Office of Community College Research and Leadership

TRANSITION Highlights

Issue 3 — January 2011

THE RELATIONSHIP OF INDIVIDUAL CAREER PLANS TO PROGRAMS OF STUDY AND CAREER PATHWAYS

by *Stephanie Kalchik* and *Kathleen Marie Oertle*

WHAT IS AN INDIVIDUAL CAREER PLAN (ICP)?

Emerging in the late 1960s and early 1970s, the concept of individual student planning developed as a component of school guidance counseling programs. The underlying significance of these plans, such as the Individual Career Plan, is that "it gives [students] a chance to tell and develop their story" (N. Gysbers, personal communication, December 7, 2010). Conducting some of the first research on career planning, Gysbers (1983) provided an early definition of the Individual Career Development Plan, which focuses on the development of an instrument and a process. He explained the importance of the Plan as follows:

> As an instrument, a plan can provide a place for people to record the aptitudes, interests, values, and competencies they possess, and an opportunity to itemize those they may wish to work on or acquire. It can become an organizer for personal, educational, and occupational information, which can then be updated periodically. As a process, a plan can become a pathway or a guide through which individuals may use the past and the present to look forward to the future. (p. 5)

Over the years, Gysbers (1983) has emphasized that such a plan is not a routine track to follow but rather a highly personalized guide that helps people plan and organize their most critical life choices, including decisions about their education and career.

A related and more recent definition of such a plan that was developed by the Council of Chief State School Officers (CCSSO) suggests Individual Learning Plans (ILPs) are

> personalized student education plans that include information such as high school courses, post-secondary education and career interests, and extracurricular activities. State approaches to developing and implementing ILPs are as varied as the information that goes into them. (in a section of the CCSSO website labeled "Individual Learning Plans", n.d.)

Appearing on the CCSSO website, this definition identifies ILPs as a strategy for supporting K-12 instruction. In this site, links are offered to six states (Colorado, New Hampshire, Kentucky, Massachusetts, Ohio, and Washington) that represent 30 states that have mandated or provided general models or frameworks for ILPs (Connolly, 2009). Connolly observes that these 30 states have "clear strategies for ILPs" (p. 7), and she describes the role of the states and districts in implementing ILPs. Other results of the national survey by Connolly show only eight of all 50 states have no state mandate for ILPs, no state support for ILPs, and no plans for adopting ILPs, and Illinois is in this group. All other states are implementing, planning to adopt, or currently discussing ILPs.

As demonstrated in the above definitions of Individual Career Plans and Individual Learning Plans, different terms are used to describe the tool and the process that is known as the Individual Career Plan (ICP). For consistency, this type of plan is referred to as ICP throughout this brief. For reference, the following list presents a sample of terms that authors use to describe the same type of plan:

- Individual Learning Plan (ILP) (Burgess, 2008; Connolly, 2009; Solomon, Solomon, & Solomon, 2010; Wilkerson, 2010)
- Mandated Career Plan (Martin, Carey, & DeCoster, 2009)
- Individual Academic Plan (Horry-Georgetown Technical College [HGTC], 2008)
- Individual Student Planning (Gysbers, 2008)
- Graduation and Career Plan (The Carl D. Perkins Vocational and Technical Education Improvement Act, 2006)
- Personalized Learning Plan (Gibson & Clarke, 2000)
- Individual Career Development Plan (Gysbers, 1983)

In his foundational piece, Gysbers (1983) supplemented his definition of the ICP with the following list of characteristics:

- Never completed; an ongoing record
- Flexible; a document that can be used throughout an individual's lifespan
- Person-centered; belongs to the individual using it
- Competency-based; records current competencies and identifies further competencies to be developed

IMPORTANCE OF ICPs

According to Gysbers (2008), ICPs allow students to work closely with school counselors, and this in turn begins a process of goal setting that gives students concrete direction and purpose. This leads to increased academic achievement when ICPs are included in guidance counseling programs. Wilkerson (2010) also found that school counselors supported the use of ICPs in terms of both academic progress and career preparation. Furthermore, motivation for learning and performance are maximized when ICPs are used as components of guidance processes and tools that promote autonomy and provide individuals with a greater sense of self-determination (Rigby, Deci, Patrick, & Ryan, 1992; Vansteenkiste, Lens, Deci, 2006). Martin and Marshall (1995) described people who are self-determined as individuals who:

> know how to choose—they know what they want and how to get it. From an awareness of personal needs, self-determined individuals choose goals, then doggedly pursue them. This involves asserting an individual's presence, making his or her needs known, evaluating progress toward meeting goals, adjusting performance, and creating unique approaches to solve problems. (p. 147)

ICPs are important to the process of the development, practice, and reinforcement of self-determination skills because they help individuals to be causal agents. The concept of a causal agent in association with an ICP refers to the way ICPs can encourage students to actively make things happen in their lives rather than passively waiting for things to come their way (Wehmeyer, Agran, & Hughes, 1998; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). ICPs promote goal-oriented thinking that takes application of problem-solving and decision-making skills to guide actions. The process of creating and reflecting with the ICP helps students to understand better what they do well, what they can improve, and where they need assistance (Gysbers, 2008). Consequently, the essential components of self-determination skills (choice-making, problem-solving, decision-making, goal-setting and attainment, self-regulation, self-advocacy, self-awareness, and self-efficacy) are supported through the ICP process.

