Introduction 1

Key Points

- The current picture of how deaf individuals reach their postsecondary goals is incomplete.
- Using a systems approach to analysis, this book will help to "unpack" what we know about the path to postsecondary outcomes for deaf individuals.
- Resiliency models help frame our conversation in a way that honors the strengths of deaf individuals as well as acknowledges the barriers that reside within larger educational and social systems.

THIS BOOK provides an in-depth discussion of issues that impact postsecondary outcomes for individuals who are deaf or hard of hearing (deaf individuals),[1] including further education, training, employment, independent living, and community involvement. Although there are several effective books that relate to the postsecondary transition process for deaf individuals, *Shifting the Dialog, Shifting the Culture* looks more systemically at the factors associated with positive postsecondary *outcomes*.[2] This book is designed for a diverse audience, including professionals who work (or are in training to work) with deaf individuals, as well as federal and state personnel. Without a strong understanding of the current research, policymakers cannot make informed decisions about the types of programs or services that may best facilitate postsecondary success for deaf individuals. We hope that this book can provide some needed perspective on what supports are already available as well as the types of barriers that reduce access to postsecondary opportunities for deaf individuals.

This chapter lays the groundwork for what we know about postsecondary education and employment for deaf individuals. We introduce key theoretical perspectives and share current national data about

postsecondary outcomes, including enrollment in and graduation from training and education programs, entry into the workplace, and independent living. We identify some knowledge and skills gaps many deaf individuals share and describe how this book seeks to fill some of those missing puzzle pieces in understanding what happens in the journey from high school to postsecondary experiences. This book brings together current research, along with stories from the field, to help readers understand important factors that influence postsecondary outcomes for deaf individuals. The stories from the field that are interwoven throughout this book in quotes, but are otherwise unattributed, come from a national needs assessment that our research team conducted in 2012 (Cawthon & the PN2 RES Team). More than 1,500 deaf individuals, their parents, and affiliated professionals participated in surveys, interviews, and focus groups across the nation. The full report of this needs assessment, available online, provides more detail on the data collection methods.

This book views the postsecondary transition process and outcomes for deaf individuals through two lenses. We use a systems theory approach to explore important themes in the transition process, explaining the purpose of this theory as well as ways in which using an ecological approach influences the structure of the book. We also emphasize a resiliency (vs. deficit) perspective, which stresses how deaf individuals persist through the transition process. Both of these perspectives are described in further detail at the end of this chapter.

What Do We Know about Postsecondary Education and Employment Outcomes for Deaf Individuals?

Many researchers in the field start the conversation about deaf education with basic demographics: descriptive statistics that provide an overview of processes and outcomes for deaf individuals. However, from a *numbers perspective*, large-scale data collection approaches provide different perspectives on what is happening with deaf individuals during transition—the journey of moving from youth to young adult and the academic, vocational, and personal outcomes resulting from the process.

- Deaf individuals tend to do well with **high school completion**, with recent estimates indicating that the majority, more than 70%, of stu-

dents successfully received a complete high school diploma or certificate (Newman et al., 2011).

- **Postsecondary training**, known to be essential to higher employment rates and promotion later in life, has increased in recent years, with an estimated 75% of deaf individuals enrolling in some kind of post-high school education or training (Newman et al., 2011).
- **Postsecondary degree completion** is a critical step in successful transition; without credentials, it can be challenging to gain entry into some career fields. About half of deaf young adults completed some type of postsecondary training, with just over a third completing degrees from either a two- or four-year degree program (Newman et al., 2011).
- **Employment outcomes** for deaf individuals are also on the rise, yet still show a great deal of variability across state contexts and career clusters.
- **Extracurricular involvement and community membership** continues to be an important part of the lives of deaf individuals. At rates higher than that of many other disability groups, 34% of deaf young adults volunteered or participated in a community service activity (Newman et al., 2011).

A person's journey from adolescence to young (or older!) adulthood also has meaning beyond a set of statistics. Definitions of successful outcomes can include literacy attainment, academic outcomes, and job placement; however, it is also about more than that. Consider the following perspective:

> . . . and these kids never cease to amaze me in their full acceptance of who everyone is and their own limitations and the abilities to succeed at whatever range that looks like without putting one another down. (Professional in higher education)

What Is the Gap That This Book Is Seeking to Fill?

