer Screen	
Locator dots for identification of letters/numbers on the keyboard	Form-generating software that computerizes order forms, claim forms, application forms, and equation and formula fields
Voice output software that highlights and reads (via a speech synthesizer) text on a computer screen	Speech recognition software that recognizes the user's voice and converts it to text on the computer screen.
Word processing software	Tape-recorded directives, messages, materials
Copy holder with line guide	
Accommodations for Composing Text on a Computer	
Spell-checking programs	Word abbreviation/expansion programs
Voice output software and word processing programs	Locator dots for identification of letters/numbers on the keyboard
Outlining software	Line guide with foot pedal
Accommodations for Handwriting	
Pens or pencils with rubber grips	Colored pens or pencils for organizing
Raised line or bold line paper	Tape recorder to outline prior to writing
Accommodations for Spelling	
Grammar-checking software	Spell-checking software/electronic spell checkers
Word processing software	General and medical spellers and thesauri
Word prediction software	Software with highlighting capabilities
Accommodations for Mathematics	
Color coding for maintaining columns	Hand-held and talking calculators
Fractional, decimal, statistical scientific calculators	Large display screens for calculators
Accommodations to Improve Concentration	
Private office or area with fewer distractions aural distractions	Cubicle walls and doors around work area to reduce visual or aural distraction
Sound-absorbing panels and other noise-masking products	Headset to listen to music and shut out distractions
Clocks and timers with prompts	Environmental sound (white noise) machine
Accommodations in Training and Orientation	
Written or audio checklists	Training materials on audio tape
Communication verbally and in writing	Visual or audio prompts
	Training sessions in smaller segments

(Adapted from Kitchen, 2006 and Tools for Life, n.d.)

TOOL 5.4

Accommodations for Specific Processing Difficulties

Tool 5.4 lists accommodations that can be useful in addressing specific processing difficulties in academic or work settings. See Exhibit 5.2 for an extensive list of resources related to accommodations and assistive technology.

Accommodations for Visual Processing Difficulties An individual who has difficulty with visual processing is likely to learn better through auditory information and hands-on experience. Visual information will need to be simplified, clarified, and supplemented through other senses, particularly hearing and touch.	
Extra time to review visual information (pictures, videos, writing on the whiteboard, etc.)	A clear and simple overview or summary of what will be learned before each lesson or training session (e.g., a study guide)
Extra time for reading and writing tests and assignments	Highlighting the most important information in textbooks, training materials, and assignments
Training materials and assessment instruments with larger print and less "clutter"	Hands-on experiences
Taped training materials, books, and assignments	Tests or assessments in a quiet area to avoid distractions
Verbal or audio descriptions to help understand visual information	Alternatives to computer programs and internet work
Graph paper to keep numbers in line when doing mathematics or technical work	Calculator or spell checker
Accommodations for Auditory Processing Difficulties An individual who has difficulty with auditory processing is likely to learn better through visual information and hands-on experience. Auditory information will need to be simplified, clarified, and supplemented through other senses, particularly sight and touch.	
Repetition and clarification of verbal instruction	Hands-on experiences to aid in tactile processing
Information in writing or drawing on paper, whiteboard, or overhead projector	Highlighting the most important information in textbooks, training materials, and assignments
Extra time for reading and writing training materials, assignments, and assessments	Clear and simple written overview or summary of what will be learned before each training session
Seating near the speaker to maintain auditory attention and minimize visual distraction	Examples and demonstrations of what is expected from assignments and projects
Visual information (e.g., pictures, videos, graphs, charts, etc.) to help understand verbal information	
Accommodations for Sequential and Organizational Difficulties An individual who has difficulty in the sequential/organizational area may have problems with detail work and memory which indicates a need to find other ways to remember and organize important information. These individuals rely on conceptual/holistic processing skills and learn best by looking at the "big picture" and developing deep understanding of a subject even if details are hard to remember.	
Access the big picture through summaries and overviews before breaking a lesson into smaller parts (e.g., provide a study guide)	Highlighting the most important information in textbooks, training materials, and assignments
Information in writing or drawing on paper, whiteboard, or overhead projector	Hands-on experiences to supplement text or online instruction
Extra time for reading and writing tests and assignments	Testing in a separate room to avoid distractions
Seating near the speaker to maintain attention and minimize distraction	Examples and demonstrations of what is expected from assignments and projects
Visual information (pictures, videos, graphs, charts, etc.) that can be taken and reviewed later	Extra time for organization of thoughts
Real-life examples to help with the big picture and to show how details contribute to the overall purpose	Calculator or spell checker

Accommodations for Conceptual/Holistic Processing Difficulties For an individual who has difficulties with conceptual/holistic processing, learning and memorizing details and facts is generally easier than understanding deeper meaning and general concepts. These individuals may read rather quickly and easily but have difficulty understanding what is read. For this type of disability, it is most important to take extra time to try to develop a deeper understanding of what is being taught.	
Extra instruction about underlying concepts and deeper meaning to answer the question: Why is this information important?	Highlight the most important information in textbooks, training materials, and assignments
Overviews and summaries to provide context before and after lessons	Hands-on experiences to use other senses in learning
Concrete visual aids (e.g., drawings, charts, videos, etc.) to help understand the big picture	Outlines listing key points and concepts
Linking information to real-life situations	Clarification and repetition of concepts
Accommodations for Processing Speed Difficulties For an individual who has difficulties with processing speed, information tends to fly right by before there is chance to absorb it. These individuals will need extra time in training or class, when doing assignments, and during assessments or tests. These individuals are likely to have good reasoning skills and can "figure out" the information, but not with the same speed as many peers.	
Extra time during training or instruction to process the lesson that has been presented	Real-life examples to help with the "big picture" and show why training session or lessons are relevant
Training sessions, lectures, and lessons on audio or video tape so they can be repeated	Highlighting the most important information in training materials, textbooks, and assignments
Access to the "big picture" through summaries and overviews before breaking training or lessons into smaller parts	Hands-on opportunities to use other senses
Drawing or writing important facts on the whiteboard	Training and assessment in a calm environment
Extra time for reading and writing assignments and assessments	Examples and demonstrations of what is expected from assignments and projects
Seating near the speaker to maintain attention and minimize distraction	

(Adapted from Crouse, 1996)

Research Findings

Disclosure

Gerber (2005) describes several reasons that adults might be reluctant to disclose a learning disability:

- Adults with LD typically recount that the stigma attached to LD during their school years was the most painful part of their childhood. By not disclosing their LD in adulthood, they hope to avoid the stigma of that label in their adult years.
- Often, LD is viewed as purely an educational issue, having little to do with the adult years. In adulthood, a person with LD has more freedom to pursue interests that stem from his/her strengths, as opposed to being forced to learn or perform school tasks that are difficult or impossible because of his/her LD.
- It is common for a person with LD not to understand what LD is, what his/her specific LD profile is, and how to explain the profile to others. (An LD profile includes such things as a person's strengths and weaknesses in learning and performance, ways to compensate for the LD, and ways to seek or structure school or workplace accommodations appropriate to his/her LD.) So, lack of general understanding of LD, and of one's specific LD profile, is a deterrent to self-disclosure.
- Young people with LD often lack knowledge about the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. In the area of postsecondary education and training, Section 504 can trigger accommodations for learning and testing. A young person can miss important opportunities if he/she does not understand the accommodations and protections offered by these laws.

Implementing Accommodations

Because of the nature of learning disabilities, accommodations must go beyond individual tasks, and beyond knowledge, skills, and abilities. Individuals with learning disabilities must be able to respond to change on a daily basis and using accommodations appropriately and consistently is often the key.

Whenever possible, accommodations should be based upon the use and further development of the existing knowledge, skills, and abilities of the individual with the disability (Brown & Gerber, 1994). Using these strengths builds learning power by compensating for the individual's limitations and creating a level of self-knowledge that promotes increased self-esteem, self-motivation, and the ability to self-advocate (Silver, 1995).

According to the Americans with Disabilities Act, a reasonable job accommodation is defined as "a modification or adjustment to the work environment, or to the manner or circumstances under which the position held is customarily performed, that enables an otherwise qualified individual with a disability to perform the essential functions of that position." Additionally, a reasonable accommodation is further defined as a modification or adjustment that enables an employee with a disability to enjoy equal benefits and privileges of employment as those enjoyed by other similarly situated employees without disabilities.

Job accommodations are designed to equalize an employee's ability to perform the essential functions of his/her job. Accommodations are not intended to justify a poor job match or compensate for the lack of knowledge, skills, or abilities necessary to succeed. Whenever possible, accommodations should be based on the use and further development of the existing knowledge, skills, and abilities of an employee in a particular work setting (Brown & Gerber, 1994). At times, methods or procedures traditionally used on the job may need to be modified or implemented to enhance these capacities.

Assistive Technologies as Accommodations

Assistive technology refers to any assistive, adaptive, or rehabilitative tool or device used by humans to help with the physical and mental tasks involved in daily living, and the services needed to make meaningful use of these devices. Assistive technologies are compensatory tools, not luxuries or a means to gain unfair advantage over others. They help to create a level playing field for workers with disabilities, and allow workers with disabilities to maintain or improve their functional capabilities and independence, and increase opportunities for future training and employment opportunities (Mooney & Werth, 1999). Thousands of assistive technological devices are available, ranging from very simple, low-cost or low-tech devices such as calculators or book holders to high-tech solutions such as voice-activated speech synthesizers.

Assistive technologies can be broken down into three categories: 1) mechanical, electronic, and microprocessor-based equipment (i.e., computers, voice recognition systems and software, speech synthesizers, telecommunication devices [TDD/TTY]), 2) non-mechanical and non-electronic aids (i.e.,

ramps to replace stairs, knowledge of or training in sign language, head wands or head sticks used for pointing to word boards or keyboards, crutches, artificial/prosthetic limbs), 3) specialized instructional materials, services, and strategies (i.e., large-print or Braille texts for persons with visual impairments, job coaches, sign language interpreting, training adaptations, audio description) (Scribner, 2000).

In the past few years, many off-the-shelf communication devices have been used as assistive technologies. Personal digital assistants (PDAs), SmartPhones, cellular phones, and iPods or other MP3 players are adaptable for use as organizers, spell checkers, dictionaries, word processors, and digital recorders in many settings, including school and work.

Cost of Accommodations

The potential costs associated with job accommodations are worth the investment. Since 1992, the Job Accommodation Network (JAN), funded by the U.S. Department of Labor's Office of Disability Employment Policy, has conducted a survey of employers on the cost of accommodations. JAN reports that 71% of job accommodations cost less than $500, with 20% of those costing nothing (2007). In addition, job accommodations can reduce workers' compensation and other insurance costs, increase the pool of qualified workers, and save training costs by reducing employee turnover.