Gysbers (2008) emphasizes the importance of the goal-setting aspect of ICPs, and notes several examples of the impact of ICPs at various schools in different states. For example, at Franklin Pierce School District in Washington that adopted ICPs for all students, there was a "10% increase in the number of students who progress from grade 9 to grade 10 on time," as well as "Dramatic increases in the number of students enrolling in rigorous, demanding classes: 28% increase in students requesting pre-calculus classes, 240% increase in students requesting physics classes, and 180% increase in students requesting chemistry classes" (p. 132). Furthermore, ICPs have been shown to increase student engagement, improve decision-making, improve transition outcomes, increase interactions among parents and teachers, and generate useful data (Bullock, Harris, & Jamieson, 1996; Connolly, 2009; Welsh, 2005).

ROOTS OF THE ICP

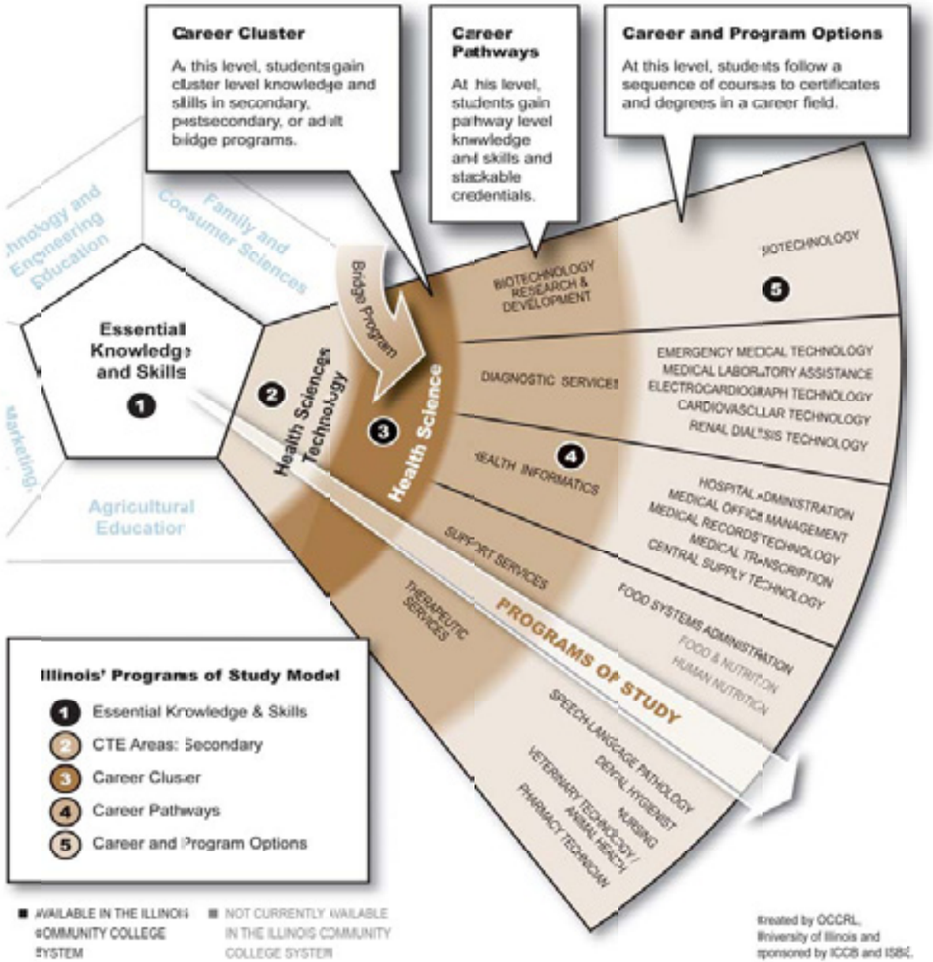
Gysbers (1983) attributed the emergence of ICPs to ideas associated with **career development** in the late 1970s. The foundational notion of career development emphasizes that occupational decisions are made throughout an individual's lifetime and involve all aspects of an individual's life; occupational choices are not isolated from other needs, anxieties, and responsibilities. As part of career guidance, ICPs assist in dealing with "the developmental concerns of individuals as well as with their immediate concerns and the crises in their lives" (p. 7).

In her reporting results of the national survey, Connolly (2009) linked ILPs to **Individualized Education Plans (IEPs)**, which have been mandated since 1975 to support the educational progression of students with disabilities. She discussed an expansion of the idea of IEPs to include a "6-year academic plan, career interests, student reflection data, personality and learning style assessments, and action plans" (p. 4). The *Individuals with Disabilities Improvement Act of 2004*, the current federal legislation addressing the educational needs of students with disabilities, requires that IEPs include measureable transition goals for students who are 16 years and older, and it also requires data collection for postsecondary outcomes. Building on these ideas, Connolly observed that ILPs provide data that are usually left out of state-level data systems, including student-level data pertaining to career interests, student reflections, learning style inventory results, etc. Through the adoption of ILPs, states can build a comprehensive instructional support system that emphasizes student planning and enhance data reporting and accountability requirements of No Child Left Behind. ILPs (or ICPs) also have a strong connection to other federal legislation, specifically the Carl D. Perkins Career and Technical Education Act of 2006 that mandates that all states accepting federal dollars for career and technical education (CTE) adopt at least one Program of Study that extends from secondary to postsecondary education.

PROGRAMS OF STUDY AND CAREER PATHWAYS AS A STRUCTURE FOR PLANNING

Programs of Study (POS) in association with CTE are often aligned with the 16 nationally recognized Career Clusters and approximately 79 Career Pathways (States' Career Clusters Initiative website, 2010). From this perspective, a POS is a framework for aligning academic and CTE course sequences, connecting secondary and postsecondary education and guiding students in their career development (Jankowski, Kirby, Bragg, Taylor, & Oertle, 2009; Kalchik & Oertle, 2010; States' Career Clusters Initiative website, 2010; Taylor et al., 2009). Through participation in POS course sequences, students explore their career interests while increasing their academic knowledge and skills and developing a career identity (Lewis, Kosine, & Overman, 2008).

