
System Components for Student Success: Mounting Evidence for Needed Change

Colleges are implementing a variety of initiatives that align to the Employment Readiness and Job Placement Project, including SSSP, Student Equity planning, Basic Skills Transformation, and the Strong Workforce Program. The most encompassing and current of these is Guided Pathways. The Guided Pathways movement has gained momentum in recent years among colleges seeking to improve retention, persistence, and completion. At the core of this approach is a fundamental reconfiguration of college experience that focuses on student needs and provides “intrusive” or proactive direction that guides students to completion and success. Rather than working with a subset of students, Guided Pathways is a college-wide undertaking that provides a framework for integrating all of the California-based initiatives. Three colleges in San Diego are participating in the Guided Pathways pilot: Cuyamaca, MiraCosta, and Southwestern.⁷

The following section highlights key system components identified through a review of the literature, interviews, and focus groups as critical for student success in college, employment, further education, and long-term careers. The components are closely aligned with those supported by the Guided Pathway initiative, with additional emphasis on career-related experiences and employment services.

PRE-ENROLLMENT ENGAGEMENT

Pre-enrollment engagement is defined by activities conducted prior to matriculation with prospective students to facilitate enrollment, and aid in their understanding of the educational options, pathways, and services available. Examples of activities include:

- Articulated or dual enrollment career exploration and college readiness courses offered at local high schools or adult schools.
- College or career success modules or workshops offered at local high schools, adult schools, community-based organizations, adult jails, or other environments.
- Online or print college and career exploration resources encouraging independent exploration and planning for college.
- “College Days,” which may include campus tours, meeting with faculty, or other early engagement strategies which help students identify their interests and programs that may be aligned with their goals.
- College outreach activities, including pre-enrollment orientations; information about pathways, courses, learning experiences, financial aid, and services; sessions with parents as appropriate.
- Opportunities for students to share information about their goals and needs.

Research suggests that early engagement for college and career planning with prospective students increases the likelihood of successful completion of high school diplomas, and also correlates with

⁷ For more information about the California Guided Pathways Initiative, see www.caguidedpathways.org.

higher persistence rates in postsecondary (Edwards & Belfield, 2012; Barnett, 2016; Barnett, Fay, Trimble, & Pheatt, 2013). Research conducted into Guided Pathways colleges has also found that mandatory pre-enrollment orientation for first-time students, when conducted in conjunction with cohesive integrated advising procedures, results in higher persistence rates and student satisfaction (Completion by Design, 2016).

Focus group participants also noted the value of knowing students' full "stories" in order to be able to provide appropriate guidance on career options and available student services. Agencies actively coordinating with area high schools, for example, through initiatives like CCPT, may already be doing this work, though it is unclear how broadly the information is captured and shared in the transition from K–12 to community college. To address this, one suggestion was to develop custom fields in CCCApply to collect supplementary information that might assist staff in obtaining a fuller picture of students' needs — an approach which one agency has already begun testing.

MATRICULATION AND COMPREHENSIVE ASSESSMENT

Matriculation and comprehensive assessment is defined as the process of enrolling in a community college and completing the necessary assessments and plans to pursue a pathway. Steps include application; orientation (to the college, pathway, and other services); assessment of academic, career, 21st Century Employability Skills, and other interests, skills, and needs; and access to financial aid, financial planning, and financial literacy services, as well as labor market information.

Research suggests transition into the college environment begins with coordinated "high-touch" engagement to assist students in aligning skills and interests with career and educational goals; help students understand and effectively navigate administrative requirements, timelines, and financial aid; and provide guidance with course selection and scheduling, as well as access to student supports.

Two aspects of the matriculation and assessment process are discussed below: Intake/Orientation and Assessment.

Intake/Orientation

Intake and orientation provide opportunities for colleges to acquaint new students with the full spectrum of pathways, courses, experiences, and services available at the college. The most effective of these begin prior to matriculation, so that upon entry, students are equipped with information and supports needed to successfully navigate and complete programs of study (Completion by Design, 2016).

Many interviewed noted the importance of incorporating career assessment and early exploration activities (or minimally meeting with a career advisor) into the orientation process. Focus group participants also expressed a desire to front-load career planning into orientation, which ideally would be customized based on students' interest, program area, and/or needs.

SPOTLIGHT:

Northeast Wisconsin Technical College

At the Northeast Wisconsin Technical College in Green Bay, Wisconsin, students are offered a detailed 15–20 question survey upon intake that asks questions anticipating barriers to success. Each at-risk response is linked to a robust referral system with help from Starfish and its early alert functionality. The alerts go directly to the appropriate student support department staff members who follow up by email and text with the student about these potential risks to success, pointing them to the steps they can take to address the need. The system also tracks student performance tied to how they responded to that referral during the semester, offering important feedback information to staff about that student’s grades, persistence, use of supports, etc. This proactive assessment and early alert system connects the student quickly and efficiently to the resource and staff support available.