EXHIBIT 5.2

Resources for Disclosure and Accommodations Strategies

General

The 411 on Disclosure

This NCWD/Youth workbook helps youth and the adults who work with them learn about disability disclosure. It helps youth make informed decisions about whether or not to disclose their disability and understand how that decision may affect their education, employment, and social outcomes.
http://www.ncwdyouth.info/resources_&_ Publications/411.html

The Job Accommodation Network (JAN)

JAN, funded by the U.S. Department of Labor's Office of Disability Employment Policy, is a free consulting service "designed to increase the employability of people with disabilities by: 1) providing individualized worksite accommodations solutions, 2) providing technical assistance regarding the ADA and other disability-related legislation, and 3) educating callers about self-employment options." Its Web site has several "portals" that provide extensive resources and information for government agencies, private businesses, postsecondary educational institutions, and individuals with disabilities.
http://www.jan.wvu.edu/

Career Planning Begins with Assessment

This NCWD/Youth Guide serves as a resource for multiple audiences within the workforce development system. Youth service professionals will find information on selecting career-related assessments, determining when to refer youth for additional assessment, and additional issues such as accommodations, legal issues, and ethical considerations. Administrators and policymakers will find information on the development of practical and effective policies, collaboration among programs, and interagency assessment systems.
http://www.ncwd-youth.info/resources_&_Publications/assessment.html

Tips for Self-Advocacy in the Workplace and Job Accommodations for People with Learning Disabilities

These articles, written by Dale S. Brown, detail tasks for individuals to complete when disclosing a disability or requesting an accommodation.
http://www.ldonline.org/article/6011 and
http://www.ldonline.org/article/9942

Centers/Organizations

Alliance for Technology Access (ATA)

ATA is a national network of technology resource centers, organizations, individuals, and companies. ATA is involved in public education, information and referral, capacity building in community organizations, and advocacy/policy efforts, enabling millions of people to achieve their dreams through the acquisition and use of standard, assistive, and information technologies. ATA's Web site provides quick and efficient access to information on assistive technology tools and services to consumers, families, and service providers.
http://www.ataccess.org/default.html

The ATA Assistive Technology Hub can be found at
http://www.ataccess.org/hub/

The Assistive Technology Industry Association (ATIA)

ATIA serves as the collective voice of the assistive technology (AT) industry so that the best AT products and services are delivered to people with disabilities. It represents the interests of its members to business, government, education, and the many other agencies that serve people with disabilities.
http://www.atia.org/

Association of Assistive Technology Act Projects

The Association of Assistive Technology Act Programs (ATAP) is a national, member-based organization comprised of state Assistive Technology Programs funded under the Assistive Technology Act (AT Act). Its missions are to promote the collaboration of AT Programs with persons with disabilities, service providers, industry, advocates, and others at the state and national levels and to increase the availability and utilization of accessible information technology (IT) and assistive technology devices and services (AT) for all individuals with disabilities in the U.S. and its territories.
http://www.ataporg.org/

CAST: Center for Applied Special Technology—Universal Design for Learning

CAST is a nonprofit organization that works to expand learning opportunities for all individuals, especially those with disabilities, through research and the development of innovative, technology-based educational resources and strategies. The impact of CAST's work is evident at every level of education, including classroom teaching and learning; in

Federal, state, and local policymaking; in scholarly research; and in commercial products used in classrooms nationwide. Frequent visits to the CAST Web site will keep the reader abreast of advancements in the application of the universal design for learning (UDL) framework.
http://www.cast.org

National Center on Accessing the General Curriculum (NCAC)

CAST established the National Center on Accessing the General Curriculum (NCAC) to provide a vision of how new curricula, teaching practices, and policies can be woven together to create practical approaches for improved access to the general curriculum by students with disabilities.
http://www.cast.org/policy/ncac/

Closing the Gap

Closing the Gap focuses on computer technology for people with special needs. It hosts an annual international conference, Computer Technology in Special Education and Rehabilitation, each fall in Minneapolis, MN, exploring the many ways in which technology can enhance the lives of people with disabilities. Closing the Gap also publishes a bimonthly electronic newspaper highlighting hardware and software products useful to people with special needs. The February/March issue of the newspaper, the annual Resource Directory, is a guide to the selection of the latest computer-related products available for people with disabilities.
http://www.closingthegap.com

CPB/WGBH National Center for Accessible Media (NCAM)

NCAM is a research and development facility dedicated to issues of media and information technology for people with disabilities in their homes, schools, workplaces, and communities. NCAM's mission is to expand access to present and future media for people with disabilities; to explore how existing access technologies may benefit other populations; to represent its constituents in industry, policy, and legislative circles; and to provide access to educational and media technologies for special needs students.
http://ncam.wgbh.org/

The National Assistive Technology Research Institute (NATRI)

NATRI conducts research related to the planning, development, implementation, and evaluation of assistive technology (AT) services in schools. This research is intended to identify promising practices in the delivery of AT services. NATRI also disseminates research findings and information about promising practices in ways that will help school personnel develop or improve AT policies and practices for students with disabilities.
http://natri.uky.edu/

The Technology and Media (TAM) Division of the Council for Exceptional Children

TAM works to promote the effective use of technology and media for individuals with exceptional educational needs. Its Web site includes information on conferences and professional publications, including an online version of TAM's professional journal, the Journal of Special Education Technology (JSET)
http://www.tamcec.org/jset/

A regularly appearing column in JSET focuses on universal design for learning (UDL).
http://www.tamcec.org/

Trace Research and Development Center

The Trace Research & Development Center is a part of the College of Engineering, University of Wisconsin-Madison. Its mission is to prevent the barriers and capitalize on the opportunities presented by current and emerging information and telecommunication technologies in order to create a world that is as accessible and usable as possible for as many people as possible.
http://trace.wisc.edu/

United States Access Board

The Access Board is an independent Federal agency devoted to accessibility for people with disabilities. Created in 1973 to ensure access to Federally-funded facilities, the Board is now a leading source of information on accessible design. It develops and maintains design criteria for the built environment, transit vehicles, telecommunications equipment, and electronic and information technology. It also provides technical assistance and training on these requirements and on accessible design and enforces accessibility standards that cover Federally-funded facilities.
http://www.access-board.gov/

Services

Bookshare

Bookshare is a subscription-based online service that provides digital books to persons with disabilities. A user must complete an application and have proof of disability in order to subscribe and download books. Thousands of books are available. This service provides more access to

recreational reading material than Recording for the Blind and Dyslexic.
http://www.bookshare.org/

National Library Service for the Blind and Physically Handicapped

The National Library Service for the Blind and Physically Handicapped (NLS), Library of Congress, administers this free program that loans recorded and braille books and magazines, music scores in Braille and large print, and specially-designed playback equipment to U.S. residents who are unable to read or use standard print materials because of visual or physical impairment. NLS administers the program nationally while direct service to eligible individuals and institutions is the responsibility of cooperating libraries in each state, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. Service is also extended to eligible American citizens residing abroad.
http://www.loc.gov/nls/

Recording for the Blind and Dyslexic (RFB&D)

Recording for the Blind & Dyslexic, a nonprofit volunteer organization, is the nation's educational library serving people who cannot effectively read standard print because of visual impairment, dyslexia, or other physical disability. Its mission is to create opportunities for individual success by providing and promoting the effective use of accessible educational materials. Its vision is for all people to have equal access to the printed word.
http://www.rfbd.org/

Assistive Technology Related Legislation

Section 508 of the Rehabilitation Act (as amended in 1988)

The Federal government's official site for information about Section 508.
http://www.section508.gov

Section 508 of the Rehabilitation Act: Electronic and Information Technology Accessibility Standards

Section 508 of the Rehabilitation Act requires access to electronic and information technology procured by Federal agencies. The Access Board developed accessibility standards for the various technologies covered by the law. These standards have been folded into the Federal government's procurement regulations.
http://www.access-board.gov/508.htm

Standards and Accessibility

National Educational Technology Standards (NETS)

The National Educational Technology Standards (NETS) Project is an ongoing initiative of the International Society for Technology in Education (ISTE). Its primary goal is to enable stakeholders in PreK-12 education to develop national standards for educational uses of technology that facilitate school improvement in the U.S. The NETS Project works to define standards for students, integrating curriculum technology, technology support, and student assessment and evaluation of technology use.
http://www.iste.org/AM/Template.cfm?Section=NETS

Technology Planning and Integration

Learning Disabilities and Assistive Technologies

This Web site offers information on assistive technologies for reading, writing, and math; general disability information; and strategies for the implementation of assistive technology.
http://gatfl.org/Portals/gatfl/LD-documents/AT%20Resource%207-00.pdf

The SETT Framework

SETT is a system to guide a team in making collaborative assistive technology decisions in the context of the home, school, and classroom.
http://www2.edc.org/NCIP/ Workshops/sett/SETT_Framework_article.html

State AT and Telework Financial Loan Programs

This site provides information on obtaining assistance with purchasing assistive technology in each state.
http://resnaprojects.org/AFTAP/state/RESNA.html

Technology Integration Site

Mountain Brook City Schools in Birmingham, AL links lessons by both subject area and grade level in addition to a technology integration evaluation rubric based on the ACOT (Apple Classroom of Tomorrow) integration stages. See the links in the left-hand column.
http://www.mtnbrook.k12.al.us/cms/Technologies/69.html

Technology Integration: Unit Planning

Kent School District in Washington State maintains this site. It provides a unit planning form and many links to resources for integrating technology into instructional practice.
http://www.kent.k12.wa.us/curriculum/tech/proj_plan.html

EXHIBIT 5:2: RESOURCES FOR DISCLOSURE AND ACCOMMODATIONS STRATEGIES

Screening and Assessment

Assistive Technology Assessment Protocol and Assistive Technology Screening and Initial Solution Toolkit

This protocol is designed to assess an individual with learning disabilities' need for assistive technology. The screening toolkit offers teachers and others a tool to screen individuals with learning disabilities for tasks that they need to do and their ability to use standard tools to accomplish them. This toolkit suggests accommodations/modifications (including AT) that may help or indicate the need for further evaluation.
http://www.gatfl.org/LearningDisabilitiesGuide/WhyapersonwithLDshouldconsiderusingAT/ATScreeningandAssessmentTools/tabid/465/Default.aspx

LD OnLine: Technology

This Web page from LD OnLine provides links to articles, books, and other Web sites that explore new developments in assistive technologies and assessments.
http://www.ldonline.org/ld_indepth/technology/at_assessment.html

Tools for Evaluation: Assistive Technology Tool Kits
http://www.ldonline.org/article/6240

Assistive Technology Assessment: More than the Device
http://www.ldonline.org/article/6237

Tools

Ability Net—My Computer My Way!