The following figure represents Illinois' POS model that displays the relationships between Illinois' five secondary CTE Areas, the Career Cluster, the Career Pathways within that Cluster, and the Career and Program Options within the Career Pathway. This figure uses a POS in health sciences technology as an example of the way in which students gain access to and advance through multiple levels of academic and career preparation that connects education to credentials and eventually to employment.



Note that the lines between the Career Cluster, the Career Pathways, and the Program Career Options are blurred to represent the flexibility that students have to move between different career areas. As students advance through the education system, they can move through a linear sequence of coursework, although we know many students do not know exactly what they want to do and so they explore, find new options that interest them, and move to study different programs. Illinois' POS model is designed to support this flexibility, and a growing number of students' POS courses are rewarded with dual credit. In addition, the arrow labeled Programs of Study extends beyond the border of the figure, denoting the idea that education and career development continues throughout an individual's lifespan. The POS arrow also illustrates that individuals can earn credentials beyond the associate and baccalaureate degree levels.

The POS framework provides a strategy that students can use to help them think about next steps in their educational and career progression (N. Gysbers, personal communication, December 7, 2010). Thus, students can develop and modify their ICPs using the POS information for short- and long-term goal-setting, including life-long learning. Integrating the ICP with the POS framework would provide processes and tools that students can use to organize, plan, and reflect on their career journey while learning and practicing self-determination skills (Gysbers, 2008; Wehmeyer et al., 2003).

RELATIONSHIP OF ICPS TO GUIDANCE COUNSELING AND ADVISING

Optimally, ICPs are implemented as a component of guidance and career counseling in schools and colleges. For example, Horry-Georgetown Technical College in South Carolina has named their version of an ICP the Guided Plan for Success (GPS). GPS came about partly in response to student concerns about advising, based on the results of a 2007 focus group with students. In developing GPS, there was a "focus on improving the total advising system to foster student success" (HGTC, 2008, pp. 8-9). Through GPS, students benefit from guidance efforts in forming goals early and in progressing towards those goals. GPS aims to provide individual student support while encouraging students to actively participate in the advising process.

Gysbers (2008) also claims that ICPs help students make connections to the guidance counseling and support a comprehensive approach to guidance and counseling:

> The purpose of the individual student planning component of a comprehensive guidance and counseling program is to provide all students with guidance and counseling activities to assist them to positively assess, plan for, and then monitor or manage their personal-social, academic, and career development (p. 122).

In addition, Wilkerson (2010) lists specific ways in which guidance counselors implement aspects of ICPs. In particular, she identifies advising activities that include academic planning, career counseling, career interest assessments, and Career Cluster/Pathway/major discussions.

IMPLEMENTATION

Experts recommend that elementary school students be introduced to the ICP process to begin building a foundation for future planning that includes career awareness and exploration (Gysbers, 2008; Magnuson & Starr, 2000). Applying ICPs to youth, Magnuson and Starr (2000) claim that, "Through career awareness and exploration children become knowledgeable about themselves, other people, and the world of work and workers" (p. 92). Drawing from the scholarly work of noted child development theorists such as Erikson, Piaget, and Vygotsky and career development theorists such as Super and Gottfredson, Magnuson and Starr argue that self-awareness and career awareness are interconnected. Therefore, career awareness and career planning needs to begin early. They also contend it is never too late to begin the process. No matter when ICPs are introduced, as individuals build knowledge and skills, career exploration and development become more central to the ICP process and less focused on the initial stage of career awareness.

Adopted by many states and endorsed by the American School Counselors Association (ASCA) is the implementation of ICPs as part of a comprehensive guidance and counseling program that includes characteristics and assumptions that are grounded in students as learners. Through a comprehensive framework, leadership situates guidance and counseling as centerpieces of education, not as an add-on (Gysbers & Henderson, 2001). According to Crow (2008) and Gysbers (2005, 2008), key features of such programs include:

- an assumption that all students can learn and want to succeed
- connection and direction that supports academic achievement
- career planning and management that are utilized to improve learning and motivation
- physically and emotionally safe learning environments that emphasize students' interests, strengths, dreams, and plans, while addressing learning needs
- evidence-based assessment, curriculum, instruction, and discipline policies that are student-centered and promote learning

- on-going development, assessment, reflection, and revision of education and career goals that students undertake to support their own learning and success
- activities that support continuous quality improvement
- schools that implement learning communities where learning is shared and interdependent
- strategies that enable students to gain and maintain lifelong career planning knowledge, skills, and behaviors

A comprehensive guidance and counseling program provides a framework to assist in making ICPs useful to students. Without this, ICPs can easily turn into a list-making and checking exercise that lacks meaning and significance for students. Therefore, ICP implementation should be intentionally connected to an active guidance and counseling process that teaches students how to use their ICPs to guide their actions and actualize their education and career aspirations. Gysbers claims, "The goal is for students' plans to become pathways or guides through which students can use the past and present to anticipate and prepare for the[ir] future" (2005, p. 210). Furthermore, an acclaimed group of educational researchers recommends that "high schools should make sure that these plans [ICPs] are living documents that are referred to by teachers and counselors, and provided to parents" (Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009, p. 15). Implemented in this manner, ICPs are meant to assist students to explore academic and career opportunities with structured support, and they do not limit students' choices or force them to commit to a specific career early in their educational journey, which has been a criticism of ICP implementation in some states (J. Makela, personal communication, January 30, 2011, Orfield & Paul, 1994). To address this concern, Gysbers (2008) describes three strategies the involve school counselors integrally in ICP implementation:

