



# The Value of Career Education

*A Brief Summary*



302 Visions Parkway  
Adel, Iowa 50003

T: 800.314.8972  
F: 515.993.5422

[www.kuder.com](http://www.kuder.com)  
[info@kuder.com](mailto:info@kuder.com)

# INTRODUCTION

The field of career development is strong nationally, but it has also gained international attention as the importance of offering reliable career education and planning services becomes apparent with the effects of globalization.

A variety of studies have shed light on the positive impact that career interventions have had on students and adults, and with this research comes a better understanding of the questions that the following four sections of this paper will answer:

1. WHAT ARE THE CRITICAL COMPONENTS OF EFFECTIVE CAREER INTERVENTIONS?
2. WHAT ARE THE BENEFITS OF COMPUTER-ASSISTED CAREER GUIDANCE SYSTEMS?
3. WHY IS CAREER DEVELOPMENT NECESSARY THROUGHOUT THE LIFE SPAN?
4. WHAT ARE THE PRACTICAL IMPLICATIONS OF USING SUCH CAREER SYSTEMS?

# 1. CRITICAL COMPONENTS OF EFFECTIVE CAREER INTERVENTIONS

Vocational psychology has a rich tradition of theory development and critical, empirical evaluation of the career development process across the life span (Brown & Lent, 2005). Many years of research and multiple meta-analytic studies have found that career interventions positively impact the vocational development of students and clients (Brown & Ryan-Krane, 2000; Oliver and Spokane, 1988; Swanson, 1995; Whiston, Sexton, & Lasoff, 1998).

One important study of this last decade is that of Brown and Ryan-Krane (2000) who conducted a meta-analysis with the goal of identifying the critical components to effective career interventions. They noted that the impact of career interventions is greater with the number of components used in an intervention, although none of the studies that they reviewed used more than three. The five critical career intervention components they identified through this meta-analysis are: (a) written exercises that facilitate clarification of career and life goals; (b) individualized interpretations and feedback of career assessments; (c) provision of world-of-work information; (d) modeling opportunities that demonstrate effective planning and coping strategies; and (e) attention to building support for choices within one's social network.

Brown and colleagues (2003) continued to conduct research on the five critical components and found support for the importance that these individual "ingredients" have on career choice outcomes. They were able to more specifically define each of the five components and generate hypotheses that could be tested about how to integrate them into career interventions to maximize their usefulness. For example, they suggested that career counselors not only teach students where to find informational resources, but that they provide students with the chance to gather and process occupational information during the time allotted for the career intervention. Another example is to allow students to discuss the accuracy, contradiction, or surprise of career assessment results during individualized or group interpretations.

A few other meta-analyses that address the effectiveness of career interventions inform us on factors that deserve our attention in the delivery of services. Here are the most salient:

Those who participate in a career intervention are over two-thirds better off in their ability to express future educational and occupational goals, and their confidence about career planning, than those in control conditions (Whiston, Sexton, & Lasoff, 1998).

The effect of career interventions peak at four or five sessions and drop dramatically thereafter with a greater number of sessions (Ryan, 1999).

The goals and competencies that should be the target of career development programs include the students' ability to: 1) become aware of personal characteristics, interests, aptitudes, and skills; 2) develop an understanding of and value for the diversity of the world of work; 3) comprehend the relationship between school performance and future choices; and 4) develop a positive attitude toward the pursuit of a career and work in general (Zunker, 2002).

If we look closely at the four goals in the latter description, they appear to be in accord with the father of career development theory, Dr. Donald Super, whose view of career is best summarized as a match between an individual's self-concept and the requirements of an occupational role. Self-concept, in his view, is most accurately described as a person's image of him- or herself. In this sense, knowing one's abilities; interests; values; past history; aspirations; etc., which develop gradually as the person becomes aware of all of these factors, will eventually facilitate the match to a satisfying career choice (Super, 1990; 1996).