The literature has, to date, focused on individual components of the developmental process. What this book hopes to do is to look holistically at the journey toward postsecondary outcomes for deaf individuals in a way that considers the interaction between individuals and the many layers of the overall system in which they navigate. Each chapter in this book delves into the factors that affect postsecondary education and workplace attainment for deaf individuals in further detail, drawing upon evidence

from across different perspectives. Furthermore, this book seeks to bring together our "right brain" and "left brain" knowledge, expanding our understanding to include both the emerging data from the research field and the stories and experiences of individuals, families, and professionals. We are also mindful of those things that are perhaps not measurable, or not a part of our evidence base for transition with deaf individuals, as follows:

> what you guys are doing there to break down those sorts [of] . . . attitudinal barriers. Build up expectations, not only of the students themselves, so they cannot be limited, but also of the environment; [the] postsecondary environment in particular. Employers maybe. Erase some of the artificial constructs that stand in their way because of people's attitudes about deaf and hard of hearing. (Professional in higher education)

What this quote offers us is both an opportunity and a word of caution. First, the opportunity: Circumstances affect an individual's journey, and "nailing down" what is actually constructive in each individual's situation can be both challenging and complex. We seek to understand commonalities among all young adults as well as those characteristics that are unique to deaf individuals.

This book is designed to offer opportunities for reflection as well as deepening one's understanding of transition for deaf individuals. The chapters begin with a brief synopsis, a kind of road map, with some key points to look for when reading the chapter. We discuss the rationale for including this focus within the book, illustrating its importance or function within the postsecondary transition process for deaf individuals. Where relevant, we provide stories from the field or vignettes that capture dimensions that we intend to expand upon in the primary narrative. The chapters include a discussion of demographics: Who are the individuals, and where are the institutions that are involved in preparing deaf individuals for their futures? Throughout the book, we include elements, such as definitions of key concepts, case law, historical context, research summaries, and available data from both within and outside of the field.

Starting with Chapter 1, the book moves through different layers of the ecological system, going from individuals, to families and communities, to schools and the workplace, to state and federal systems, and to specific times and places in history. We encourage readers to proceed chrono-

logically through the chapters, as they necessarily build upon each other, as we move through the system layers. The Conclusion pulls together the shared themes discussed in individual chapters, highlighting places where advances may need to be made, or analyzing what is known and what needs to be known about supporting positive postsecondary outcomes for deaf individuals.

Theories That Guide This Book

Theories are ideas that we have about how the world works or ways to organize our thinking about a behavior. Theories can feel lofty, out of reach, and disconnected from our daily practice. Some theories are broad and explain how we, as humans, function on a very basic level. For example, we may be familiar with science-based theories, such as the theory of gravity that explains how we remain tethered to the earth. Some theories are more specific and focus on a particular behavior or phenomenon. When studying people, we often draw upon theories about why people act a certain way or have different kinds of life outcomes. For example, there are theories about the relationship between exercise and weight loss or about what instructional strategies can help students learn mathematics content. These theories may be less dramatic than explaining gravitational pull, but they are useful in helping us understand ideas about cause and effect between current actions and future events.

This book utilizes two primary theoretical frameworks in its discussion of postsecondary outcomes for deaf individuals: systems theory and the resiliency model of development. Although there are several theories or paradigms that are active in the field, we feel that these two approaches capture both the complexity of the topic and the disposition that we hope to emphasize in this discussion.

Systems Theory

Ecological systems theory (shortened to systems theory) comes from the fields of biology and ecology but has applications in many other fields, including education, sociology, and human development. Because transition is a developmental process, one that includes not only achieving specific tasks, but also developing identity and leveraging internal and external

resources, this discussion benefits from a theory that acknowledges that not only is an individual's journey influenced by outside factors, but it is also elicited by the individual's unique characteristics.

One primary premise of systems theory is that there is an interaction between the individual and many people, policies, and institutions during the course of development. An advantage to using systems theory to study the transition process is that it is specifically designed to get people thinking about complex issues. Systems theory is not prescriptive, in that it does not say specifically how different factors affect an individual's development; however, it does provide a way to describe, organize, and integrate influences both on a local level and at a broader societal level.