- Individual appraisal. School counselors help students to assess and interpret their abilities, interests, skills, and achievement.
- Individual advisement. School counselors help students use self-appraisal information along with personal/social, academic, career, and labor market information to plan for and realize their personal, social, academic, and career goals.
- Transition planning. School counselors and other education personnel help students make the transition from school to work or to additional education and training. (p. 123-124)

As technology advances and becomes increasingly more available, ICPs will evolve. While the paper and pencil format still exists, web-based ICP portals are becoming more commonplace to engage students in their own planning, decision making, and preparation (Conolly, 2009). Multiple examples of implementation and guidance associated with ICPs are included in the resource section of this paper to illustrate how students can engage and utilize these various ICP-related tools and processes.

CHALLENGES

Implementation of ICPs has several challenges that deserve attention. At the macro level, some states mandate the use of ICPs, but do not provide leadership for systems change, new organizational structures, or support systems that provide students with the knowledge and skills they need to develop their own plans. ICP mandates without state level leadership, structure, and support offer little to those responsible for ICP implementation at the local level, and this results in inadequate policies and protocols, minimal efforts, and limited benefits for students (Martin et al. 2009; N. Gysbers, personal communication, December 7, 2010; Wilkerson, 2010). Additionally, in their national study

of the current status of state school counseling models, Martin et al. (2009) found that variations in political power, economic resources, and demographics influenced the ability of states to support the implementation of ICPs in a comprehensive fashion. For example, states with active state-level leadership for CTE appeared more able to support and access resources for comprehensive guidance and counseling initiatives than those states without such leadership. Furthermore, Martin et al. (2009) found that the weight of local control in some states created additional challenges for implementing ICPs, suggesting that state leaders need to find alternatives to state mandates and requirements that may not be effective in these situations. Engaging local leaders in implementation begins by convincing them of the potential of ICPs to improve student achievement and success.

At the local level, school districts, individual schools, and institutions of higher education often face difficulties finding and receiving support for ICP implementation. A problem for many states and especially Illinois is the ratio of students to counselors. ASCA recommends a 250-to-1 student-to-counselor ratio, but the national average is 457-to-1. As of 2008-09, Illinois' ratio was 672-to-1, ranking the state 46th in the nation (ASCA, n.d.). In these circumstances, students have limited opportunity to meet with a counselor and gather information about future education and careers, and counselors have minimal opportunity to gain new knowledge and communicate with other counselors to maximize their ability to counsel students about careers (Dykeman et al., 2003; Wilkerson, 2010). Further, some counselor programs do not emphasize the value of career courses, reducing the possibility that counselors will understand the connection between career theory and practice and understand how to implement ICPs (Wilkerson, 2010). Professional development, additional time, and personnel are needed to assist in demonstrating the significance of ICPs to various stakeholders (e.g., school leaders, students, and their families). Gysbers described this challenge as follows: "We have what I would call an 'implementation gap;' we have a lot of rhetoric, but we still are working on getting it [ICPs] actually put into the schools in a way that makes sense to students and their parents" (personal communication, December 7, 2010).

At both the macro and micro levels, insufficient evaluation of a formative and summative nature has been conducted. Furthermore, while there has been some research on the effects of ICPs on student outcomes, this research is limited (Dykeman et al., 2003; Martin et al., 2009). It takes time to follow students through the ICP implementation process and assess their choices, persistence, and outcomes. However, more evaluation and research is critical. Investigation is especially needed because so little information is available about how ICPs continue to be useful to students through college and into their careers. The primary focus has been on middle and high school planning and transitions; although other countries such as Hong Kong use plans as documentation of future education and employment (Gysbers, 2008; N. Gysbers, personal communication, December 7, 2010).

For Further Reading

Governor's Workforce Development Council (2011). *All hands on deck: Sixteen ideas for strengthening Minnesota's workforce.* Retrieved from http://www.gwdc.org/policy_advisory/All_Hands_on_Deck_2011.pdf

Gysbers, N. C., & Henderson, P. (2006). *Developing and managing your school guidance and counseling program*. Alexandria, VA: American Counseling Association.

Individual Career Plan Models. (n.d.). Retrieved from http://www.ericdigests.org/pre-928/career.htm

Millwood, R., Powell, S., & Tindall, I. (2009). Undergraduate student as action researcher: Work-focused learning. *Educational Cybernetics: Conference Papers*. Institute for Educational Cybernetics. Retrieved from http://digitalcommons.bolton.ac.uk/cgi/viewcontent.cgi?article=1008&context=iec_conference

Protheroe, N., (2010, May). Making effective use of counselors to increase student achievement. *Principal's Research Review, 3,* 1-7. Retrieved from http://www.principals.org/Content/158/10-000_prr_May10screen.pdf

Saba, F. (2008). Learning management systems of the future: A theoretical framework and design. *MERLOT Journal of Online Learning and Teaching, 4*, 158–168.

Sampson Jr., J. P., Palmer, M., & Watts, A. G. (1999). *Who needs guidance?* Centre for Guidance Studies. Retrieved from http://www.derby.ac.uk/files/who_needs_guidance1999.pdf

Stern, D. (2009). Expanding policy options for educating teenagers. *The Future of Children, 19*, 211–239.