This page, supported by Microsoft, provides step-by-step instructions to help the user customize their computer for physical, visual, and hearing needs.
http://www.abilitynet.org.uk/myway/index.htm

Apple Computer: Accessibility

This Web page contains latest information on accessibility features in Apple products to support various types of disabilities. This page also provides links to the sites with information on other services and Web resources, and a direct link to the database of Apple products with assistive technologies, including software, general hardware, and input devices.
http://www.apple.com/accessibility/

IBM Accessibility Center: Human Ability and Accessibility Center

This Web site provides an overview of IBM's accessibility commitment, including their product compliance and global accessibility services. The sections in this Web site include product accessibility information; developer guidelines; laws, standards, and regulations; accessibility education; events; resources; and accessibility at IBM.
http://www-03.ibm.com/able/index.html

Microsoft Accessibility: Accessibility in Microsoft Products
This Web site provides an overview of accessibility information on numerous Microsoft products, including operating systems, internet technologies, office and productivity software, and related resources, such as accessibility documentation, keyboard assistance, accessibility tips and tricks, and technical support information.
http://www.microsoft.com/enable/products/default.aspx

CHAPTER 6

Charting a New Course

Charting a New Course from a Policy Perspective

Chapter 1 of this Guide detailed findings of Goldberg et al. (2003), who identified specific factors that led to successful outcomes for adults with learning disabilities: self-awareness/self-acceptance, proactivity, perseverance, emotional stability, appropriate goal setting, and the presence and use of effective social support systems. The authors noted a "need to place greater emphasis on developing compensatory strategies aimed at circumventing difficulties" (p. 234) which will allow youth with LD to develop skills that are transferable to adulthood and that will support their transition to the workforce. They concluded

> *that much of the field's view of the challenges faced by individuals with LD has been shortsighted, focusing primarily on educational contexts. Based on the current research, individuals with LD need to learn to develop "strategies for success" across the lifespan, and in multiple contexts…[and]at the least, the field needs to evaluate its current position and emphasize the development of success attributes to the same degree that we do academic skills.* (p. 234)

In this Chapter

- Charting a New Course from a Policy Perspective
- Building Institutional Capacity to Integrate Design Elements into Youth Programs
- Recommendations
- Final Thoughts
- Research Findings

Progress in institutional support for youth with LD has been made on several fronts. Yet the scale and scope of this support remains inadequate and requires leadership from Federal, state, local, and organizational levels to chart a new course. This course should move toward a cross-systems collaborative-focused approach to create stronger and sustained relationships between education and workforce systems. From a policy perspective there are four reasons that support this direction.

Reason 1: Our nation needs qualified workers. Youth with LD are not participating in the labor market at the same rate as their peers. Whether this is due to limited educational opportunities or limited developed skills, youth with LD are a valuable source for future workforce shortages. The Employment Policy Foundation (2006) reports that over the next three decades, 61 million Americans will retire and despite current economic difficulties, the workforce is expected to not keep up with worker demand. Innovations in technology indicate that 60% of new jobs in the U.S. will require skills held by only 20% of the current workforce. Therefore, continued efforts to improve

education and workforce development systems are critical.

Reason 2: Significant fiscal and societal costs are incurred when issues that cause unemployment or underemployment are not addressed. Youth with LD are more likely than their peers to depend on income support programs (e.g., Medicaid, welfare, Supplemental Security Income [SSI]). Additionally, they participate disproportionately in costly systems such as foster care, juvenile justice, and adult corrections.

Reason 3: Young people benefit from knowledgeable youth service professionals. Youth with LD gain when they are provided an opportunity to try out strategies and accommodations. This allows them to see what works best for them while optimizing their ability to contribute their strengths to the workplace. Frequently, however, youth service professionals enter the field by happenstance and lack specific training around youth development and the workforce development system. Increasing youth service professionals' awareness of compensatory techniques and accommodations would better prepare them to guide youth with LD as they transition from the classroom to the work site.

Reason 4: The data supports action! In most cases, the needs of youth with LD are not being met in current programs. The system can learn from the handful of successful programs that exist around the country. These programs tend to emphasis youths' strengths and include a universal design for learning approach.

More Evidence

Two recent studies support a cross-systems collaborative-focused approach to integrating the design elements of this Guide. Baird, Scott, Dearing, and Hamill (2009) studied the academic self-efficacy of youth with LD and found that for many, a learning disability, in the absence of strong support from teachers and others, may cause a young person to avoid challenges, experience negative feelings about their abilities, exhibit poor persistence and task abandonment, and show a deterioration in performance following failure. Baird et al. also found that youth with LD were

> *more likely to view their intelligence as fixed and not changeable, either through effort or practice. [Thus,] if youth with LD doubt their current academic abilities (possess low self-efficacy), and view those abilities as inherently unalterable, then the prospects for improving academic performance appear especially dim. In contrast, if youth viewed themselves as highly capable of performing academic tasks, then an entity theory of intelligence would be less damaging on motivation and performance.*

Madaus, Gerber, and Price (2008) found three significant "lessons" related to adults with LD and success at work:

- Adults with LD are largely unaware of the [Americans with Disabilities Act];
- Disclosure and accommodation use are not typical in the workplace; and
- Students must learn self-determination skills.

They observed that "once a student with LD exits secondary school, he or she must understand the general nature of the LD and how it impacts them." Then, at appropriate times, if needed, they "should be prepared to explain this impact to others (i.e., frontline supervisors, coworkers, spouses, friends, etc.). This involves knowledge of both strengths and weaknesses, as well as a high level of [self-determination] skills" (p. 150-51).

Building Institutional Capacity to Integrate Design Elements into Youth Programs

Building related institutional capacity into youth programs is contingent upon rethinking the roles of the institutions that serve them. Currently, the complex maze of service delivery priorities, eligibility rules for who can receive services, and service duplications and limitations present substantive challenges in the field. These challenges were initially addressed in Chapter 2: The Guideposts Framework which underscored the need to bridge multiple institutional boundaries. Chapters 3, 4, and 5 of this Guide provided direction to help youth with LD build the foundation to develop the compensatory techniques and individualized support strategies necessary to play a meaningful role in the labor market (see Figure 6.1).

Unfortunately, few programs exist that incorporate all of the Design Elements described above. However, such practices have begun to emerge in some secondary school settings (e.g., private schools focusing on LD, traditional public schools, charter schools, career academies, schools-within-schools), in vocational

rehabilitation, in adult learning programs, at colleges and universities, and in workforce development programs.

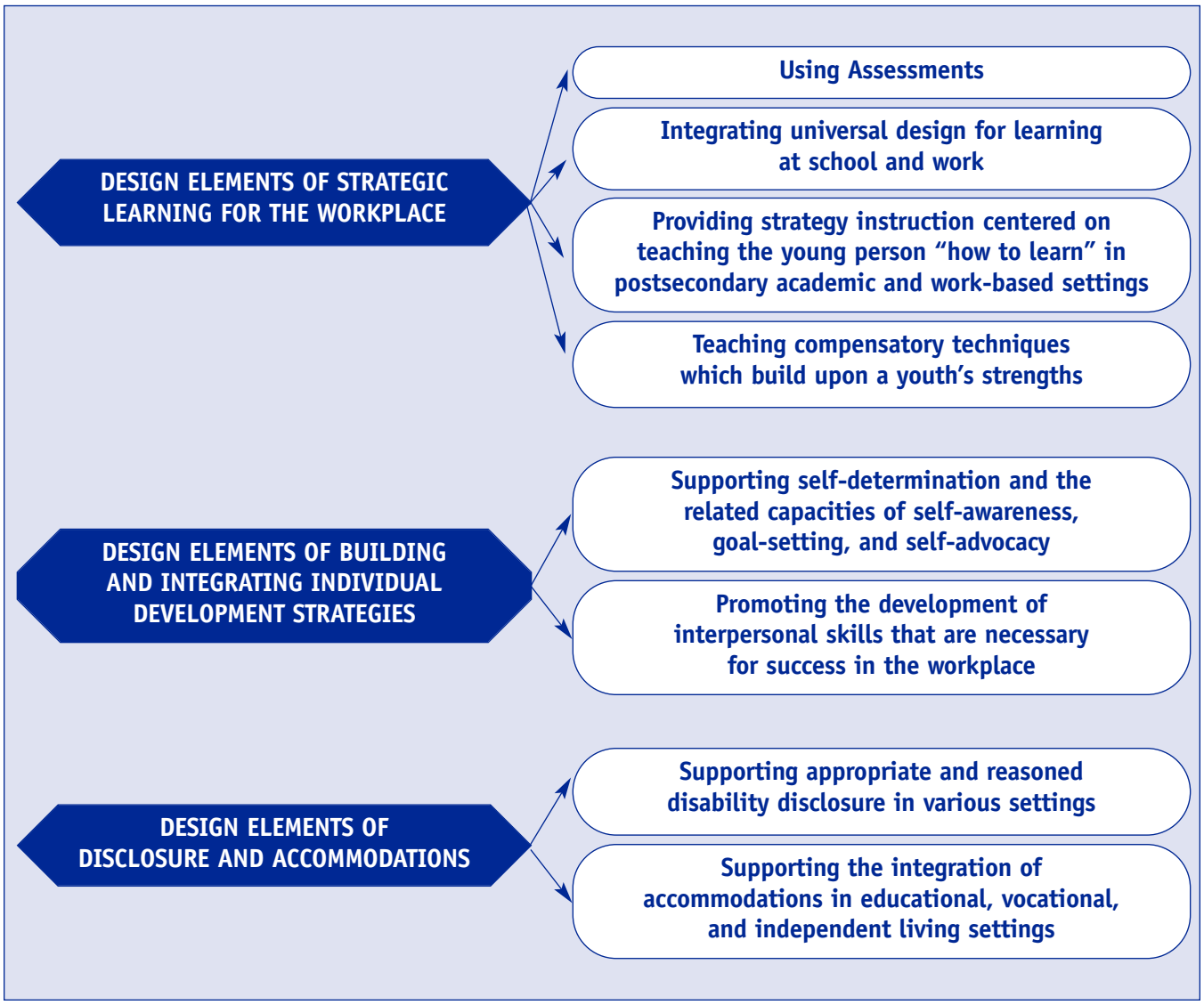
This Guide has identified some action steps the field should consider adopting in order to improve transition outcomes for youth with disabilities.