Paisley and Hubbard (1994) outlined the specific career competencies that they thought were relevant to students in each grade level in high school. For example, they listed five competencies that they thought 10th graders should pursue. First, students should clarify how personal values play a role in their future career choice. Second, after stating their areas of career interest, students should be able to distinguish the skills and educational requirements for those interests. Third, students must be able to recognize that their work roles will impact other roles in their lives. Fourth, students must continuously assess their strengths and weaknesses for the different fields in which they are interested. Finally, students should be able to give priority to career planning and other career development needs.

Based on Paisley and Hubbard's (1994) work, Zunker (2002) suggested strategies to help counselors facilitate the exploration of self-knowledge, educational and occupational interests, and career planning. Below is a summary of such list published by the National Career Development Guidelines (NOICC, 1992 as cited in Zunker, 2002):

## **1. Self-Knowledge**

- a. Understanding the influence of a positive self-concept.

- b. Development of skills to interact positively with others.
  - c. Understanding the impact of growth and development.
- 2. Educational and Occupational Exploration**
- a. Understanding the relationship between educational achievement and career planning.
  - b. Understanding the need for positive attitudes toward work and learning.
  - c. Development of skills to locate, evaluate, and interpret career information.
  - d. Development of skills to prepare to seek, obtain, maintain, and change jobs.
  - e. Understanding the influence of societal needs and functions on the nature and structure of work.
- 3. Career Planning**
- a. Development of decision-making skills.
  - b. Understanding the interrelationship of life roles.
  - c. Understanding the continuous changes in male/female roles.
  - d. Development of skills for career planning.

## 2. BENEFITS OF COMPUTER-ASSISTED CAREER GUIDANCE SYSTEMS (CACGS)

With the technology boom of the last few decades, Computer-Assisted Career Guidance Systems (CACGS) took a step forward in connecting students and adults to easy-to-access, individually tailored career development interventions. The Internet greatly expanded access to career information but vocational psychologists now have an extensive history of incorporating technology and developing CACGS to provide a more reliable system of career development (Gore & Leuwerke, 2000). To illustrate the need for reliable systems, one may cite Boyce and Rainie's (2002) national survey in which they estimated 52 million Americans had searched that year for career information online, with about four million seeking daily. Numbers that are likely to be far exceeded with the current economic recession.

What do we know so far about CACGS? Hughes and Karp's (2004) research enabled them to conclude that CACGS have had a positive impact on important constructs such as career decision-making self-efficacy, career commitment, career decidedness, and career maturity. Further, CACGS may be particularly well-suited to support academic planning for students, as students can use these systems to complete assessments; explore majors, careers, and colleges; and use information to build a course plan for high school and beyond.

The importance of academic planning, a predictor of successful career transition and completion, has gained incredible strength and has often been included in State legislative agendas in the recent past. Two examples are states South Carolina (Education and Economic Development Act, 2005) and Iowa (Senate File 2216, 2008), which require each student to have a four-year plan for high school courses by the completion of the eighth grade. Today, CACGS are the leading tool in the development of such education plans.

Researchers have studied the use of a CACGS for the academic planning process and found that it has tested as a positive application. For example, Peterson, Long, and Billups (1999) reported on the results

of an investigation that looked at how students utilized three different types of career interventions designed to facilitate academic planning for high school. The interventions included: 1) An announcement of an upcoming planning session with the school counselor and instructions on how to prepare the career plan; 2) handouts and a manual on school and state graduation requirements; and, 3) use of an assessment via a CACGS and four sessions to support students in the planning process. The results demonstrated that of the students provided with the announcement, only a small percentage created a specific plan that suitably matched their education goals. Students provided with a manual had more success creating an appropriate plan. Those that utilized the CACGS with instruction had 100 percent success developing a specific, appropriate academic plan that listed classes in the correct sequence (Peterson, et al., 1999).

The use of a CACGS has also proven to be an effective accountability tool at a variety of levels. Gore and colleagues (Gore et al. 2006; Gore & Leuwerke, 2000) found that computer-based systems allow for extensive examination of actual career exploration behavior because aspects of users' behaviors can be tracked through the system in a noninvasive manner. Gati and Tikotzi (1989) also examined actual career exploration behavior through records of interaction with a CACGS. Individuals' actual career exploration behavior was measured to better understand the process and impact of this critical component of career development. By having these data on hand, administrators, counselors, and others are also able to pinpoint real-time results of interaction with the system. As a tool for confirming the validity of the system, these reporting capabilities are invaluable.