Washor, E. (n. d.). Personalized learning: Preparing high school students to create their futures. *Big Picture Learning.* Retrieved from http://www.bigpicture.org/2002/12/when-learning-matters-using-learning-plans-to-educate-one-student-at-a-time/

RECOMMENDATIONS

With the above challenges in mind, Wilkerson (2010) proposes the following suggestions for improving the implementation of ICPs:

- Clearly communicate policies to stakeholders
- Outline specific roles for everyone involved, such as counselors, mentors, and supervisors
- Set aside time to develop and implement an evaluation system and engage in continuous improvement

The developers of **Check and Connect** (Institute on Community Integration, 2008), a high school dropout prevention program for high school students, including students with disabilities, provide several recommendations to ensure that student-level planning contributes to student success. (Also noteworthy, Check and Connect has been expanded recently to the community college through an Institute of Education Sciences (IES) grant. See: Maus, 2009). The following recommendations for implementation of Check and Connect are highly relevant to ICPs:

- Provide additional staff training to guide expectations for implementation
- Provide technical assistance for "unique situations" that may arise
- Engage in continued research to assess the effectiveness of the program, in addition to examining "the degree to which improvement in students' cognitive and affective engagement influences their willingness to attend (behavioral engagement) and engage in and complete academic work (academic engagement). (Institute on Community Integration, 2008, 67)

In addition to the specific suggestions above, Gysbers recommends a general structural shift to help improve implementation of ICPs (personal communication, December 7, 2010). He indicates that ICPs will be most successful when included within an overall structure of a comprehensive school counseling program that features a guidance curriculum. Through a guidance curriculum, students gain the knowledge and skills that can help them navigate the ICP process independently and effectively. Comprehensive school counseling programs can also help state leaders and administrators to recognize the importance of ICPs, leading to a well-rounded support system for schools offering ICPs as part of a counseling program. Gysbers (personal communication, December 7, 2010) also calls for increased interaction between elementary and high school guidance counseling programs, based on the national model of the ASCA. This can result in a smoother transition for students between levels of the educational system and ensure that their initial ICPs do not become lost during transitions. As students transition to college and careers, ICPs should support their progression through the educational system and through their career paths.

Ideally, systems, policies, procedures, programs, and people are aligned and coordinated to create educational and career pathways for all learners; however, these linkages are often not as fully developed as desired. Whereas systems' alignment is desired and is occurring in some places, it has yet to materialize uniformly or on a large scale in some states, including Illinois and this is unfortunate. When ICPs are implemented as a component of a comprehensive guidance and counseling approach, learners are empowered with skills that they can use throughout their lifetimes (Gysbers, 2008; N. Gysbers, personal communication, December 7, 2010; Shugart & Romano, 2006; Shugart & Romano, n.d.). Reinforcing the idea that ICPs need to fit into the larger structure, Gysbers observed that educators "…can't just stick this [ICP] in arbitrarily; alone. It has to fit in to a broader structure, a structure [that] we call the comprehensive school counseling program" (personal communication, December 7, 2010).

Gysbers' many years of research and his extensive experience in the U.S. and internationally create a compelling case for the ICP. He, along with many other researchers, policy makers and practitioners highlighted in this brief, are calling for the adoption of ICPs, pointing to enhanced student achievement and improved transition from high school to college and careers. We believe Illinois' students would benefit from ICPs, and we urge policy makers to adopt state policy on implementation of ICPs and to support their implementation by K-12 schools and higher education institutions throughout the state.

ICPs In Action

The following sections illustrate examples of ICPs. These examples were chosen to highlight different plans for secondary and postsecondary students. The first example, called LifeMap, was developed for use by community college students. The second example, the Self-Determined Career Development Model (SDCDM), has been used to assist elementary, middle, and high school students to develop ownership of their academic and career plans. The SDCDM is currently being tested with adult learners (Wehmeyer et al., 2009). Each example provides steps through which students progress in order to effectively plan for their education and careers.

LifeMap

LifeMap is a five-stage developmental advising model developed by Valencia Community College in Orlando, Florida. It is one component of "a trilogy of interactive systems for engaging students" (Shugart & Romano, n.d., The Systems Trilogy section, para. 1). According to Shugart and Romano, the systems trilogy is comprised of LifeMap, along with Atlas (a web-based portal learning community system) and the Learning-Centered Student Services. These components "work together to provide the platform…for operational performance and also for creating a learning centered student affairs environment" (n.d., The Systems Trilogy section, para. 1). LifeMap provides a space where students can connect with college faculty, personnel, and other resources, and it helps students to recognize and draw upon relationships among these groups (Shugart & Romano, 2006). By creating these links for students, LifeMap guides students to appropriate resources to help them complete their education and career goals. The five stages of LifeMap appear below, with a brief description of each stage (for more information, visit http://valenciacc.edu/lifemap/.