1. Bolster Behavior Modification Practices.

In all programs, regardless of mission and setting, youth service professionals need to incorporate strategies that support behavior modification in order to assist youth with their transition to the workplace. A growing body of evidence-based strategies has emerged to help guide the staff in this area including Check & Connect, Response to Intervention, Positive Behavioral Interventions and Supports, and Cognitive-Behavioral Interventions. These approaches focus on youth engagement, academic interventions, and social-behavioral supports to foster learning environments and improve employment, education, and independent living outcomes for youth. All approaches call for implementing tiered strategies, monitoring warning signs, and providing sustained support. The Research Findings at the end of this chapter provides more information on these behavior modification practices.

2. Replicate Private School Curriculum Design Standards.

The most comprehensive curriculum design standards for secondary students with LD are found in the private market—specifically, in private secondary and postsecondary schools. Many of these schools were established by well-to-do families with children who were struggling in traditional school settings. Unfortunately, such schools are out of reach for many



individuals since their annual cost ranges from $10,000-$40,000 for day programs, and significantly more for residential programs.

A review of the curricula of many private schools shows that compensatory techniques and individual development strategies are key parts of the curriculum, as are vocational assessments, work experiences, social integration, independent living skills instruction, counseling, family involvement, self-determination activities, adapted curriculum, and assistive technology (AT). These schools also generally have a low student-teacher ratio ranging from 5:1 to 12:1. The National Association of Independent Schools (http://www.nais.org/transact/MembershipDirectory.cfm) and the Autism and PDD Support Network (http://www.autism-pdd.net/school-resources.html) have directories listing some schools that provide programs for youth with LD.

3. Connect to Postsecondary Support Services.

Virtually every college and university now has an office or department that provides services for students with disabilities. Most of these offices support students by providing access to accommodations and assistive technology (AT) and by ensuring that instructors are knowledgeable about disability issues. Certain colleges and universities go further, recognizing that students with LD (often the greatest proportion of all students with disabilities) may well need more than just accommodations and AT, and provide tutoring, instruction in study habits and learning strategies, social integration activities, and specialized support related to career development. These services may be included as part of regular student fees or they may be stand-alone programs with extra fees for participants. Additional information about AT is provided below.

4. Commit to Collaboration Among Core Institutions.

Commitment to collaboration among core institutions presents opportunities on several fronts. First, collaboration is often accompanied by the practice of combining resources from more than one stream of funding, also called *blending* or *braiding* funding. Diversifying funding sources is common and required to realize large-scale, comprehensive programs, such as publicly funded K-12 programs that incorporate the Design Elements. These programs are frequently built on collaboration among several school districts that may use funds from the Individuals with Disabilities Education Act (IDEA), Career and Technical Education, and other workforce development programs to incorporate Design Elements from this Guide.

For instance, some youth with disabilities stay in secondary transition programs until age 21. These pullout programs may be supported by single or multiple school districts that connect students to the necessary wraparound services to complete their high school education. These services are also available at dropout-prevention or after-school "second chance" programs that serve at-risk youth, many of whom have diagnosed or undiagnosed LD. Examples of successful collaboration among publicly-funded high school programs that have integrated Design Elements are described below.

Technology in Postsecondary Settings and the Workplace

The growth in personal technology in recent years has made access to media much easier for many people with LD. Smart phones, IPods, tablet computers, global positioning systems, streaming video, and many other forms of technology provide alternative ways to take in information and data that previously was not available to people with reading, math, or processing difficulties. Digital, auditory, and visual reconstruction of text and other printed materials is being utilized in academic and work settings and not just by individuals with disabilities.

Learning about individualized accommodations using off-the-shelf technology or specialized assistive technology for home, work, or school can begin by visiting the Job Accommodation Network (http://askjan.org/index.html), the Family Center on Technology and Disability (http://www.fctd.info/show/home), the Disability.Gov Links to Resources on Assistive Technology (http://www.disability.gov/education/assistive_technology), and by working with individual state partners of the National Assistive Technology Technical Assistance Partnership (NATTAP) (http://www.resnaprojects.org/nattap/at/statecontacts.html). Training and technical assistance is also available from local school districts, two- and four-year colleges, and state vocational rehabilitation agencies.

Collaboration among core institutions creates a framework for collective inquiry and continuous improvement. In light of ensuring positive impact on youth education and employment outcomes, stakeholders must be willing to incorporate a common, formative assessment process or tool to examine the result of their shared knowledge regarding policies, program standards, and procedures for service delivery. An example of a successful program that incorporated a tool to track students' progress and staff accountability is described below.

5. Expand Staff Professional Development.

In order to address the scale of the issue it is essential that we use public resources in "smarter" ways. The recently enacted reauthorization of the Higher Education Act of 1965 (as the Higher Education Opportunity Act of 2008) is promising in that it begins to address some of these long-standing challenges.

Having knowledgeable youth services professionals is essential to ensuring that services reflect cultural competency and are inclusive of people with

Career Connections Program (CCP)

In east-central Iowa, the Career Connections Program (CCP), formerly called the High School Super Senior School to Work Transition Program, serves 80-100 students per year, with over 60% of participants believed to have LD and related conditions (Iowa no longer assigns categorical labels to special education students). Coordinated by an area Intermediate School District, the Grant Wood Area Education Agency, the program incorporates three elements of transition into the one or two years following an individual's senior year: person-centered planning, multiple short-term vocational experiences, and extended internships with ongoing supports.

With access to resources from area schools, community-based rehabilitation agencies, Iowa Vocational Rehabilitation Services, and Iowa Workforce Centers, participants set goals that include strategies for vocational and social development and better career outcomes. Funding for the program was originally provided by grants from the U.S. Department of Education, but since funding has ended, local school districts and other government agencies have provided funding that allows the program to continue.

In the past decade, over 200 students participated in the program. They participated in a total of 325 internships, and over 75% of them exited with paid employment averaging 30.5 hours per week at an average wage of $8.02 per hour. Prior to participation in the project, students were working only 5.8 hours per week on average. Participants found employment in many industries: construction, computer, pharmacy, auto, childcare, security, manufacturing, and service. Data also showed that participants had more opportunities for postsecondary education than those who did not participate.

The Rhode Island Transition Academy and the Career Academy

The Rhode Island Transition Academy and the Career Academy are two programs sponsored by the East Bay Educational Collaborative (EBEC) in Warren, Rhode Island. The EBEC is one of five educational collaboratives in Rhode Island, each of which provides extensive special education programming for member school districts.

The Transition Academy at Roger Williams University is designed for students aged 18-21 who have a disability. It provides students an opportunity to complete their high school education on a college campus and in various community settings. Mentoring and connecting with working adults is a primary program component. By its fourth year, the program had had 19 graduates: 2 went on to college, 5 found full-time employment, and 10 were working part-time.

The Career Academy is designed for students who are struggling in regular high school and need extra supports to complete the academic requirements for graduation. Students are exposed to traditional academic classes coupled with community-based vocational curriculum activities. The Career Academy serves approximately 35-45 students yearly. In follow-up studies conducted between 1998 and 2004, over 90% of participants graduated, 85% went on to full-time employment, and 13% enrolled in postsecondary training/college (EBEC, 2004).

disabilities. In order to implement the new paradigm envisioned in this Guide, organizations that control or provide professional development services need to ensure that youth service professionals know how to share with youth with LD compensatory strategies, self-advocacy skills around accommodations, and decision making skills about disclosure.

To do this effectively, youth service professionals, including individuals who work in education, youth development, and workforce development settings, need to redefine their roles and work collaboratively with stakeholders across secondary and postsecondary institutions, professional associations, and workforce development and literacy programs to incorporate professional development materials that are based on the principles of universal design for learning. This approach will ensure that all youth, including youth with disabilities, will receive the "layers of support" to draw from the skills they have learned in the classroom to transition into self-sufficient adults.

North Carolina's Department of Juvenile Justice and Delinquency Prevention

The North Carolina's Department of Juvenile Justice and Delinquency Prevention (NCDJJDP) uses the *Vocational Competency Tracking System* (VoCATS), a competency-based, computer-supported system, to support transition to work and postsecondary education for youth with disabilities. VoCATS is comparable to a tool used in North Carolina public schools which plans instruction; assesses, evaluates, and documents student mastery; and provides accountability data.

Working within the North Carolina Workforce Development system, VoCATS provides: (a) 129 course blueprints validated by business/industry (including competencies and objectives); (b) 116 banks of assessment items distributed electronically; (c) 100 curriculum guides developed or adapted for use in North Carolina; (d) generation of secured End-of-Course tests or post-assessments for courses supported in the Programs of Study: (e) staff development; and (f) a help desk to assist the Lead Educational Agency (LEA) with implementation of VoCATS and use of related software. Youth involved with NCDJJDP are presented with opportunities to work on high school credits or a General Education Diploma (GED) (Gagnon and Richards, 2008).

6. Develop a Research and Demonstration Agenda.

The study of promising practices related to youth with LD and employment needs to focus on two areas: (1) strategic learning for the workplace and (2) the use of accommodations during assessments. Although the available research on strategic learning for the workplace provides hints about promising practices, the research base is thin. The field needs to have a

More on Universal Design for Learning

Chapter 3 described a Design Element to develop strategic learning: the integration of universal design for learning (UDL) at school and work. To review, UDL is an approach that addresses the needs of all kinds of learners and all kinds of learning styles. According to CAST (n.d.), UDL calls for:

- multiple means of representation: to give learners various ways of acquiring information and knowledge in the areas of perception, language and symbols, and comprehension.
- multiple means of expression: to provide learners alternatives for demonstrating what they know in the areas of physical action, expressive skills and fluency, and executive function.
- multiple means of engagement: to tap into learners' interests, offer appropriate challenges, and increase motivation through recruiting interest, sustaining effort and persistence, and self-regulation.

The National Center on Universal Design for Learning (NCUDL) provides guidelines and checkpoints that educators and employers can use to implement UDL (see http://www.udlcenter.org/aboutudl/udlguidelines). According to NCUDL, the guidelines

> are not meant to be a "prescription" but a set of strategies that can be employed to overcome the barriers inherent in most existing curricula. They may serve as the basis for building in the options and the flexibility that are necessary to maximize learning opportunities for all [learners]. Educators may find that they are already incorporating many of these guidelines into their [instruction and training] (2010).

The use of such principles and guidelines can go far in alleviating issues related to learning (and other) disabilities and also identifying and building skills that individuals may not have known they had. Recommendations for research related to UDL are included in the last section of this chapter.

better understanding of what interventions help youth succeed in the work environment and why. Attention is also needed in the study of accommodations and assessments. In an era of high-stakes testing, a much better understanding of the impact of appropriate accommodations during test taking is needed. Youth with LD also need more opportunities to experience the advantages and disadvantages of different accommodations, including test-taking accommodations, in order to learn which work best for them. Two related research and demonstrations projects are described below.

Continued research and demonstration projects should start with questions that cover content and process issues and proceed to recommendations. The research questions that follow are a jumping off point for policy makers and other stakeholders to more strongly address the needs of youth with LD.