Overall, the literature base evaluating the effectiveness and outcomes of computer-based career interventions supports the conclusion that students and clients benefit from system use, particularly in regard to cost effectiveness (Whiston, Sexton, & Lasoff, 1998). A more recent meta-analysis of career interventions found that computer-assisted interventions that also included interaction with a counselor were superior to instances of students or clients interacting with the computer alone (Whiston, Brecheisen, & Stephens, 2003). It is through this partnership of technology and a concern for the career development of the future workforce that students and adults are able to discover successful, satisfying opportunities.

# 3. CAREER DEVELOPMENT THROUGHOUT THE LIFE SPAN

According to Dr. Super (1996), there are specific skills that should be constructed and maintained throughout the life span in order to deal with career choice and management tasks at any given point in time. The interventions he proposed to develop include:

- Knowledge of self-attributes (e.g., interests, skills/abilities, and work-related values).
- A well-defined self-concept.
- Broad knowledge of the world of work.
- Detailed knowledge and reality testing of occupations under consideration.
- Awareness of the need to plan ahead.
- Decision-making skill.
- Knowledge and use of appropriate resources for career decision making.

This set of skills, indicative of career maturity, can be used again and again in the changeable 21st century work environment (Super, 1996).

As a model for vocational development and the organization of career and education counseling, Dr. Super's theory of career development for the life span stands out as the industry's leading and most long-lasting practices. The theory of career development for the life span, which has been built with over 70 years of research, establishes occupational choice as an "unfolding process" rather than a decision made at a single point in time. Dr. Super states that because life is not static – but instead undergoes continuous, predictable changes according to the psychology and the social roles expected of someone during their various life stages – that career development, too, requires a "redesign" for every stage of life.

Just as individuals experience physical and intellectual development and progressive maturity, they also experience the phenomenon of career development and maturity. Just as physical and intellectual

development can be stunted if appropriate interventions are not applied, so can the normal developmental process of career development be stunted if appropriate interventions are not available in a planned, systematic way.

Dr. Super's studies discovered a series of five predictable, major stages of life relating to psychosocial maturation: growth; exploration; establishment; maintenance; and disengagement. These stages correlate to appropriate ages, as career choice readiness increases with chronological age and school grade (Crites, 1965). Each life stage proposes a set of developmental needs. These needs can be fulfilled, resulting in the progressive gain of career maturity and development, through a planned, systematic, ongoing program of services and resources available from early childhood through adulthood.

## GROWTH (CHILDREN AGES FOUR TO 13)

### Elementary School (Up to Grade Five)

Children during this time period need to develop an image of who they are and form a positive self-concept. They need to become aware of work as a means of self-expression, of supporting desired activities in other life roles, and as a contribution to society. These first years of growth see the foundation built for many of the work habits and attitudes desired in occupations. As a goal, children should by the end of this stage in life have higher confidence in making decisions and completing tasks, as well as an understanding in the importance of looking to the future.

### Middle School (Grades Six Through Eight)

During the grades six through eight, interests are being formed which guide children to prefer certain types of activities over others. Children need to become consciously aware of these developing interests so that they may learn to plan ahead, make decisions, and develop a strong internal locus of control. In relation to the work world, they need to experience a broad exploration of possibilities in an organized way. By the end of this time span, they should be able to make some tentative choices that guide the selection of their high school curriculum.

## EXPLORATION (ADOLESCENTS AGES 14-24)

### Secondary School Students (Grades Nine Through 12)

Interests and self-concepts become more defined in secondary school students, as do values. Students seek competencies (skills) in areas of their interest and should begin to connect the relationship of

learning in school to future work. Developmentally, they need to make tentative choices and gain detailed information about those choices, including as much reality testing (job shadowing, part-time jobs, related coursework, etc.) as possible.