Systems theory was first summarized in *The Ecology of Human Development: Experiments by Nature and Design* (1979), the seminal work of Dr. Urie Bronfenbrenner, who led much of the work related to the theory and the study of human development throughout the lifespan. He spent many years researching the effects of early childhood experiences on later developmental outcomes. Dr. Bronfenbrenner was also deeply interested in the cultural factors that contributed to an individual's outcomes. He looked extensively at children's experiences in the United States and in (what was then called) the USSR. His work inspired many to think about how larger government policies, cultural and linguistic factors, and historical contexts trickled down into our more proximal context, thus influencing our development.

In the later iterations of his framework, Bronfenbrenner conceptualized development as having four components: Process-Person-Context-Time (or the PPCT model) (Bronfenbrenner & Morris, 1998). *Process* emphasizes the importance of daily interactions that become the foundation for our development and understanding of the world. *Person* explores how we, as individuals, shape our own experience in ways that result in unique developmental pathways. *Context* honors the social and historical context in which individuals, families, and institutions operate in their interaction. *Time* emphasizes not only the time in history, but also the length of time and the developmental nature of experiences that we have as we age. In sum, the PPCT model captures not only the influences that we directly experience, but also the influences that we are not always aware of in our day-to-day living.

Empirical studies of human development utilizing PPCT are challenging and complex, just like the model itself. PPCT is a theoretical approach that is very flexible, allowing researchers to think about development across many domains and settings. Full applications of more recent iterations of PPCT have been used in a number of areas related to education, family functioning, and allied fields (e.g., Adamsons, O'Brien, & Pasley, 2007; Riggins-Caspers, Cadoret, Knutson, & Langbehn, 2003; Steinberg, Darling, & Fletcher, 1995). Because full implementation of PPCT within a single study is so challenging, and because there are few studies that fully capture this dynamic, these applications not only draw upon systems theory, they have helped it to evolve and grow (Tudge, Mokrova, Hatfield, & Karnik, 2009).

Although some authors draw upon the entire systems framework, others choose to focus only on parts of the overall systems theory, using the components that are most relevant to their work (Tudge et al., 2009). In this book, we draw mainly upon the two primary components of PPCT—Person and Context—with some overlap from the other remaining aspects. Our choices reflect the emphasis on the importance of both the individuals and the social and historical context in which they live (Darling, 2007). The first focus is the idea of system layers as a way of organizing contextual factors that influence development for deaf individuals (the C in PPCT). Although terminology and organization varied over the course of Bronfenbrenner's long career, the following list (from Bronfenbrenner, 1979) characterizes his approach to understanding developmental context:

- **Self**: These are factors related to individuals—their personalities, genetic characteristics, or predispositions, as well as factors related to their identities.
- **Microsystem**: These are factors related to one's immediate context, typically one's family, roommates, or other individuals one sees on a daily basis.
- **Mesosystem**: These are factors related to peers, community, school, and workplace, which vary with the developmental stage of the individual.
- **Exosystem**: These are factors that provide infrastructure or laws that affect what resources or opportunities an individual has. Some examples of exosystem include legal polices, education policies, vocational rehabilitation, transportation, and so forth.
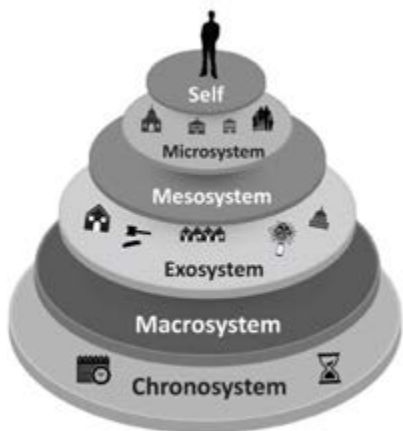
- **Macrosystem**: These are factors that relate to one's culture and the political and economic forces at work.
- **Chronosystem**: The chronosystem refers to major life events, including ways in which the period in history in which one lives affects availability of resources, attitudes, and perspectives. This may also be seen as "generation effects" or factors related to one's cohort.

To help guide our thinking, we use an image depicting these layers throughout this book, highlighting the relevant layer within each chapter.