Stage	Focus	Purpose
One	Postsecondary/College Transition	Helps students make decisions about their educational options
Two	Introduction to College	Helps students make connections to resources at the beginning of their college experience to help them find success in their education
Three	Progression to Degree	Emphasizes exploration of career options and possible changes to initial career goals
Four	Graduation Transition	Offers resources to help with transition to further study or entry to careers
Five	Lifelong Learning	Recognizes that students need continuing education once they enter the workforce; Valencia offers resources to help returning students meet their educational needs for their careers

ICPs In Action (continued)

The Self-Determined Career Development Model

The Self-Determined Career Development Model (SDCDM) was created by Wehmeyer et al. (2003) and adapted from the Self-Determined Learning Model of Instruction (SDLMI), which was developed to promote self-directed learning (Mithaug, Wehmeyer, Agran, Martin, & Palmer, 1998). The SDCDM is grounded in research that indicates that enhanced self-determination leads to improved and more positive transition outcomes (Wehmeyer & Palmer, 2003; Wehmeyer, et al., 2009; Wehmeyer & Schwartz, 1997). The SDCDM is divided into phases. "In each phase, a facilitator guides students through a decision-making process by posing questions to them that require that they identify a problem, potential solutions to the problem, barriers to solving the problem, and the consequences of each solution" (Wehmeyer et al., 2003, pp. 1–2). The following table is a modification of the SDCDM framework that Wehmeyer et al. (2003) developed for facilitators to use in guiding and supporting students in career- and education-related decisions (Oertle, 2008). An example of a facilitator's guide can be accessed at http://www.wnyil.org/Compendium/bestprac/pdfs/bestpractice.pdf.

The Self-Determined Career Development Model (modified)

Phase	Problem to Solve	Questions to Answer to Solve Problem
One	What are my career or job goals?	What career and job do I want? What do I know about it now? What must change for me to get the job and career I want? What can I do to make this happen?
Two	What is my strategy?	What actions can I take to reach my career or employment goal? What could keep me from taking this action? What can I do to remove these barriers? When will I take action?
Three	What was the outcome?	What actions have I taken? What barriers have been removed? What has changed to enable me to get the job and career I want? Have I achieved what I wanted to achieve?
Four	What have I learned?	What did I do well? What do I need to do better? What has changed to enable me to get the job and career I want? What do I need to do next time?

ICP Resources

A Perspective on Individual Graduation Plans
http://www.education.ky.gov/NR/rdonlyres/7EA3CE11-41B0-406D-BCE8-9FD2B7017501/0/PerspectiveonIGP.pdf
Examples of strategies in the planning, implementation, and follow up of Individual Graduation Plans in Kentucky.

Career Cruising
http://www.careercruising.com/Public/ProIndex.aspx
Resources for course planning, networking, and test preparation rooted in the Programs of Study (POS) model.

CareerForward Course
http://nroc.careerforward.org/mvu/default.htm
20 one hour on-line sessions that assist in creating and actualizing an Educational Development Plan (EDP).

Check and Connect
http://checkandconnect.org/
Describes the Check and Connect model, including components and monitor/mentor's role.

Council of Chief State School Officers (CCSSO)
http://highschool.ccsso.org/web/guest/IndividualLearningPlans
Resources and information regarding different states' implementation of ILPs.

GACOLLEGE411
https://secure.gacollege411.org/Home/_default.aspx
A comprehensive education and career planning on-line information system

Horry-Georgetown Technical College Guided Plan for Success (GPS)
http://www.hgtc.edu/int_y.php?pageid=181
Outlines questions that GPS can help students address and illustrates the benefits of GPS.

Kentucky Department of Education
http://www.education.ky.gov/KDE/Instructional+Resources/Career+and+Technical+Education/Individual+Learning+Plan/
Individual Graduation Plan Folders - designed for students to use in academic and career planning and to help them focus on the connection between course work and goals after high school.

Ohio Career Information System
http://www.ocis.org/materials/iacp.htm
Resources for Individual Academic and Career Plans for junior high school, high school, college, and adult education.

Oregon Department of Education – Comprehensive Guidance and Counseling
http://www.ode.state.or.us/search/results/?id=132
Comprehensive guidance and counseling is an integral part of the school support system that advances high quality learning opportunities.

Pathways to College Network
http://www.pathwaystocollege.net/Default.aspx
An alliance of national organizations that advances college opportunity for underserved students by raising public awareness, supporting innovative research, and promoting evidence-based policies and practices across the K-12 and higher education sectors.

ICP Resources (continued)

South Carolina Personal Pathways to Success
https://www.scpathways.org/EEDA/default.aspx
Academic and career planning resources for students, parents, educators, adult employment-seekers, and employers.

The Kansas Career Pipeline System
http://www.kansascareerpipeline.org/
Helps individuals measure their career interests, skills and work values, explore occupations, establish educational strategies, and ultimately connect with Kansas employers who need their talents.

The Sloan Career Cornerstone Center
http://www.careercornerstone.org/aboutsccc.htm
A non-profit resource center for those exploring career paths in science, technology, engineering, mathematics, and medicine. The extensive site explores over 185 degree fields and offers detailed education requirements, salary and employment data, precollege ideas, and career planning resources.

Student Education Occupation Planning – Utah
http://www.schools.utah.gov/cte/documents/guidance/publications/SEOPBrochure.pdf
Student Education Occupation Planning (SEOP) gets information to career and technical education students and their parents or guardians about career options and educational preparation. SEOPs help students plan for high school and beyond, understand career and college options, access programs and information, and measure progress toward achieving goals.

ACKNOWLEDGEMENTS

We want to acknowledge and thank Norman C. Gysbers for his generous and thoughtful contributions to this project. Dr. Gysbers is a licensed school counselor and professor of Educational, School, and Counseling Psychology at the University of Missouri – Columbia. He has conducted extensive research in career development and planning, career counseling, and school guidance counseling programs since he received his Ph.D. in 1963 and continues to work in these areas. Gysbers served as editor of Career Development Quarterly from 1962-1970, and of The Journal of Career Development from 1978-2006. His prolific work in the arenas of career development, planning, and counseling led us to seek his input through an interview for this issue. We benefited from studying his long and deep research portfolio, including work dating from the 1980s to 2010 (see www.gcdf.com/forum/doc/vita%20of%20norma%20gasper.doc). We would also like to express our appreciation to our OCCRL colleagues Debra Bragg and Linda Iliff for their support and revisions on this project. In addition, we thank the staff from the Illinois State Board of Education for direction and encouragement throughout the research process.