Assessment

Assessment refers to the evaluation of academic as well as career-related skills and interests. Assessment occurs early in students’ enrollment and helps shape students’ career and education plans. It is also used by faculty to determine whether students are meeting learning outcomes.

Academic skills are evaluated using a multiple measures approach and conducted in conjunction with career assessments and skills inventories (Completion by Design, 2016; Jenkins & Fink, 2015; Mejia, Rodriguez, & Johnson, 2016). Measuring attainment of student learning outcomes through the use of targeted assessments is a key feature of effective pathways (Jenkins, Lahr, & Fink, 2017).

Many interviewees noted the importance of incorporating career assessment and early exploration activities (or minimally meeting with a career advisor) into the orientation process. The preferred sequence of steps involves 1) identifying students’ aptitudes, 2) career exploration activities, 3) pinpointing a preferred pathway, and 4) creating a detailed education plan. However, since career exploration and assessment are not required, students typically skip this and jump right into coursework. College staff discussed the need for quality assessments of employability skills and a consistent structure for administering and using those assessment results to link directly to services or supports needed.

CAREER EXPLORATION

Career exploration is defined as the process of learning about career options through workshops, classes, tours, career-related research projects, informational interviews, and job shadows, based on identified interests and goals. Career exploration experiences that involve employer engagement are considered to be early-stage work-based learning. (See “Applied and Work-Based Learning.”)

Career exploration is a key element of high-quality career technical education (CDE & CCCCCO, 2008). It is also a key element of Guided Pathways (Jenkins et al., 2017). Career exploration should be iterative and developmental, providing opportunities for students to develop their decision-making and metacognitive skills (Karp, 2013). It should also precede academic planning, and continue throughout a student's tenure at the college, with successive work-based learning experiences, and even during the job placement stage, to help students respond flexibly to the outcomes of job-seeking.

Data collected during the interview and focus group processes suggest many entering students in the SDIC region have little understanding of career goals. Establishing interests, financial aspirations, career goals, and aligning education planning to the goals, is critical to determining if the college or pathway is the right fit, even before the educational planning process begins, according to interviews and focus groups. Data collected through the interview process support the recommendation that career exploration should begin even before students enroll in the college. One student said: “[It would be] Helpful to make career resources part of orientation, from the beginning.”

CAREER AND EDUCATION PLANNING

Career planning is the process of developing a career plan, which includes the following components: a student's interests, skills, and values; the career options that the student is interested in pursuing; and the educational and work-related experiences that will lead to one or more long-term career goals. A career plan should be updated with successive educational, life, or work-related experiences that may impact the student's interests or goals. The career planning process includes the following steps, among others:

- Self-assessment of interests, needs, and values, through the use of validated assessments, reflection, and other activities
- Assessment of career options through research and career exploration, as well as understanding of labor market data and economic forecasts
- Understanding of educational and work-related requirements for various options
- Guidance and coaching from a counselor, staff member, or mentor, as appropriate
- Identification of goals based on assessments and coaching
- Identification of steps to attain goals

Education planning is the process of developing an education plan, which includes the documentation of the courses needed for a student to complete a specific degree, certificate, or transfer program of study and fulfill their educational goals, both at the community college and beyond. While often prepared separately from the student's career plan, it can also be considered a subset of a student's career plan, to the extent that it serves to advance the student's long-term career goals.

Best practices documented in the literature suggest career and education planning is a long-term endeavor (Scrivener, Weiss, & Sommo, 2012), informed by outcomes of pre-engagement activities, assessments, and skills inventories (Karp & Stacey, 2013), which should culminate in academic and

career plans that are utilized by both students and advisors throughout college (Jenkins et al., 2017; Kalamarian, Karp, & Ganga, 2017a). Career advising and planning should precede academic advising, enabling students to explore options before making selections about coursework (Karp, 2013).

Focus group participants noted little, if any, career planning actually occurs until students are nearing the end of their degree programs. Education plans — a requirement of SSSP funding — could serve as a catalyst for this early on, but are generally treated as a pro forma activity necessary for continued funding. Despite acknowledging the value of career planning, much of the support provided by advisors is focused on completion of administrative tasks, such as registration for courses. Most conversation objectives are related to selecting a major, rather than identifying career goals.

Those interviewed echoed the literature in recommending that career exploration and planning occur prior to developing educational plans. They also recommended closer connections between academic and career advising functions overall, as well as between career advisors and program faculty. Additional recommendations included a tighter integration of career center services with instruction, as well as better alignment of career and education planning.