This period in students' lives is one in which the exploration of knowledge and storing of a great deal of information should be encouraged in order to plan for a successful future. They should understand the educational options available to them after high school and make a choice about the next steps to take. They need to plan, take, and succeed in high school courses that build the foundation for postsecondary education or work, as well as develop the soft skills needed to live harmoniously in family and work life. Additionally, they should also learn the necessity of acquiring some form of postsecondary education and understand the process of career choice and change.

## Postsecondary Students

Postsecondary students need to make an informed choice of major that is related to their interests and occupational choices. They need to gain skills to perform well in the chosen occupation and continue their development of soft skills. Further, they should understand the requirements of the world of work and how to find access to it through good job-seeking skills and documents. They must have the ability to engage in lifelong learning and to be resilient when job change or career redirection is required, and in the case that such action is required, they need to know how to access available sources for financial aid and job placement.

## ESTABLISHMENT (YOUNG ADULTS AGES 25-44)

### Adults Establishing a Career

At this point, adults should be in the process of stabilizing and advancing in an occupational position of their choice. This involves securing a job and continuing to perform it in accordance with or above the expectations of an employer, whether through progressive training or demonstrated work attitudes and habits that are seen as positive. Adults should also expect to advance professionally by some means within their organization or in their level of responsibilities, sometimes by searching for and applying to new positions within the same industry, organization, or workplace.

Completing a successful job search such as this requires the ability to prepare job-seeking documents and identify possible employers. Additionally, adults should have an avenue to communicate their skills and experience to employers who are seeking talented employees.

## MAINTENANCE (ADULTS AGES 45-65)

### Adults Making Life Changes

During this life stage, adults may be reconsidering their career placement as one in which they wish to stay for the rest of their life. If they choose to stay or advance in this occupation, they enter career maintenance, which requires keeping current in the industry with available training and bringing innovative ideas to the table. If they decide to change their occupational choice, they must undergo the process of exploration and establishment again. This is not an easy process without the appropriate aid, as options seem limited without the width of information required to make an informed decision.

Adults need support for career change and job placement. Due to the economy, disability, life changes, or job dissatisfaction, adults may need to reassess their interests, skills, and values as they redirect their careers. They may need assistance with identifying other occupations that require the skills they now have or jobs that have options for retraining.

## DISENGAGEMENT (ADULTS AGES 65+)

### Adults Approaching Retirement

Disengagement approaches as, after extensive experience at an occupation, workers begin to see a decline in interest and energy for their job. Adults begin to consider retirement and seek to make plans that will allow them to live comfortably. Retirees, at this point in their life, may decide to research other avenues that match their interests, utilize their experiences and skills, and still allow for the space of retirement living. These avenues can include volunteer work or mentoring.

As Havighurst (1953) stated, and as some Career Pattern Study cases reveal (Bell, Super, & Dunn, 1988), skipping a life stage in Dr. Super's career development through the life span cycle may present difficulties when the person encounters a later stage of development. A lack of exploration, for example, frequently leads to unsuccessful, unsatisfying choices for occupation.

# 4. PRACTICAL IMPLICATIONS OF IMPLEMENTING A DEVELOPMENTALLY APPROPRIATE CACGS

With the variety of opportunities and information available through career interventions, students and adults can find themselves in possession of a skill set that can be used each time a career transition is desired or required across their life span. By having access to information about the competencies required in different occupations, and how those competencies traverse other career fields, students and adults can develop and utilize a flexible, advantageous skill set.

What are some of the expected outcomes if students and adults have access to and utilize a research-based, developmentally appropriate sequence of well-designed interventions for the development of career maturity? Studies and data have found a consistent, supported set of conclusions. The following are many research-supported benefits we would expect to see with these students and adults.