This book uses the structure of these system layers as a rough guide for our chapter organization. Each of our chapters is framed by aspects of one of the layers identified in this figure. For example, when we discuss individual characteristics, we focus on Bronfenbrenner's concepts of the self; when we discuss the impact of time, or the T in PPCT, we draw upon concepts within the chronosystem. For the mesosystem, a layer that includes many contextual factors in the lives of deaf people, we address issues related to postsecondary outcomes across chapters, including ones focusing on the influence of peers, school, and the workplace.

The second way in which we take our cue from Bronfenbrenner's work is by focusing on the relevance of the person, the second P in PPCT. The purpose of this is to focus on how an individual's characteristics interact with factors within each larger contextual layer (Bronfenbrenner, 2005). Bronfenbrenner conceptualized this person-centered perspective as including both *demand* components or ways in which an individual elicits a response from his or her environment, as well as *resource* components, or ways in which different individuals may have characteristics that lead to different trajectories (Darling, 2007). Demand and resource characteristics may be genetic dispositions; however, they may also be personality characteristics or physical strengths that help to shape how an individual navigates the world (Bronfenbrenner & Ceci, 1994; Stattin & Kerr 2000). In some cases, a person may deliberately work to change the world around

her, recasting or reconstructing the environment in which things are or are not possible. These forces may be generative, creating possibilities, or disruptive, blocking opportunities that may otherwise have been afforded to the individual (Bronfenbrenner & Morris, 2006).

This person-centered perspective emphasizes that individuals are not passive recipients of information or resources. Instead, this approach emphasizes how an individual uniquely elicits responses from his or her environment in both passive and active ways. This interactive component is particularly important when thinking about what aspects are specifically unique to the postsecondary transition process for deaf individuals and what aspects are similar to that of hearing adolescents and young adults. Furthermore, this perspective also challenges us to think about dual responsibility for both desired and at-risk outcomes, such as parents and child, child and peer, or students and schools, as well as the culturally bound aspects of these interactions. Given the strong cultural components within deaf studies and deaf education, we pay particular attention to where culture influences the person-in-context experience.

A Focus on Resiliency

For much of the last 50 years, education for individuals who are deaf has taken what is sometimes seen as a *deficit* approach. Similar to ableism when applied to students with disabilities, a deficit model of education is prevalent for many marginalized, pathologized, and criminalized groups. What does this deficit model imply? In schools, the focus in a deficit model is on identifying what an individual student lacks, sometimes in the absence of a critical analysis of where the learning environment is falling short. A deficit model places the cause of challenges a student might be having as something that needs to be fixed in the student. Students are labeled as "being" or "having" a named weakness or characteristic, one that makes them eligible for special services, which ironically can, in some cases, perpetuate the philosophy that the student somehow needs the help of a nondisabled professional. One of the hallmarks of a deficit model is how people respond when someone shows that they are able and competent, particularly in school and workplace settings. If deaf individuals are successful, this is noted as a remarkable event, one that happened *in spite of* the fact that they are deaf. In this scenario, an exceptional person challenges expectations

about what is possible or typical for deaf individuals, thus revealing the low expectations that lie under the surface.

Language can be a powerful indicator of attitude or perspective, and how we frame our assertions says a great deal about our assumptions of worth or value. In contrast with a deficit approach, recent years have brought a focus on what is termed *Deaf Gain*. Bauman and Murray (2009) conceptualize the process of reframing the concept of hearing loss into a strength for a deaf individual. When thinking about the world from a Deaf Gain perspective, one seeks out ways in which deaf individuals are not only different in how they engage with the world, but also how they have strengths that are unique to this population. Being rooted in a visual world, including a visual language modality, affords deaf individuals with perspectives and skills that cannot occur in the same way when one is reliant on sound and spoken language. Furthermore, Deaf Gain perspectives also hold that we, as a society, value and benefit from the presence of deaf people. The benefit is thus not necessarily limited to deaf individuals themselves, but to all peoples, intrinsically linking us together in partnership and relationship.

Resilience theories abound in the literature. Although definitions and contexts vary, when a person is resilient, we say that they have "beaten the odds" or "risen above their circumstances" to attain stronger outcomes than might have been expected due to the challenges they faced. Theories regarding resilience and factors that support resiliency emphasize the developmental nature of this process (McAslan, 2010). Young people from a marginalized group, in particular, must engage in, resist, and prosper with the larger dominant framework to effect change. We have chosen a resiliency approach for this book, because we feel that it both honors the agency of deaf people and acknowledges the many barriers that they face. To focus only on one or the other would be to lose the contextualized nature of development, thus presenting an incomplete view of transition within a culture, time, and place (Ungar, 2012). A resiliency approach thus provides us with an opportunity to explore nuances that would not be possible if we were looking at societal barriers or individual achievements as separate entities.