Content Issues

- Which practices promote strategic learning and are most effective in helping youth with LD acquire needed skills?
- Which strategies are most effective in different settings (e.g., high school, adult basic education, vocational rehabilitation, and apprenticeship programs)?

National Joint Committee on Learning Disabilities

In 1985, the National Joint Committee on Learning Disabilities issued a report entitled *Adults with Learning Disabilities: A Call for Action* which called for the development of a systematic program of research that would address the status and needs of adults with LD, including:

- the types, characteristics, and changing manifestations of learning disabilities during the course of adult growth;
- the relationship between learning disabilities and adult psychosocial maladjustments, including substance abuse, depression, and suicide;
- the performance differences of adults with learning disabilities in various educational, mental health, and vocational settings;
- the status and needs of adults with learning disabilities who are in prison;
- the patterns of outcomes for adults with learning disabilities who dropped out of or graduated from public or private secondary education programs;
- the impact of minimum competency testing requirements for individuals with learning disabilities; and
- the effects of minimum competency test modifications on the pass and fail rates among individuals with learning disabilities.

However, it is important to note that the National Joint Committee's important call for action focused on what happens to persons with LD, rather than addressing the processes within and across service providers. As noted earlier, there has been substantial research focused on obtaining literacy skills, but research on how to attain the functional and strategic learning skills needed in the workplace is practically nonexistent. Nor is research on the role of accommodations and how to access them in the workplace, and increase the scale and scope of promising practices is practically nonexistent.

Commission on Adult Literacy

In 2007, a privately-initiated Commission on Adult Literacy called for five times the amount of funding currently available under Titles I and II of WIA to fund a new adult learning program and workforce skills system by 2020. Among the findings of that Commission is the need to redefine the fundamentals of adult learning programs, set program goals, and offer incentives and strategies to increase learner access to programs. Their proposals would continue to provide basic reading, writing, math, and English language services, but would also teach adults how to communicate, acquire information, think critically, solve problems, use technology, and work in teams. In addition, greater emphasis would be placed on career exploration, counseling services, and instruction customized to the context in which it will be used.

The Commission's report, entitled *Reach Higher, America,* posits that if the nation reaches the Commission's projected goals, adult learners' fiscal contributions to national, state, and local government will more than offset the cost of paying for the build-up of America's new Adult learning programs and Workforce Skills System. This report also recognizes that legislative and regulatory actions at the Federal level need to be retooled to meet the long-term needs of the economy through increased supports to people with barriers to employment.

The next generation of accountability systems need to be built based on constructing the capacity to promote *collaboration* among all stakeholders and *continuous improvement* throughout all levels of the system.

- How may the integration of compensatory techniques, individual development strategies, and disclosure and accommodations early in an individual's life affect their ability to succeed in employment and training programs?
- How can technology be integrated into academic and vocational settings that most effectively benefits youth with LD?

Process Issues

- How can we eliminate or lessen the effects of the "transition cliff"—the switch from youth programs to adult programs—to ensure that youth do not get lost in the process?
- What policy implications arise when there is braiding and blending of multiple funding steams?
- What type of professional development support is needed and most effective for cross-agency staff serving youth with learning disabilities?
- Does participation in "pullout programs" reduce reliance on income support programs? Does it increase labor market or postsecondary success?

Recommendations

Building institutional capacity to integrate Design Elements into youth programs warrants action from leadership at Federal, state, local, and organizational levels:

Federal Leadership

- Develop policies across youth-serving systems that encourage the use and adaptation of the promising practices identified in the behavior modifications section above.
- Encourage the use of accessible technology in Federally-funded programs as a method to increase access to information for youth with learning disabilities.
- Promote the linkages between pieces of legislation that impact youth-serving systems to improve and coordinate systems' infrastructure. The Workforce Investment Act of 1998 (WIA) reauthorization, for example, could serve as a vehicle to set forth goals, service strategies, accountability, and performance measures to be incorporated into other legislation that impacts youth with LD.
- Build the next generation of accountability systems to promote *collaboration* among all stakeholders and *continuous improvement* throughout all levels of the system. This next generation of accountability systems will require experimentation to test new measures and methods of data collection. Federal legislation should establish the general parameters of accountability systems in two ways:
- Identify the core issues that need to be addressed in an accountability system but not the precise measures. The allowable activities in the various titles/programs in all the laws should be used to develop a checklist for use in the development of measures and metrics for (a) individual client outcomes, (b) individual progress, (c) program design and system improvement, and (d) informing professional development strategies.
- Support the development of the platforms to meet the accountability needs of state and local

governments, specific programs, and direct service institutions/providers and clients. Use of common definitions across all the various legislation should occur to the maximum extent possible (e.g., career guidance, self-sufficiency, assessment, professional development). All reporting should be based on the use of common target population categories for reporting results.

- Establish a dedicated funding stream to enhance professional staff development across multiple institutions, including our nation's workforce development system.
- Create a research agenda that includes collecting information from practitioners in the field about what is needed to promote continuous improvement in order to strengthen the links between research and practice and the connection between education and work for youth with LD.
- Examine outcomes and consider research that compares employment outcomes of students with LD who complete college/university programs geared to students with LD with those students with LD who attend integrated university settings and access accommodations; that examines strategies successful people with LD who chose not to disclose find most useful in particular work-related settings; and that looks at the types of technology and assistive technology that are most effective at helping adults learn particular job skills.

State Leadership

- Encourage the use of evidence-based practices that focus on youth engagement, academic interventions, and social behavioral supports to foster learning environments and improve employment, education, and independent living outcomes for youth.
- Integrate teaching compensatory techniques into state education standards.
- Promote continued fiscal investment in postsecondary support services that are currently available.
- Convene ad hoc task forces and conduct cross-agency reviews involving Workforce Development Youth Councils and Special Education Transition Councils centered on policy, practice, and resource allocation approaches for serving youth with LD, thus helping to alleviate "transition cliffs" for vulnerable populations.
- Promote the integration of universal design for learning in youth-serving workforce development programs through professional development opportunities for staff.
- Develop jointly-funded education and workforce development programs (including evaluation) based on the Design Elements.

Local Leadership

- Encourage the use of behavior modification practices and UDL principles in locally-funded youth-serving programs.
- Develop written policies that promote the use of appropriate accommodations on standardized intake and exit assessments used in adult learning programs and workforce training programs (such as CASAS and TABE) at workforce development agencies.
- Create universally accessible youth-serving sites that present program information in written and alternative formats.
- Develop common intake processes and forms to encourage the easy transition of youth from one needed service to another.
- Provide joint professional development training sessions that incorporate interventions highlighted in the Design Elements to institutionalize common knowledge across agencies.

Leadership from Youth and Adults with Learning Disabilities

- Get involved in the development of a learning disabilities research agenda.
- Establish leadership development programs to serve as mentors, practitioners, and policy makers.
- Promote assistive technology widely and train professionals in its use.

It is critical that a comprehensive, coordinated agenda between education and workforce systems be developed for effective service delivery; one built upon the Guideposts for Success and the Design Elements laid out in this Guide.

- Ensure that the Design Elements are part of youth service professionals' certification training programs to encourage the provision of quality services for all youth.
- Use the tools and checklists in this Guide to conduct program design audits to identify areas needing improvement.
- Participate in the development of a collaborative cross-disciplinary service delivery system that aims to reduce achievement gaps or transition cliffs for all youth, including youth with disabilities.
- Examine testing practices to ensure that the results are valid and reliable and that appropriate accommodations are in place.
- Assure that procedures are in place to swiftly and effectively handle accommodation requests from young people with learning disabilities and their families to eliminate discriminatory practices and assure universal design.

Final Thoughts

It is important to remind readers of what does not exist today—that is, supportive settings where youth with LD can go to find an environment designed to "begin with the end in mind"—a system that incorporates a full range of services to maximize education and workforce development opportunities. This system includes provisions to advance the awareness, knowledge, and proficiency of youth professionals who work with youth, including youth with disabilities. To do this, it is critical that a comprehensive, coordinated agenda between education and workforce systems be developed for effective service delivery; one built upon the Guideposts for Success and the Design Elements laid out in this Guide. How these are applied will differ based upon organizational ability to scale-up promising practices, the youth service professionals' ability to leverage their roles (e.g., educators, interventionists, coaches, collaborators, implementers), and the youth's ability to develop the necessary foundation to learn compensatory techniques that are transferable and applied in multiple contexts.

Additionally, to thrive economically and socially, America must capitalize on all of its labor force. This will require systems, organizations, and individuals to reexamine their own views of youth with learning disabilities, convey high expectations, and foster a strong sense of valuing the human potential of all youth. Doing so will ensure that youth with learning disabilities become strategic lifelong learners who are able to exercise their disability-related civil rights to chart their own course to success in the workforce.

Research Findings

Behavior Modification Practices

Check & Connect (Institute on Community Integration, 2009) is a "sustained intervention for promoting students' engagement with school and learning" and is based on these integrated strategies:

- Relationship Building—mutual trust and open communication, nurtured through a long-term commitment focused on students' educational success.
- Routine Monitoring of Alterable Indicators—systemically checking warning signs of withdrawal (attendance, academic performance, behavior) that are readily available to school personnel and that can be altered through intervention.
- Individualized and Timely Intervention—support tailored to individual student needs, based on level of engagement with school, associated influences of home and school, and the leveraging of local resources.
- Long-Term Commitment—committing to students and families for at least two years, including the ability to follow highly mobile youth from school to school and program to program.
- Persistence Plus—a persistent source of academic motivation, a continuity of familiarity with the youth and family, and a consistency in the message that "education is important for your future."
- Problem-Solving—designed to promote the acquisition of skills to resolve conflict constructively and to look for solutions rather than a source of blame.
- Affiliation with School and Learning—facilitating students' access to and active participation in school-related activities and events.

Response to Intervention (RTI) is an academic program model using tiered intervention strategies for students with learning difficulties and depends on ongoing diagnostic information and data about what is or is not working for students. This data leads to adjusting support levels or approaches to instruction (Duffy, 2009). Originally designed for use in elementary schools, components of RTI are now being incorporated in secondary settings to maintain monitoring for students already receiving learning supports and to uncover learning problems that may have developed later in a student's life.

Some organizations use an RTI-like approach to help young people with learning disabilities who also struggle with problem solving or behavioral issues that interfere with learning and employment. Bohanon, Goodman, and McIntosh (2009) say that youth service professionals

> can use this interaction between academic skills and behavioral issues to prevent problems in one area by intervening in the other. For example, reducing the number of incidents of problem behavior allows quality instruction to occur more often and with fewer distractions.