## HIGHER MOTIVATION IN SCHOOL LEADING TO ACADEMIC SUCCESS

Students experience a higher level of motivation in middle and high school that increases adjustment to school and academic success. Lapan, Gysbers, and Petroski (2001) examined the relationship of statewide implementation of comprehensive guidance and counseling programs and indicators of safety and success for seventh graders. Hierarchical linear modeling was used to analyze data from 22,601 seventh graders attending 184 Missouri schools and 4,868 middle school teachers. After researchers controlled for differences between schools due to socioeconomic status and enrollment size, students attending middle schools with more fully implemented comprehensive career programs reported:

## FEELING SAFER ATTENDING THEIR SCHOOLS.

Having better relationships with their teachers.

Believing that their education was more relevant and important to their futures.

Being more satisfied with the quality of education available to them in their schools.

Having fewer problems related to the physical and interpersonal milieu in their schools.

Earning higher grades.

## DECREASE IN HIGH SCHOOL DROPOUT RATE

Components of CACGS often lead to a decrease in high school dropout rates. Noonan (2005) concludes that assisting students in effective academic planning contributes to more successful completion of coursework and results in greater retention and graduation rates. In a comprehensive review of research done by the National Center for Dropout Prevention, 15 strategies were identified that are effective in dropout prevention. Two of these strategies – a quality guidance program and service-learning – are essential.

The benefits of extended learning opportunities in decreasing dropout rates are expressed well in a quote extracted from a study conducted by Dunlap (1998): “There are numerous benefits from blending service-learning and school-to-work programs: students can gain powerful work experience while contributing to the community, employers benefit with prepared employees, schools benefit from students actively engaged in learning, and student growth intellectually and personally is supported by their civic and social growth and in their preparation for a career and for life.”

Stone (2004) has identified several career program techniques that keep students in school. These include career guidance, work-based learning, career pathways, and tech prep. Bauer and Michael (1993) found that a guidance model using career interest inventories and job readiness training can increase at-risk student school engagement by 35 percent.

## HIGHER RATE OF STUDENTS PURSUING POSTSECONDARY EDUCATION

D’Achiardi-Ressler and colleagues (2008) studied the rate at which students pursuing postsecondary education would exceed the national average with the use of the Kuder Career Planning System® (KCPS). In this study, students using the system transitioned from high school to higher education at a

higher rate as compared to those who did not use the system. From two technical colleges in South Carolina, with a combined group of 1,989 participants, the data indicated that of the students who chose to use the system, 90.8 percent graduated from high school and transitioned to technical college. With a national average transition rate of 67 percent, these numbers are initial evidence that the availability of such career intervention tools has an impact on students' transition rate.

## IMPROVED SELECTION OF POSTSECONDARY MAJORS

D'Achiardi-Ressler and colleagues (2008), provided evidence that institutions of higher education witness an improved selection of postsecondary majors if the results of interest inventories are used to make that selection. More specifically, students demonstrated better career decision-making skills, including fewer changes in their choice of college major. Students using the career and education planning system changed their college major zero times on average, compared to those who did not use such a system and changed their college major an average of 2.12 times. Further, findings showed that 60.9 percent of system users had never changed their major, whereas only 22 percent of non-users never changed it.

Other evidence in this study linked congruence between the students' choices of major and the results of their interest and skills assessments taken through the system. In this study, congruence indices suggested that users of the KCPS selected college majors that are highly congruent with their interest assessment and moderately congruent with their skills assessment.

## GREATER SUCCESS IN RESULTS OF JOB SEARCH

Research shows that students find greater motivation for the job search when they have previously engaged in career exploration, enabling them to attain a higher degree of job satisfaction and success when they enter the job market. In addition to examining the connections among career exploration and related variables, career exploration has been found to positively impact the career development processes.

Werbel (2000) reported that career exploration impacted the intensity of college graduates' job search, which in turn influenced the level of compensation at a first job. Exploration behavior has also been found to influence employees' initial expectations and socialization when starting a new job (Stumpf & Hartman, 1984). These researchers found connections among the amount of information gathered during exploration and increased their work motivation. These findings specifically identify the role of career exploration behavior upon subsequent career development outcomes. Gati, Gadassi, and Shemesh (2006) interviewed users of a computer-assisted career guidance system six years after

system usage and found that individuals employed in careers suggested by the computer system were much more satisfied than individuals in careers that were not recommended by the system.