A resiliency approach to postsecondary attainment for deaf individuals seeks to look not only at what an individual outcome looks like, or what

factors predicted their process, but also looks more specifically at what factors serve as protectors against negative factors. A resiliency approach assumes that the environment that many deaf people grow up in has obstacles and challenges. This framework thus requires us to do two things: to understand those obstacles in the environment and to explore how deaf individuals work through, in, and around those obstacles. Resiliency can be found in individual characteristics, such as strong self-advocacy or a sense of humor, or in family characteristics, such as high parent expectations for their child's success. Resiliency can also be embedded within a culture, one that continues not only to survive, but also to thrive in the face of threat (Feldman & Masalha, 2007). In this way, cultural resources can serve as a buffer between early ecological risk and later pathology. Both individual and cultural resources draw upon the human dimension in living through adversity. When thinking about resiliency while reading this book, consider how resources for deaf people exist in conjunction with challenges, and think of ways in which systems can further foster resiliency for young people, such that they have those tools and supports to be successful throughout their lives.

In the foreword to the edited volume, *Resilience in Deaf Children: Adaptations through Emerging Adulthood*, Irene Leigh (2011) reflects upon the great renaissance in recent years of deaf people as survivors, thrivers, and strong members of society. The volume includes contributions from a broad range of perspectives, all focusing on the positive attributes of individuals and their capacity to create, shape, and mold the world around them. Perspectives represented in this volume are far from victim narratives; however, by the same token, they are honest in their identification of risks to healthy development for deaf youth. In this book, editors Debra Zand and Katherine Pierce (2011) also utilized both resilience as a framework and Bronfenbrenner's systems approach to understanding the complex interactions between an individual and her environment.

This book seeks to deepen and extend the conversation begun in *Resilience in Deaf Children*, focusing specifically on factors related to resiliency in deaf people and how they navigate their exit from high school and into postsecondary arenas. Critical to this book is the understanding that resilience is more than an individual characteristic, as aptly laid out in the *Resilience in Deaf Children* introductory chapter by Young, Rogers, Green,

and Daniels (2011). Their chapter raises many critical questions about how resilience is conceptualized and documented in research with deaf individuals. Who is defining a resilient outcome? Is it the deaf individual themselves, a family member, or someone from outside their world? How is someone to know whether or not an outcome was achieved within an adverse environment? Does being resilient require awareness of risk, obstacles, and a conscious strategy or resources to thrive within that context?

Young et al. (2011) also point out that definitions of resilience may vary, and more specifically, may or may not specifically include reference to risk. Risk is often discussed in terms of the likelihood of a later outcome occurring, given the presence or absence of an earlier, detrimental event. Researchers conceptualize risk as cumulative—more negative or stressful events are worse than just one—and the predictors themselves are labeled as discrete: loss, disease, poverty. Our understanding of resilience often relies upon our perspectives on risk (Young, Green, & Rogers, 2008). Who identifies an event or experience as one that puts an individual or a system at risk? The extent to which events are authentic, monolithic, and linear may influence the extent to which we understand how individual and cultural factors moderate risk or facilitate resilience. In short, when we refer to resilience, it may be different across individuals and contexts. Resilience from an individual's perspective may also look different from someone else's perspective, particularly if one is seeking a specific measurable outcome (e.g., to define whether or not someone is resilient).

Our Own Experiences . . .

Because any narrative is written, in part, from the perspective of the authors' own experiences, we provide a brief description of who we are and what our journey into and through postsecondary experiences was like.

Stephanie Cawthon

Stephanie is an associate professor in Human Development, Culture, and Learning Sciences at the University of Texas at Austin and director of the National Deaf Center on Postsecondary Outcomes (NDC), a federally funded project that supports the postsecondary advancement of deaf individuals. While writing this book, Stephanie was affiliated with pepnet 2 (pn2) as the associate director of the research and evidence synthesis team.