Other models designed to foster positive learning environments include **Positive Behavioral Interventions and Supports** (PBIS) and **Cognitive Behavioral Interventions** (CBI). PBIS utilizes a "three tiered strategy to assist in the development of school-wide, classroom, and individual student interventions that identify, adopt, adapt, implement, and evaluate student interventions [and] is characterized as a problem solving and action planning process" (Sugai, Flannery, & Bohanon-Edmonson, 2004). CBI strategies can be used to help individuals, especially those who have difficulties with interpersonal relationships, acquire personal development knowledge and skills. CBI includes "a number of different but related interventions used to change behavior by teaching individuals to understand and modify thoughts and behaviors. Problem solving, anger control, self-instruction, and self-control are examples of interventions under the umbrella of CBI (Riccomini, Bost, Katsiyannis, & Zhang, 2005). Both PBIS and CBI are designed to promote self-regulation, increase positive behavior, and reduce inappropriate behavior.

Bohanon, Goodman, and McIntosh contend that combining academic and behavior supports can be an effective way to maximize time for instruction, enhance student-teacher relationships, foster school connectedness, and improve academic and social competency for all students (2009). Duffy (2009) says the use of RTI components in programming for older youth should: (a) identify screening and progress monitoring tools; (b) identify appropriate intervention models that work across subjects (e.g., mathematics and reading); (c) determine universal instruction across content areas; (d) ensure structural supports for collaboration among professionals; (e) ensure ongoing professional development; and (f) expand parent communication.

EXHIBIT 6.1: RESEARCH FINDINGS

Postsecondary Education

The Promise of the Higher Education Opportunity Act

In 2008, Congress reauthorized the Higher Education Opportunity Act (P.L. 110-315) and included an array of opportunities for persons with disabilities. These changes reflect new awareness that federal attention is needed to overcome the stubborn challenges persons with disabilities face. Several of the references specifically seek to the support those with learning disabilities.

The sections of the reauthorized Act focused on disability issues primarily fall under the research and demonstration sections. Accordingly, services funded by the law will not be available across the nation. If the research and demonstration projects are successful, however, the services they have piloted will hopefully become standard practice. The authorizations in the Act focus on core infrastructure issues, many found wanting in the research for this Guide. The new Act will

- Promote a common definition of universal design for learning;
- Fund Teacher Quality Partnership Grants and a Teach to Reach competitive grant program to improve pre-service teacher preparation programs;
- Update the national College Navigator website to provide information about services received through disability services offices at institutions of higher education;
- Support a competitive grant program focused on early intervention and college awareness to help students obtain a secondary school diploma, including funds for financial assistance, counseling, mentoring, outreach, and support services for at-risk students with a new emphasis on inclusion of youth with disabilities;
- Develop model transition programs for students with intellectual disabilities in order to prepare them for gainful employment, including support for technical assistance, evaluation and development of accreditation standards for such programs, and the establishment of a coordinating center to work with the grantees;
- Develop model projects to provide information on promising practices to students with disabilities and their families;
- Award grants, contracts, or cooperative agreements to 1) support postsecondary faculty, staff, and administrators in assisting students with disabilities related to teaching issues and transition practices; 2) synthesize research, evaluation, and information; 3) enhance distance learning; 4) promote disability career pathways; and 5) provide professional development and training;
- Establish an advisory commission on accessible instructional materials and support model demonstration programs to improve access to instructional materials for students with print disabilities;
- Establish a national technical assistance coordinating center with a wide-ranging mission to support students with disabilities and faculty, including working through networks of organizations involved in relevant services; and
- Support a scientifically-based study by the National Academies' Center for Education of the preparation of educators to teach students with reading and language processing disabilities.

APPENDIX A

Types of Learning Disabilities and Common Co-existing Conditions

Learning disabilities refer to a "heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span" (National Joint Committee on Learning Disabilities, 2008). Although primarily thought of as academic in nature, learning disabilities can profoundly impact the vocational and social development of youth and young adults, and often require support and interventions above and beyond those typically provided in many educational, employment, and social settings.

Dyslexia is a specific language-based learning disability that is neurological in origin. It is not caused by any visual acuity problem. Dyslexia refers to a cluster of symptoms, characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. Secondary consequences may include problems in reading comprehension, written expression and speaking. People with dyslexia can may find it difficult to express themselves clearly, or to fully comprehend what others mean when they speak. Individuals with dyslexia may have difficulties in some of the following areas:

- Understanding time and estimating the amount of time tasks take
- Coping with several simultaneous tasks
- Efficient pre-planning
- Making inferences from their errors and adjusting what they do as a result
- Interpreting language figuratively rather than literally
- Organizing spoken or written language,
- Remembering important language, spatial information, or social information
- Writing neatly, especially under time pressure
- Doing tasks involving numbers, doing mathematics

Dyslexia can make it very difficult for an individual to succeed academically in the typical instructional environment, in the workplace, and in relating to other people (International Dyslexia Association, 2008, and Learning Disabilities Resource Community, 2001).

Dyscalculia is a learning disability for mathematical or arithmetic concepts and calculations. People experiencing dyscalculia often have visual processing difficulties. Individuals with dyscalculia have difficulty:

- Understanding concepts of place value and quantity, number lines, positive and negative value, carrying and borrowing;
- Understanding and doing word problems;
- Sequencing information or events;
- Using steps involved in math operations;
- Understanding fractions;
- Making change and handling money;
- Recognizing patterns when adding, subtracting, multiplying, or dividing;
- Putting language to math processes;
- Understanding concepts related to time such as days, weeks, months, seasons, etc.; and
- Organizing problems on the page, keeping numbers lined up, following through on long division problems.

Dysgraphia refers to a writing or fine motor skills deficit and, according to the National Center on Learning Disabilities (2006), "it can manifest itself as difficulties with spelling, poor handwriting and trouble putting thoughts on paper." Addressing symptoms of dysgraphia can be difficult and may require assessment of other processing and learning issues to determine effective interventions.

APPENDIX A

Types of Learning Disabilities and Common Co-existing Conditions

Dyspraxia is a "disorder characterized by an impairment in the ability to plan and carry out sensory and motor tasks…[and] individuals with the disorder appear 'out of sync' with their environment" (National Institute of Neurological Disorders and Stroke, 2008). The Institute says that "symptoms vary and may include poor balance and coordination, clumsiness, vision problems, perception difficulties, emotional and behavioral problems", and other difficulties related to processing and learning.

Central Auditory Processing Disorder (CAPD) is found in individuals who have no trouble detecting the presence of sound, but do have difficulty processing and remembering language-related tasks (e.g., understanding conversations in noisy environments, following complex oral directions, learning new vocabulary words or foreign languages). These "hearing" difficulties can affect their ability to develop normal language skills, succeed academically, or communicate effectively (Schminky & Baran, 1999). CAPD often co-exists with other disabilities such as speech and language disorders or delays, dyslexia, attention deficit disorders with or without hyperactivity, and social and/or emotional problems (Chermak & Musiek, 1997).

Processing deficits or disorders are problems with the processes of recognizing and interpreting information taken in through the senses. Although there are many types of perception, the two most common areas of difficulty involved with learning disabilities are visual and auditory perception (National Research Center on Learning Disabilities, n.d.). Visual and auditory processing are the processes of recognizing and interpreting information taken in through the senses of sight and sound. The terms, "visual and auditory processing" and "visual and auditory perception," are often used interchangeably.

Visual Processing Disorder refers to a hindered ability to make sense of information taken in through the eyes. This is different from problems involving sight or sharpness of vision. Difficulties with visual processing affect how visual information is interpreted or processed by the brain. Common areas of difficulty include:

- Spatial relation—the ability to accurately perceive objects in space with reference to other objects.
- Visual discrimination—the ability to differentiate objects based on their individual characteristics (i.e., color, shape, size, pattern, etc), and the ability to recognize an object as distinct from its surrounding environment.
- Visual closure—the ability to identify or recognize a symbol or object when the entire object is not visible.

Auditory Processing Disorder interferes with an individual's ability to analyze or make sense of information taken in through the ears. Difficulties with auditory processing do not affect what is heard by the ear, but do affect how this information is interpreted or processed by the brain. An auditory processing deficit can interfere directly with speech and language, but can affect all areas of learning, especially reading and spelling.

Common areas of difficulty include:

- Phonological awareness—the understanding that language is made up of individual sounds (phonemes) which are put together to form the words we write and speak. This is a fundamental precursor to reading.
- Auditory discrimination—the ability to recognize differences in phonemes (sounds). This includes the ability to identify words and sounds that are similar and those which are different.
- Auditory memory—the ability to store and recall information which was given verbally.
- Auditory sequencing—the ability to remember or reconstruct the order of items in a list or the order of sounds in a word or syllable.
- Auditory blending—the process of putting together phonemes to form words.

APPENDIX A

Types of Learning Disabilities and Common Co-existing Conditions

Non-verbal Learning Disorders (NVLD) is a neurological condition affecting the functioning of the right hemisphere of the brain. The four major areas of functioning impacted by this condition are:

- Social functioning
  - lack of ability to comprehend non-verbal communication
  - difficulties adjusting to transitions or novel situations
  - deficits in social judgment and social interaction
- Academic functioning
  - deficits in math calculations and reading comprehension
  - difficulty with reasoning
  - trouble with specific aspects of written language (handwriting)
- Visual, spatial, organizational functioning
  - lack of image
  - poor visual recall
  - faulty spatial perceptions
  - difficulties with spatial relations
- Motor functioning
  - lack of coordination
  - severe balance problems
  - difficulties with fine graphomotor skills

NVLD is often misdiagnosed or not diagnosed until late elementary or middle school because reading ability tends to be regarded as the chief indicator of academic well-being by most public school systems. It persists into adulthood and is often accompanied by anxiety, depression, social isolation, and relationships and employment difficulties. Possible reasons for these social problems include poor social comprehension, inability to take the perspective of others, misinterpretation of body language, impulsivity, and being easily led. NVLD can co-occur with other disabilities or conditions (Thompson, 1997).

Visual Perceptual/Visual Motor Deficits manifest themselves in individuals who exhibit problems in the discrimination, analysis, and synthesis of visual form and spatial relations. Their vision is intact but comprehension of written words or symbols is impaired. An individual with deficits in visual-motor skills has difficulty with the integration of visual information and motor output necessary for gross motor skills such as handwriting and drawing. Their vision and the function of their muscles are fine, but the coordination of body movements during certain activities is impaired (Miller & Sammons, 1999).