## GREATER EARNING POWER

There is evidence that career information and services enable students and adults to make informed career decisions that result in economic benefits for both the individual and their community. Students who use career and education planning systems to further their education or training are shown to have greater earning power, contributing positively to their own lifestyles as well as to the tax base of their communities, states, and country. Workers without a high school diploma earn approximately \$852,000 over a 40-year career. This is \$672,000 less than those with an associate degree, and a bachelor's degree can increase earning more than \$1.9 million over a 40-year period (Dolin, 2001).

Further, career guidance has shown to reduce occupational mismatch, a problem in workplaces that increases aggregate demand and gross domestic product. Students who explore their career options in order to make informed career decisions are able to seek out the best possible education and occupation beyond high school (Mayston, 2002). Young employees often change their jobs; many workers by the age 27 have had between six and eight jobs (Veum & Weiss, 1993). Reducing employee turnover can do much to improve finances within an organization, as money can otherwise be spilled into training and orienting employees; the loss of productivity due to occupational mismatch and job loss; and the many other costs associated to the individual who has lost their job (Gillie & Isenhour, 2005).

# APPLICATION

Kuder understands that career guidance, starting at any age, has positive effects including decreased dropout rates and greater earning power. Kuder's ([www.kuder.com](http://www.kuder.com)) complete suite of solutions, from the comprehensive, evidence-based Kuder Career Planning System for all ages to ongoing expert support services such as professional development and certification for teachers, counselors, and other professionals, is designed to ensure today's students and adults receive valuable and effective career education and guidance. This approach follows and showcases positive outcomes of the four core tenants of this paper:

1. Critical Components of Effective Career Intervention
2. Benefits of Computer-Assisted Career Guidance Systems (CACGS)
3. Career Development through the Life Span
4. Practical Implications of Using Career Development Systems

Kuder is your partner for implementing and maintaining the only comprehensive career guidance system available and proven to support career interventions for all ages.

Learn more at [www.kuder.com](http://www.kuder.com).

Contact Kuder at [info@kuder.com](mailto:info@kuder.com) or +1 515.993.3005/800.314.8972.

# REFERENCES

- Bauer, R., & Michael, R. (1993). *They're still in school: Results of an intervention program for at-risk high school students*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta.
- Bell, A.P., Super, D.E., & Dunn, T.B. (1988). Understanding and implementing career theory: A case study approach. *Counseling and Human Development*, 20(8), 1-19.
- Boyce, A., & Rainie, L. (2002, July). *Online job hunting*. *Pew Internet project data memo*. Retrieved January 30, 2008 from [www.pewinternet.org/pdfs/PIP\\_Jobhunt\\_Memo.pdf](http://www.pewinternet.org/pdfs/PIP_Jobhunt_Memo.pdf).
- Brown, S. D., & Lent, R. W. (2005). *Career development and counseling: Putting theory and research to work*. Hoboken, NJ: John Wiley & Sons.
- Brown, S. D., & Ryan-Krane, N. E. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 740-766). New York: John Wiley.
- Brown, S. D., Ryan Krane, N. E., Brecheisen, J., Castelino, P., Budisin, I., Miller, M. et al. (2003). Critical ingredients of career choice interventions: More analyses and new hypotheses. *Journal of Vocational Behavior*, 62, 411-428.
- Crites, J.O. (1965). Measurement of vocational maturity in adolescence: I. Attitude Test of the Vocational Development Inventory. *Psychological Monographs*, 79 (2, Whole No. 595).
- D'Achiardi-Ressler, C. (2008). The impact of using the Kuder® Career Planning System: School performance, career decision making, & educational transitions. Retrieved August 6, 2009, from [http://www.kuder.com/downloads/News/2008\\_D'Achiardi-Article.pdf](http://www.kuder.com/downloads/News/2008_D'Achiardi-Article.pdf).
- Dolin, E. (2001, December 19). Give yourself the gift of a degree. *Employment Policy Foundation (EPF) News Release*.
- Gati, I., Gadassi, R., & Shemesh, N. (2006). The predictive validity of a computer-assisted career decision-making system: A six-year follow-up. *Journal of Vocational Behavior*, 68, 205-219.
- Gati, I. & Tikotzi, Y. (1989). Strategies for collection and processing of occupational information in making career decisions. *Journal of Counseling Psychology*, 36, 430-439.