PATHWAY PARTICIPATION AND CAREER PREPARATION

Pathway participation and career preparation is defined as engagement with the courses and experiences offered in a career pathway. The California CTE State Plan highlights integrated curriculum as fostering learning by making academics relevant for students; curriculum should be aligned with industry needs and coursework designed to develop skills and competencies needed to succeed in a student's chosen field (CDE & CCCCO, 2008). Students are provided opportunities within the first year to begin coursework in their chosen field of study (Jenkins, 2011; Jenkins & Cho, 2013). Basic skills courses should be accelerated and tailored to student areas of interest through contextualization and/or modularization. Co-requisite strategies also facilitate acceleration and encourage persistence (Denley, 2017).

Some interviewees noted that faculty do not always have time to connect to the tools and resources provided on campus. While perceived as focused on their student's academic needs, faculty have limited availability to aid career exploration, engagement, or placement. This is particularly true for CE faculty who are seen as less "looped-in" to campus initiatives.

A challenge identified by staff were strategies for embedding employability skills into CE classrooms, and connecting students to available services when needed. Helping students prepare for careers "creating a culture of career engagement," as noted by one participant, should be seen as everyone's responsibility.

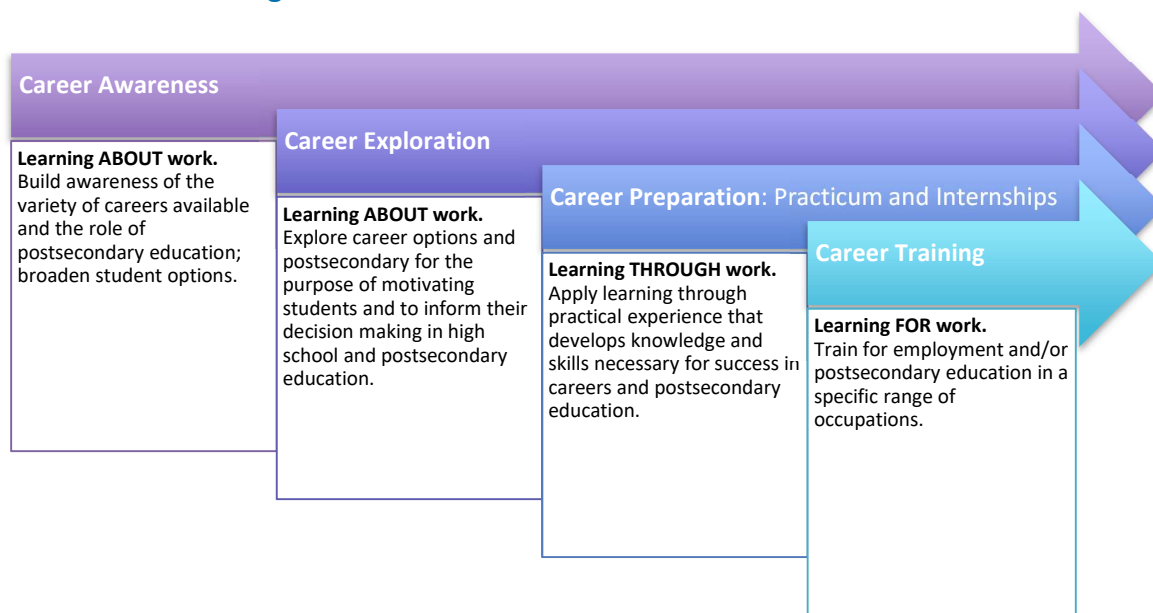
APPLIED AND WORK-BASED LEARNING

Applied and work-based learning (WBL) are strategies that deepen learning and support career awareness, career exploration, and career preparation through engagement with real problems and projects. In addition, WBL connects students directly to employers and real work opportunities. Work-

based learning experiences are offered along a continuum, ranging in intensity, from tours and job shadowing, which expose students to career options, to internships, work experience, co-op, and apprenticeships, which teach both general and specific career-related skills through actual work, as illustrated in Exhibit 5. High-intensity WBL can also include projects completed, or services performed, in classrooms, if employers are directly involved, or if the projects and services are being developed/performed for a client outside of class. Examples include a web development project or service for a local nonprofit organization. Any high-intensity WBL experience requires a learning plan, assessment, and adherence to other criteria for high quality and safe practice. Work-based learning, while sometimes coordinated by staff outside the pathway, is integral to pathway participation, career preparation, employment preparation and connects these efforts.

EXHIBIT 5

Work-Based Learning Continuum



Source: [Linked Learning Alliance \(2012\)](#).

Work-based learning, offered through internships, apprenticeships, and service learning, motivates learning and supports deep engagement and the development of higher order thinking skills. It also exposes students to career options, builds social capital, helps students develop an understanding of workplace practices, builds 21st Century Employability Skills, and builds career navigation skills (Bailey, Hughes, & Moore, 2004; Darche, Nayar, & Bracco, 2009; Holzer & Lerman, 2014; Cahill, 2016). Applied learning, including project-based learning as well as other strategies, is also seen as critical to student success within career pathways (Jenkins et al., 2017; CDE & CCCCO, 2008).