Language Disorders (Aphasia/Dysphasia) refer to a speech and language impairment that manifests itself in difficulty understanding spoken language or expressing language as a result of congenital or acquired brain damage. Aphasia/dysphasia often impacts reading comprehension. Some signs or symptoms of aphasia/dysphasia include difficulty with (Learning Disabilities Association, n.d.):

- gaining meaning from spoken language
- written output
- reading comprehension
- expressing thoughts in verbal form
- labeling objects or recognizing labels
- finding the words to explain or describe things
- feelings of sadness or depression
- understanding jokes

Co-existing Conditions

The most common co-existing conditions found in individuals with learning disabilities are disorders related to attention and hyperactivity, emotion and behavior, anxiety, and depression.

Attention Disorders: The largest body of studies supports a co-existing relationship between learning disabilities and attention deficit hyperactivity disorder

(ADHD) and attention deficit disorder (ADD). This extensive research estimates co-morbidity as high as 70% (Maynard, Tyler & Arnold, 1999; Riccio, Gonzalez & Hynd, 1994). A very large percentage of those who have ADHD or ADD also have accompanying learning disabilities, while approximately 30% of those who have learning disabilities also have ADHD (Barkley, 1998). In fact, learning disabilities are sometimes confused with ADHD. It is important to note that these are two distinct conditions, in spite of the significant level of co-existence.

Attention Deficit Disorder (ADD) is a biologically-based condition causing a persistent pattern of difficulties resulting in one or more of the following behaviors: inattention, hyperactivity, impulsivity, inattention, and difficulty attending or focusing on a specific task. For an individual with inattentive deficit disorder, behavior may manifest itself in the following ways:

- often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities;
- often has difficulty sustaining attention in tasks or play activities;
- often does not seem to listen when spoken to directly;
- often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions);
- often has difficulty organizing tasks and activities;
- often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework);
- often loses things necessary for tasks or activities (e.g., school assignments, books, or tools);
- is often easily distracted by extraneous stimuli; and
- is often forgetful in daily activities.

Attention-Deficit Hyperactivity Disorder (ADHD): An individual with ADHD exhibits the inattentive behaviors associated with ADD as well as symptoms of hyperactivity-impulsivity. A person with hyperactivity may have the following symptoms:

- often fidgets with hands or feet or squirms in seat;
- often leaves seat in classroom or in other situations in which remaining seated is expected;
- often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness);
- often has difficulty playing or engaging in leisure activities quietly;
- is often "on the go" or often acts as if "driven by a motor;" and
- often talks excessively.

A person with impulsivity may have the following symptoms:

- often blurts out answers before questions have been completed;
- often has difficulty awaiting turn; and
- often interrupts or intrudes on others (e.g., butts into conversations or games).

Some impairment from the hyperactivity-impulsivity symptoms is present in school, work, and home settings. There is clear evidence of significant impairment in social, academic, or occupational functioning. Attention deficit hyperactivity disorder (ADHD) is often co-morbid with dyslexia (Kadesjö & Gillberg, 2001). The two disorders occur simultaneously in 12-24 percent of individuals with dyslexia (Shaywitz, 2003). However, they do not appear to share a common cause (Doyle, 2001; Shaywitz, 2003).

APPENDIX A

Types of Learning Disabilities and Common Co-existing Conditions

Emotional and Behavioral Disorders (EBDs): A group of disorders also found frequently to coexist with learning disabilities is that involve social, emotional, and/or behavioral difficulties (Glassberg, Hooper, & Mattison, 1999; Kamphaus, Frick, & Lahey, 1991). Studies suggest that anywhere from 24% to 52% of students with learning disabilities have some form of such a disorder (Rock, Fessler, & Church, 1997). This group encompasses diagnoses such as conduct disorder and oppositional/defiant disorder (DeLong, 1995; Shaywitz & Shaywitz, 1991).

EBDs are important barriers to learning and development, interfere with the acquisition of academic, vocational, and social skills, and negatively affect adult adjustment. The National Mental Health and Special Education Coalition (Forness & Knitzer, 1992) identified students in need of specialized educational services in school using the following definition for Emotional and Behavioral Disorder (EBD):

> *EBDs refer to a condition in which behavioral or emotional responses of an individual in school are so different from his/her generally accepted, age appropriate, ethnic or cultural norms that they adversely affect performance in such areas as self care, social relationships, personal adjustment, academic progress, classroom behavior, or work adjustment. EBDs are more than a transient, expected response to stressors in the child's or youth's environment and persist even with individualized interventions, such as feedback to the individual, consultation with parents or families, and/or modification of the educational environment. This category may include children or youth with schizophrenia, affective disorders, anxiety disorders, or who have other sustained disturbances of behavior, emotions, attention, or adjustment.*

Youth with emotional and/or behavior disorders are a diverse group whose difficulties exist along continua of intensity, duration, and frequency of occurrence. Some emotional behavioral disorders that co-exist with learning disabilities are defined below, including obsessive-compulsive disorder, oppositional defiant disorder, and anxiety/depressive disorders.

Obsessive-Compulsive Disorder (OCD) is a medical brain disorder that causes problems in information processing. OCD usually involves having both obsessions and compulsions, though a person with OCD may sometimes have only one or the other. Obsessions are thoughts, images, or impulses that occur over and over again and feel out of a person's control. The person does not want to have these ideas, finds them disturbing and intrusive, and usually recognizes that they don't really make sense. People with OCD typically try to make their obsessions go away by performing compulsions. Compulsions are acts the person performs over and over again, often according to certain "rules." OCD compulsions do not give the person pleasure. Rather, the rituals are performed to obtain relief from the discomfort caused by the obsessions. OCD symptoms cause distress, take up a lot of time (more than an hour a day), or significantly interfere with the person's work, social life, or relationships.

Oppositional Defiant Disorder (ODD) refers to a pattern of negative, hostile, and defiant behavior (social aggression) lasting at least six months, during which four (or more) of the following behaviors are present:

- often loses temper;
- often argues with adults (opposition to authority figures);
- often actively defies or refuses to comply with adults' requests or rules;
- often deliberately annoys people;
- often blames others for his or her mistakes or misbehavior;
- is often touchy or easily annoyed by others;
- is often angry and resentful;
- is often spiteful or vindictive; and
- frequent use of obscene language.

This disturbance in behavior causes significant impairment in social, academic, or occupational functioning. Some research indicates a co-morbidity relationship between ODD and/or Conduct Disorder (CD) and Attention Deficit/Hyperactivity Disorder (ADHD). CD is a disruptive behavior disorder that involves the infliction of pain or the denial of the rights of others (i.e., initiating fights, breaking into others' homes, fire setting). Researchers have found that (1) there is an overlap in the symptoms of all three conditions; and (2) ADHD clearly increases the risk for early onset of ODD and CD.

Research also suggests that some mental illnesses such as anxiety and depressive disorders co-occur with learning disabilities (San Miguel, Forness, & Kavale, 1996; Zuckerman, Debenham, & Moore, 1993).

Anxiety Disorders, the most common group of mental illnesses, are characterized by severe fear or anxiety associated with particular objects and situations. Most people with anxiety disorders try to avoid exposure to the situation that causes anxiety. Types of anxiety disorders are:

- **Panic disorder**—the sudden onset of paralyzing terror or impending doom with symptoms that closely resemble a heart attack.
- **Phobia**—excessive fear of particular objects (simple phobias), situations that expose a person to the possible judgment of others (social phobias), or situations where escape might be difficult (agoraphobia).
- **Post-traumatic stress disorder** (PTSD)—a psychological syndrome characterized by specific symptoms that result from exposure to terrifying, life-threatening trauma such as an act of violence, war, or a natural disaster.

Depressive Disorders are also known as mood disorders or affective disorders. These illnesses share disturbances or changes in mood, usually involving either depression or mania (elation). Types of depressive disorders are:

- **Major depression**—an extreme or prolonged episode of sadness in which a person loses interest or pleasure in previously enjoyed activities.
- **Manic-depressive illness** (also referred to as bipolar disorder) alternating episodes of mania "highs" and depression "lows."
- **Dysthymia**—continuous low-grade symptoms of major depression and anxiety.
- **Seasonal affective disorder** (SAD)—a form of major depression that occurs in the fall or winter and may be related to shortened periods of daylight.

Many people first develop symptoms of mental illnesses between the ages of 15 and 25 and traditional educational or vocational training may be delayed as a result. This may affect their qualifications for jobs or educational programs. Also, the irregular nature of mental illness may create problems in establishing or maintaining consistent work or school patterns. Some individuals may need time off for medical appointments or to recuperate. The irregular nature of mental illness might also impair an individual's performance.

Despite their effectiveness for many people, medications can also have side effects that create difficulties at work or in school. Each person has an adjustment period after starting, changing the dose of, or stopping medication.

APPENDIX B

Civil Rights Laws Pertaining to Disabilities

The Americans with Disabilities Act (ADA)

What it Protects	The ADA prohibits discrimination on the basis of disability in employment, State and local government, public accommodations, commercial facilities, transportation, and telecommunications. To be protected by the ADA, one must have a disability or have a relationship or association with an individual with a disability. An individual with a disability is defined by the ADA as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment or a person who is perceived by others as having such an impairment.
Age Specific Relevance	There are no specific provisions for age in the act.
Responsibilities of Individual and Documentation Requirements	To be covered under ADA, individuals must be willing and able to disclose their disability, and in some cases, to document its existence.
Responsibilities of Institutions or Employers	Title I requires employers with 15 or more employees to provide qualified individuals with disabilities an equal opportunity to benefit from the full range of employment-related opportunities available to others. For example, it prohibits discrimination in recruitment, hiring, promotions, training, pay, social activities, and other privileges of employment. It restricts questions that can be asked about an applicant's disability before a job offer is made, and it requires that employers make reasonable accommodation to the known physical or mental limitations of otherwise qualified individuals with disabilities, unless it results in undue hardship. Title II requires that State and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities (e.g., public education, employment, transportation, recreation, health care, social services, courts, voting, and town meetings).
Types of Support	Title I complaints must be filed with the U. S. Equal Employment Opportunity Commission (EEOC) within 180 days of the date of discrimination, or 300 days if the charge is filed with a designated State or local fair employment practice agency. Complaints of Title II violations may be filed with the Department of Justice within 180 days of the date of discrimination. In certain situations, cases may be referred to a mediation program sponsored by the Department.