Stephanie spent high school in Oakland, California, at Holy Names High School, a small, all-girl Catholic high school. Holy Names provided some honors classes, but minimal opportunities for either advanced placement test preparation or an extended course curriculum. Stephanie's accommodations during high school were limited to seating (i.e., front row) and amplification via hearing aids. She did not receive additional services. Stephanie's family had a long history of college enrollment with many individuals with careers as teachers.

Despite a strong high school experience, Stephanie's transition to college was not seamless. Although her original aspiration was to be a physicist, it was soon clear that she did not have the high school mathematics background to keep up with her peers. Furthermore, the accommodations strategies she used in high school were inadequate in a large university setting and in a shared dormitory living environment. Many classroom environments were no longer accessible without note-taking support and accessible teaching approaches. Stephanie made contact with the Office for Students with Disabilities, but did not make use of their services outside of a special telephone for use in her dorm room. There were several instances where faculty questioned her self-designed strategies of working with seatmates to clarify lecture content. In the end, Stephanie chose to study psychology, with an emphasis on language development in deaf children, and has built upon that initial line of research throughout her career. Stephanie's current work looks at systemic factors that affect postsecondary outcomes for deaf individuals, with a special emphasis on accessible instruction and assessment practices.

Carrie Lou Garberoglio

Carrie Lou is a researcher with the Meadows Center for Preventing Educational Risk at the University of Texas at Austin, and associate director of the National Deaf Center on Postsecondary Outcomes, as described above. While writing this book, she was affiliated with pn2 as project manager of the research and evidence synthesis team. Carrie Lou graduated from the Texas School for the Deaf (TSD), one of the largest state schools for the deaf in the nation. Her parents, who are deaf, also worked at TSD. Her mother was an English teacher, and her father was a high school principal. Thus, nightly conversations around the dinner table often revolved around

educational issues and challenges in deaf education. Growing up, Carrie Lou always wanted to be a teacher—most often an art teacher.

The high school that Carrie Lou attended did not offer advanced placement courses. During her senior year in school, Carrie Lou opted to take classes at the local community college in psychology and education. In the classes at the community college, she utilized ASL interpreters and took her own notes. After high school graduation, Carrie Lou received vocational rehabilitation services to support her college enrollment. She enrolled in Gallaudet University, with vague plans to study education and art. After three semesters at Gallaudet, Carrie Lou decided to leave college and move to California to explore new opportunities. In California, she worked as a Waldorf early childhood co-teacher and completed her bachelors' degree at an accelerated degree program at a small private college in San Francisco. The college worked with Carrie Lou in selecting appropriate accommodations, allowing her to choose her own team of interpreters to work with her throughout her program. Carrie Lou's transition did not navigate a traditional path, but she continued to pursue her interests in education and psychology, eventually receiving a doctoral degree in Educational Psychology. Carrie Lou's current work explores the psychological factors involved with teaching and learning in deaf education settings, with particular areas of interest in technology integration, multimodal literacy practices, and transition.

Notes

1. Unless specifically contextualized, we have adopted *deaf* as our term to describe the populations included in this research. There are many caveats required here. For decades, there has been a recognition of the difference between "little d" deaf and "big D" Deaf, typically designating an audiological and cultural perspective, respectively. Individuals who identify as deaf and Deaf represent a broad range of life experiences, ones that are challenging to categorize into simply two groups. Our choice to use *deaf* does not imply an alignment with "little d" representations, as they have been described. In this volume, *deaf* represents the broad range of individuals, groups, types of education models and settings, and community contexts, unless specifically noted.

We have also chosen to use phrases with *deaf* in the primary position, as in "deaf individuals," "deaf students," and "deaf researchers." We make this choice as authors who have, ourselves, often used the person-first descriptors and find the

need to move to a descriptor-first usage. With all due respect to the person-first tradition in inclusive language that would suggest the use of "students who are deaf" or "researchers who are deaf," we personally find this to be both cumbersome and, at times, out of sync. A common example is comparing *deaf* with another identity marker, such as *Native American* or *female*. As deaf scholars ourselves, this structure aligns well with what we have seen in the field.

2. Section 602(a) of the Individuals with Disabilities Education Act (IDEA) defines *transition services* as:

> A coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation. (20 U.S.C. 1401[a]).