ABOUT THE AUTHORS

Stephanie Kalchik served as a graduate research assistant at the Office of Community College Research and Leadership from August 2009 to December 2010, during which time she conducted research on career pathways, career development, and contextualized teaching and learning. She is currently employed full-time as an academic advisor in the Division of General Studies at the University of Illinois. Stephanie can be reached at *kalchik1@illinois.edu*.

Kathleen M. Oertle served as a graduate research assistant from August 2008 to January 2010 and was employed as a post-doctoral researcher in the Office of Community College Research and Leadership (OCCRL) from January through December, 2010. In January 2011, she took a visiting research scientist position with the Graduate College, University of Illinois. Kathleen can be reached at *oertle@illinois.edu*

REFERENCES

Bullock, K., Harris, A., & Jamieson, I. (1996). Personal development plans and equal opportunities [Electronic version]. *Educational Research, 38,* 21-35.

Burgess, A. (2008). The literacy practices of recording achievement: How a text mediates between the local and the global. *Journal of Education Policy, 23,* 49–62.

Connolly, F. (2009). *Results of state survey on individual learning plans*. Washington, D.C.: Naviance.

Council of Chief State School Officers. (n.d.). *Individual Learning Plans*. Retrieved from http://highschool.ccsso.org/web/guest/IndividualLearningPlans

Crow, C. (2008). *Comprehensive guidance and counseling: Purposes, characteristics, results*. Des Moines, WA: Center for Learning Connections, Highline Community College.

Dykeman, C., Wood, C., Ingram, M. A., Pehrsson, D., Mandsager, N., & Herr, E. L. (2003). The structure of school career development interventions: Implications for school counselors. *Professional School Counseling, 4,* 272-279.

Gibson, D., & Clarke, J. (2000). *Growing toward systemic change: Developing personal learning plans at Montpelier high school.* Providence, RI: Northeast and Islands Regional Educational Laboratory at Brown University. Retrieved from http://www.alliance.brown.edu/pubs/Grow_Sys_Change.pdf

Gysbers, N. C. (1983). *Create and use an individual career development plan*. Athens, GA: National Center for Research in Vocational Education, The Ohio State University.

Gysbers, N. C. (2005). Comprehensive school guidance programs in the United States: A career profile. *International Journal for Educational and Vocational Guidance, 5,* 203-215.

Gysbers, N. C. (2008). Individual student planning in the United States: Rationale, practices, and results. *Asian Journal of Counseling*, 2, 117–139.

Gysbers, N. C., & Henderson, P. (2001). Comprehensive guidance and counseling programs: A rich history and a bright future. *Professional School Counseling, 4,* 246-256.

Horry-Georgetown Technical College. (2008). *The Guided Plan for Success: A Quality Enhancement Plan to support student learning.* Horry-Georgetown Technical College Quality Enhancement Plan. Retrieved from http://www.hgtc.edu/int_y.php?pageid=181&searchstring=guided%20plan

Individual Learning Plans. (n.d.). In a section of the Council of Chief State School Officers website labeled “Individual Learning Plans”. Retrieved from http://highschool.ccsso.org/web/guest/IndividualLearningPlans

Individuals with Disabilities Education Act of 1997, 20 U. S. C. 1400 et seq. Retrieved from http://www.ed.gov/offices/OSERS/Policy/IDEA/the_law.html

Individuals with Disabilities Education Improvement Act Amendments of 2004, 20 U. S. C. 1400 et seq. Retrieved from http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_public_laws&docid=f:publ446.108

Institute on Community Integration. (2008). *Check and Connect: A comprehensive student engagement intervention*. Minneapolis, MN: University of Minnesota Regents. Retrieved from http://checkandconnect.org/

Jankowski, N.A., Kirby, C.L., Bragg, D.D., Taylor, J.L., & Oertle, K.M. (2009). *Illinois' career cluster model*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Projects/perkins/Report/POSmailerFINAL.pdf

Kalchik, S., & Oertle, K. (2010, May). The integral role of career development in supporting programs of study and career pathways. *Transition Highlights*, Issue 1, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_05_2010.pdf

Lewis, M.V., Kosine, N.R., & Overman, L. (2008). *What will be the impact of Programs of Study? A preliminary assessment based on similar previous initiatives, state plans for implementation, and career development theory.* Louisville, KY: National Research Center for Career and Technical Education, University of Louisville. Retrieved from http://occrl.illinois.edu/files/Projects/perkins/Report/POSmailerFINAL.pdf

Magnuson, C. S., & Starr, M. F. (2000). How early is too early to begin life career planning? The importance of elementary school years. *Journal of Career Development, 27*, 89-101.

Martin, I., Carey, J., DeCoster, K. (2009, June 1). A national study of the current status of state school counseling models. *Professional School Counseling*. Retrieved from http://www.thefreelibrary.com/A+national+study+of+the+current+status+of+state+school+counseling...-a0201850610

Martin, J. E., & Marshall, L. H. (1995). ChoiceMaker: A comprehensive self-determination transition program. *Intervention in School and Clinic, 30*, 147-156.