The Individuals with Disabilities Education Act (IDEA)

What it Protects	IDEA requires public schools to make available to all eligible children with disabilities a free appropriate public education in the least restrictive environment appropriate to their individual needs.
Age Specific Relevance	Services can be provided as early as two years of age. In most states, services may be provided to age 21 or until the end of the school year after an individual turns 21.
Responsibilities of Individual and Documentation Requirements	Either an individual's parents or the education agency may request an evaluation before the provision of special education and related services to a child with a disability under IDEA. The evaluation is done to determine if the child is a child with a disability and to determine the educational needs of the child. If either the parents or the education agency disagrees with the findings, there are due process provisions in the act for the settlement of disputes.
Responsibilities of Institutions	IDEA requires public school systems to develop appropriate Individualized Education Programs (IEPs) for each child. The specific special education and related services outlined in each IEP reflect the individualized needs of each student. IDEA also mandates that particular procedures be followed in the development of the IEP. Each student's IEP must be developed by a team of knowledgeable persons and must be at least reviewed annually. The team includes the child's teacher; the parents, subject to certain limited exceptions; the child, if determined appropriate; an agency representative who is qualified to provide or supervise the provision of special education; and other individuals at the parents' or agency's discretion.
Types of Support	If parents disagree with the proposed IEP, they can request a due process hearing and a review from the State educational agency if applicable in that state. They also can appeal the State agency's decision to State or Federal court.

Section 504 of the Rehabilitation Act

What it Protects and What Support is Provided	Section 504 states that "no qualified individual with a disability…shall be excluded from, denied the benefits of, or be subjected to discrimination under" any program or activity that either receives Federal financial assistance or is conducted by any Executive agency or the U.S. Postal Service. Each Federal agency has its own set of section 504 regulations that apply to its own programs.
Age Specific Relevance	There are no specific age requirements or restrictions in the act.
Responsibilities of Individual and Documentation Requirements	In schools (including colleges that receive any type of Federal aid), students who have disabilities but are not receiving special education services may request assistance under this act. They are required to disclose their disability and to provide documentation to appropriate authorities.
Responsibilities of Institutions or Employers	Requirements common to these regulations include reasonable accommodation for employees with disabilities; program accessibility; effective communication with people who have hearing or vision disabilities; and accessible new construction and alterations. Each Federal agency is responsible for enforcing its own regulations—for instance, the U.S. Department of Education enforces Section 504 in public schools.
Types of Support	In-school services include related aids and supports designed to meet the student's individual needs; however, there is no dedicated source of funding.

APPENDIX C

Federal Legislation that Funds Access to Services for the LD Population

The Individuals with Disabilities Education Act (IDEA)

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Services can begin in preschool. Most states end services at age 21 or the school year an individual turns 21. To receive services, a child must have one or more of thirteen disabling conditions and therefore need special education and related services.	Beginning not later than the first IEP to be in effect when the child is 16, and updated annually thereafter [the IEP statement shall include] appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills; the transition services (including courses of study) needed to assist the child in reaching those goals.	The U.S. Department of Education measures state and district performance related to transition by examining four indicators: • Percent of youth with IEPs graduating from high school with a regular diploma compared to percent of all youth in the State graduating with a regular diploma. • Percent of youth with IEPs dropping out of high school compared to the percent of all youth in the State dropping out of high school. • Percent of youth aged 16 and above with an IEP that includes coordinated, measurable, annual IEP goals and transition services that will reasonably enable the student to meet the post-secondary goals. • Percent of youth who had IEPs, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school.

Carl Perkins Career and Technical Education Improvement Act of 2005

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
To receive services, individuals must be high school or post-secondary students.	The act is designed to assist students in meeting technical standards, including student academic achievement standards, in preparation for high skill, high wage, or high demand occupations in emerging or established professions.	The U.S. Department of Education measures • Academic achievement in language arts and mathematics • Attainment of high school diploma or GED • Transfer to a post-secondary program • Technical skill proficiency, an industry-recognized credential, a certificate, or a degree, in a specific career field • Placement in high skill, high wage employment or to further education and utilizes career pathways, to the extent practicable

No Child Left Behind Act of 2001

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
All students in U.S. public schools are included.	No specific provisions.	The U.S. Department of Education examines • Individual state assessment results by performance level (basic, proficient, and advanced) • Percentage of each group of students not tested • Graduation rates for secondary school students and any other student achievement indicators that the state chooses • Performance of school districts on adequate yearly progress measures, including the number and names of schools identified as needing improvement • Professional qualifications of teachers in the state

Workforce Investment Act (WIA)

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Title I Adult Services are available to individuals from age 18 to 61. Core services are available to all. Other services are provided to those with specific employment barriers.	No specific provisions for transition age youth but this title provides for three basic levels of employment and training services to eligible individuals age 18 or older.	The U.S. Department of Labor measures individual state performance by: • Entry into unsubsidized employment; • Retention in unsubsidized employment six months after entry into the employment; • Earnings received in unsubsidized employment six months after entry into the employment; and • Attainment of a recognized credential relating to achievement of educational skills, which may include attainment of a secondary school diploma or its recognized equivalent, or occupational skills, by participants who enter unsubsidized employment.

APPENDIX C

Federal Legislation that Funds Access to Services for the LD Population

WIA Title I — Youth

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Services are available to youth age 14 to 21. Youth are eligible if they are low-income and at risk in one of several categories related to education, employment, health, or housing.	Youth programs provide objective assessments of the academic levels, skill levels, and service needs; develop service strategies for each participant that shall identify an employment goal, appropriate achievement objectives, and appropriate services; prepare youth for postsecondary educational opportunities; develop strong linkages between academic and occupational learning; prepare youth for unsubsidized employment opportunities; and make effective connections to intermediaries with strong links to the job market, and local and regional employers.	The U.S. Department of Labor measures individual state performance using these indicators: Older Youth (aged 19-21) • Entry into unsubsidized employment; • Retention in unsubsidized employment six months after entry into the employment; • Earnings received in unsubsidized employment six months after entry into the employment; and • Attainment of a recognized credential relating to achievement of educational skills or occupational skills. Younger Youth (aged 14-18) • Attainment of basic skills and, as appropriate, work readiness or occupational skills; • Attainment of secondary school diplomas and their recognized equivalents; and • Placement and retention in postsecondary education, advanced training, military service, employment, or qualified apprenticeships.

WIA Title II — Adult Basic Skills and Family Literacy Education Act

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Services are available for individuals age 16 and up.	It is the purpose of this title to provide instructional opportunities for adults seeking to improve their basic reading, writing, speaking, and math skills, and support states and local communities in providing, on a voluntary basis, adult basic skills and family literacy programs	The U.S. Department of Labor measures state agency performance using these indicators: • Placement in unsubsidized employment • Retention in unsubsidized employment or career advancement • Receipt of a secondary school diploma or its recognized equivalent • Demonstrated improvements in literacy skill levels in reading, writing, and speaking the English language, numeracy, problem solving, English language acquisition, and other literacy skills.

WIA Job Corps

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Services are available for youth age 16 through 24. To receive services, one must meet low income requirements and be a U.S. citizen.	In the Job Corps, students enroll to learn a trade, earn a high school diploma or GED, and get help finding a good job. Participants are paid a monthly allowance. Job Corps provides career counseling and transition support to its students for up to 12 months after they graduate from the program.	The U.S. Department of Labor measures individual agency performance using these indicators: • Number and rate of vocational completion. • Number of GED or high school diploma graduates. • Learning Gains Measure in literacy rate and numeracy rate. • Number of graduates placed in jobs, college, advanced training, or military services and Job Training Match. • Average entry wages of those placed. • Job retention at 6 and 12 months. • Wage gains at 6 and 12 months.

WIA Title IV – The Rehabilitation Act of 1973 as Amended

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
No age limit but applicants must be seeking an employment outcome. To receive services, one must be a person who has a physical or mental impairment which constitutes or results in a substantial impediment to employment for the individual; and can benefit from VR services to achieve an employment outcome.	The act requires state vocational rehabilitation agencies to coordinate services with local education agencies in order to facilitate the transition of students from the provision of a "free appropriate public education" to the provision of vocational rehabilitation services, so that there are no gaps and delays in services. This is done through interagency agreements and subsequent collaborative activities. The provision of vocational rehabilitation services to individuals with disabilities enables them to maximize opportunities for employment and career advancement. Includes assistance with physical and mental health care, education and training, assistive technology, assessment, independent living skills, and supported employment.	The U.S. Department of Education measures state agency performance by examining • Change in employment—the number of individuals exiting with employment • Competitive employment rate—percentage of individuals exiting with employment who were competitively employed • Significant disability rate—percentage of individuals exiting with competitive employment who have significant disabilities • Wage Ratio—ratio of the average hourly earnings of individuals exiting with competitive employment to the average hourly earnings for all employed individuals in the state • Increase in self-support based on percentage of wages over other sources of income

Temporary Assistance for Needy Families (TANF)

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Parents with children under age 18 who have low income.	TANF is created by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Two of the ways states can use TANF dollars are to provide assistance to needy families so that children may be cared for in their own homes or in the homes of relatives and to end the dependence of needy parents on government benefits by promoting job preparation, work, and marriage.	The U.S. Department of Health and Human Services measures performance based on • Number and rate of vocational completion. • Number of GED or high school diploma graduates. • Number of graduates placed in jobs, college, or advanced training • Average entry wages of those placed. • Job retention • Wage gains

Ticket to Work and Work Incentives Improvement Act of 1999

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Individuals can use the "ticket" beginning at age 18 until age 65. To be eligible, persons must be receiving SSI or SSDI (see next section)	Ticket to Work can provide supplemental funding to schools and other agencies for 18-21 year old students who have been re-determined as eligible for disability benefits as an adult. The Ticket to Work Program supports the provision of employability services, supports, and incentives. The Ticket to Work is designed to remove many of the barriers that previously influenced people's decisions about going to work because of the concerns over losing health care coverage. Ticket to Work is meant to increase opportunities and choices for Social Security disability beneficiaries to obtain employment, vocational rehabilitation (VR), and other support services from public and private providers, employers, and other organizations. Private sector employers may be able to take advantage of a "Work Opportunity Tax Credit" if they hire certain individuals, including participants in the Ticket to Work program.	Not Applicable.

Supplemental Security Income (SSI) for the Aged, Blind and Disabled

Social Security Disability Insurance (SSDI)

Age and Eligibility Requirements	Transition Focused Services	Expected Outcomes
Supplemental Security Income (SSI) for the Aged, Blind and Disabled Eligible individuals have significant disabilities and are not working in full time job *Social Security Disability Insurance (SSDI)* Eligible individuals have significant disabilities and are not working in full time job	Special rules make it possible for people with disabilities receiving SSI or SSDI to work and still receive monthly payments and Medicare or Medicaid. SSA calls these rules "work incentives." SSI provides cash assistance programs for elderly individuals and people with disabilities who have not worked or who are not expected to work. It serves as a safety net for individuals who had not acquired the work history necessary to receive assistance under the SSDI program and it provides incentives and support to recipients to find employment. A Plan for Achieving Self-Support (PASS) lets you spend or save income (other than SSI income) and/or resources for employability investments and work expenses. Work expenses that are related to a disability can be included in the work incentive called "Impairment Related Work Expense".	Not Applicable.

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