Gillie, S., & Isenhour, M. (2005). The educational, social, and economic benefits of making informed and considered career decisions. America's Career Resource Network Association Research-based Policy Guidance. Retrieved August 6, 2009, from <http://inpathways.net/iccd.pdf>.

Gore, P. A., & Leuwerke, W. C. (2000). Information technology for career assessment on the Internet. *Journal of Career Assessment*, 8, 3-20.

Gore, P. A., Jr., Leuwerke, W. C., & Krumboltz, J. D. (2002). Technologically enriched and boundaryless lives: Time for a paradigm upgrade. *Counseling Psychologist*, 30, 847-857.

Gore, P.A., Jr., Bobek, B.L., Robbins, S.B., & Shayne, L. (2006). Computer-based career exploration: Usage patterns and typology of users. *Journal of Career Assessment*, 14, 421-436.

Havighurst, R.J. (1953). *Human development and education*. White Plains, NY: Longman.

Hughes, K. L., & Karp, M. M. (2004, February). *School-based career development: A synthesis of the literature*. New York: Institute on Education and the Economy, Teachers College, Columbia University.

Noonan, B. M., Sedlacek, W. E., & Veerasamy, S. (2005). Employing noncognitive variables in admitting and advising community college students. *Community College Journal of Research and Practice*, 29, 463-469.

Oliver, L. W., & Spokane, A. R. (1988). Career-intervention outcome: What contributes to client gain? *Journal of Counseling Psychology*, 35, 447-462.

Peterson, G. W., Long, K. L., & Billups, A. (1999). The effect of three career interventions on educational choices of eighth grade students. *Professional School Counseling*, 3, 34-42.

Ryan, N.E. (1999). *Career counseling and career choice goal attainment: A meta-analytically derived model for career counseling practice*. Unpublished doctoral dissertation. Loyola University, Chicago.

Stone, J. R. (2004). Career and technical education: Increasing school engagement. In J. Smink, J. & F.P., Schargel. (Eds.), *Helping students graduate: A strategic approach to dropout prevention* (pp. 195-203.). Larchmont, NY: Eye on Education.

Stumpf, S. A. & Hartman, K. (1984). Individual exploration to organizational commitment or withdrawal. *Academy of Management Journal*, 27, 308-329.

Swanson, J. L. (1995). The process and outcome of career counseling. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational Psychology: Theory, Research, and Practice* (2nd ed.), 217-259. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Super, D.E., Savickas, M.L., & Super, C.M. (1996). The life-span, life-space approach to careers. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 121-178). San Francisco: Jossey-Bass.

Veum, J.R., & Weiss, A.B. (1993, April). Education and the work histories of young adults. *Monthly Labor Review*, 11-20.

Werbel, J. D. (2000). Relationships among career exploration, job search intensity, and job search effectiveness in graduating college students. *Journal of Vocational Behavior*, 57, 379-394.

Whiston, S. C., Brecheisen, B. K., & Stephens, J. (2003). Does treatment modality affect career counseling effectiveness? *Journal of Vocational Behavior*, 62, 390-410.

Whiston, S.C., Sexton T.L., & Lasoff, D.L. (1998). Career-intervention outcome: A replication and extension of Oliver and Spokane (1988). *Journal of Counseling Psychology*, 45, 150-165.

Zunker, V.G. (2002). *Career counseling: Applied concepts of life planning* (6th ed.). Pacific Grove, CA: Brooks/Cole.



### **Our Vision**

To help people discover and achieve what they want to be.

### **Our Mission**

To be the global authority in career guidance and education by providing evidence-based and proven tools to navigate life's journey.  
Our resources help to raise aspirations to last a lifetime.