Maus, R. (2009, March 31). *U of M's "Check and Connect" program tackles problem of school dropouts: New grant will expand program to include community college students in Minneapolis and Kentucky*. Retrieved from http://www1.umn.edu/news/news-releases/2009/UR_CONTENT_106297.html

Mithaug, D., Wehmeyer, M. L., Agran, M., Martin, J., & Palmer, S. (1998). The self-determined learning model of instruction: Engaging students to solve their learning problems. In M. L. Wehmeyer & D. J. Sands (Eds.), *Making it happen: Student involvement in educational planning, decision-making and instruction* (pp. 299–328). Baltimore: Brookes.

Oertle, K.M. (2008). *Equity in access and opportunity for bright future*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/Newsletter/2008/fall/2

Orfield, G., & Paul, F. G. (1994). *High hopes, long odds: A major report on Hoosier teams and the American dream.* Indianapolis, IN: Indiana Youth Institute. Retrieved from http://www.eric.ed.gov/PDFS/ED378463.pdf

Nebraska Career Education 2009 Annual Report. (n.d.). Retrieved from http://www.nlc.state.ne.us/epubs/E2400/A001-2009.pdf

Rigby, C. S., Deci, E. L., Patrick, B. C., & Ryan, R. M. (1992). Beyond the intrinsic-extrinsic dichotomy: Self-determination in motivation and learning. *Motivation and Emotion, 16,* 165-185.

Shugart, S. C., & Romano, J. (n.d.). Chapter 9: Aligning student affairs in a learning-centered college. Retrieved from http://legacy.owensboro.kctcs.edu/IR/QEP/AligningStudentAffairs.pdf

Shugart, S., & Romano, J. C. (2006). Lifemap: A learning-centered system for students success. *Community College Journal of Research and Practice, 30,* 141-143.

Solomon, K., Solomon, J., & Solomon, F. (2010). *Engaging students at the Solomon Group Education and Training Academy: A case study*. Retrieved from Teaching and Learning Research Initiative. http://www.tlri.org.nz/assets/A_Project-PDFs/9261-Zepke/9261-Case-Study6-.pdf

States' Career Clusters Initiative. (2010). *States' Career Clusters*. Retrieved from http://www.careerclusters.org

Taylor, J. L., Kirby, C. L., Bragg, D. D., Oertle, K. M., Jankowski, N. A., & Khan, S. S. (2009, July). *Illinois programs of study guide*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Projects/perkins/POSguide.pdf

The Carl D. Perkins Vocational and Technical Education Improvement Act of 2006, Retrieved from http://www.ed.gov/policy/sectech/leg/perkins/index.html

Tierney, W. G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009). *Helping students navigate the path to college: What high schools can do: A practical guide.* (NCEE #2009-4066). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/practiceguides/higher_ed_pg_091509.pdf

Wehmeyer, M. L., Agran, M., & Hughes, C. (1998). *Teaching self-determination to students with disabilities: Basic skills for successful transition*. Baltimore: Paul H. Brookes.

Wehmeyer, M. L, Lattimore, J., Jorgensen, J. D., Palmer, S. B., Thompson, E., & Schumaker, K. M. (2003). The self-determined career development model: A pilot study. *Journal of Vocational Rehabilitation, 19,* 79-87.

Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities 38*(2), 131-144.

Wehmeyer, M. L., Parent, P., Lattimore, J., Obremski, S., Poston, D., & Rousso, H. (2009). Promoting self-determination and self-directed employment planning for young women with disabilities. *Journal of Social Work in Disability & Rehabilitation, 8*, 117-131.

Wehmeyer, M. L. & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children, 63*, 245-255.

Welsh, S. (2005). *Goal-oriented personal learning plans and their effect on student aspirations regarding post-secondary education.* (Doctoral dissertation). Retrieved from ProQuest Dissertation and Thesis database. (UMI No. 31736884).

Wilkerson, B. J. (2010). *Career interventions: Practices and preferences of southern New England high school counselors supporting students' individual learning plans.* Ph.D. Dissertation, Johnson & Wales University. Retrieved from ProQuest, Dissertation and Thesis database. (UMI No. 3398420).

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist, 41,* 19-31.

TRANSITION HIGHLIGHTS

Please visit the OCCRL website at *http://occrl.illinois.edu* for these additional issues of *Transition Highlights*:

Kalchik, S., & Oertle, K. (2010, May). The integral role of career development in supporting programs of study and career pathways. *Transition Highlights,* Issue 1, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_05_2010.pdf

Kalchik, S., & Oertle K. M. (2010, September). The theory and application of contextualized teaching and learning in relation to programs of study and career pathways. *Transition Highlights,* Issue 2, Champaign, IL: Office of Community College Research and Leadership, University of Illinois. Retrieved from http://occrl.illinois.edu/files/Highlights/Highlight_09_2010.pdf

The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the University of Illinois at Urbana-Champaign. Our primary mission is to provide research, leadership, and service and assist in improving the quality of education of P-20. Projects of this office are supported by the Illinois Community College Board (ICCB) and the Illinois State Board of Education (ISBE), along with other state, federal, and private and not-for-profit organizations. The contents of our publications do not necessarily represent the positions or policies of our sponsors or the University of Illinois. Comments or inquiries about our publications are welcome and should be directed to *OCCRL@illinois.edu*. This document can be found on the web at: *http://occrl.illinois.edu*.

This publication was prepared pursuant to a grant from the Illinois State Board of Education and printed by the Authority of the State of Illinois, January, 2011 (ISBE Grant Agreement Number 11-472001-09-010-5450-51).

University of Illinois at Urbana-Champaign
College of Education
51 Gerty Drive, CRC Room 129 — Champaign, IL 61820
217-244-9390 — Fax: 217-244-0851
Website: http://occrl.illinois.edu/