Focus groups and interviews suggest that within SDIC agencies, faculty tend to be the primary conduits for work-based learning opportunities and job placement with local sites, whereas internships tend to be administered programmatically. The lack of coordination around these functions was identified as

one of the challenges to incorporating applied learning consistently within and outside of classrooms. Practical considerations, such as transportation, attire, and limited availability were also noted as barriers to systemic implementation of work-based learning opportunities.

STUDENT SUPPORTS

Student supports encompass the full range of services needed to successfully complete pathways. Traditionally, academic supports include tutoring, testing for special education, peer study groups, as well as assessment and accessibility supports for students with disabilities. Nonacademic supports consist of logistical and life-related supportive services to address an array of personal needs such as just-in-time housing services, transportation and parking, food and nutrition, child care, financial assistance, and other subsidies.

Literature has shown numerous positive effects for students provided with proactive and integrated student supports. These include a range of academic and non-academic supports that extend beyond those typically provided through traditional academic advising. Counselors, faculty, and other staff work together to monitor student progress and proactively intervene to help students find the help they need — academic or otherwise — when they appear to be at risk of failing or dropping out (Kalamkarian, Karp, & Ganga, 2017b; Bailey, Jagers, & Jenkins, 2015a). “Enhanced” or “intrusive” advising anticipates student needs and connects them to resources whether students know they need them or not — and then closes the loop for students once those referrals are made, as in the Northeast Wisconsin Technical College spotlight above.

SPOTLIGHT: Valencia College

Valencia College in Orlando, Florida has demonstrated excellence in high graduation, transfer, job placement rates as well as exemplary workforce training programs, due in part to a deliberate investment in proactive student supports. Embedded career staff work with faculty in each program track to identify and address student needs right from the start. One key component is their New Student Experience course. In it, students and instructors work together to develop educational and career plans while learning how to navigate the various functions at the college. Since it is taught by program faculty, it also provides a chance for faculty and students to build personal relationships deemed essential for long-term success.

Investments in technology and system improvements are generally one of the first steps taken by colleges seeking to implement this kind of advising approach, but research suggests that this alone is insufficient for ensuring long-term system change (Karp, Kalamkarian, & Klempin, 2016). While technology improvements can effectively aid in academic and career planning, counseling and coaching, and risk management — and ideally, all three — they are nevertheless a means to an end — that end being the development of long-term relationships with students (Kalamkarian et al., 2017b).

Focus groups and interviews corroborated the need to proactively engage students around support services available. Students reported that they had not been aware of many of the services the college provides until much later in their academic careers when they needed or sought it out on their own based on a specific need. In addition to these services, interviews and focus groups highlighted the importance of nonacademic supports that students need, including transportation, food security, financial services, transportation, and health.

EMPLOYMENT PREPARATION AND TRANSITION

Activities that prepare students to transition into further education, formal training, and/or the workforce are considered part of employment preparation and transition. These may include resume writing, interview skills; mock interviews, job search and placement services; letters of recommendation, as well as job placement supports, such as job boards, curated interviews, and feedback and coaching opportunities. These also include transfer preparation services.

Employment preparation programs are often implemented in collaboration with workforce development and community-based organizations (Martinson & Holcomb, 2007). While traditional college employment preparation efforts stop short of job placement, some colleges have begun to reframe their mission to make it a more explicit part of their value proposition. As captured in the proceedings of a recent conference at Wake Forest University entitled “Rethinking Success,” college leaders asserted the need for proactive employment-related services, emphasizing the importance of research and building networks among influencers and alumni, and boldly advocated for broad and ongoing public reporting of job placement outcomes (Chan & Derry, 2013).

As described by interviews and focus groups, career centers in the SDIC region provide employment and transition planning services in addition to other career preparation services, though students usually only utilize these services near the end of their time in college. Only a few SDIC colleges have dedicated employment services staff, with most employment functions staffed by part-time advisors or student employees. Data collected suggest a relative lack of investment in employment and placement services. Job boards at each campus serve to connect students with local employers, but usage data are not tracked systematically across all colleges. Respondents advocated for more robust services with more powerful tools and adequate staffing.

With regard to transfer services, many within the community college system highlight the premium placed on transfers by their colleges. Yet research suggests that roughly 25 percent actually transfer, and worse, only 17 percent actually earn a bachelor’s degree (Jenkins & Fink, 2015). Further, only around 15 percent of transfer students complete their bachelor’s degree within six years (Crosta & Kopko, 2014; Shapiro, Dundar, Chen, Ziskin, Park, Torres, & Chiang, 2012). These data suggest that more could be done to support the success of transfer students, including better integration of education and transfer planning with career planning, among other improvements.