ACADEMIC & CAREER PLANNING AND STUDENT DECISION-MAKING

Prepared for Southeast Wisconsin Schools Alliance

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In the following report, Hanover Research discusses the existing empirical research regarding the impact of Academic and Career Planning (ACP) on student decision making. In addition, this report discusses the key components of comprehensive ACP programs and the recommended strategies to ensure the efficiency and sustainability of such programs.

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INTRODUCTION

State governments and school districts have increasingly turned to personalized academic and career planning (ACP) to prepare students for success in college and career. Often called "personal learning plans" (PLPs) or "individual learning plans" (ILPs), these post-secondary planning initiatives typically feature goal setting, career awareness activities, and academic planning designed to help students meet their postsecondary college and/or career goals.[1] An April 2011 review of state policies by Hobsons, an education consulting firm, finds that 35 states (including the District of Columbia) within the United States either mandate that all students participate in ACP or provide ACP guidance for districts to use on a voluntary basis.[2]

Beginning in the 2017-18 school year, the state of Wisconsin will require that all school districts provide ACP services to students in Grades 6-12. Several districts in the state have already implemented ACPs as part of a statewide pilot program.[3] To support the Southeast Wisconsin Schools Alliance (SWSA) and its member districts in implementing and supporting ACP programs, this report examines the existing empirical research related to the impact of ACP programs on student outcomes, and presents best practices in implementing ACP programs. The report proceeds as follows:

- **Section I: Literature Review** discusses the current empirical research that examines the impact of comprehensive ACP programs on student attitudes, behavior, and decision-making.

- **Section II: Best Practices in Implementing ACP Programs** discusses expert-recommended best practices for implementing comprehensive ACP programs, with a particular focus on key ACP components and strategies to improve program efficiency and sustainability.

KEY FINDINGS

- **ACP is usually a multi-year program in which students engage in self-reflection, career exploration, and goal setting to align their secondary and post-secondary plans with academic, career, and personal goals.** Comprehensive ACP programs typically comprise both the *process* of engaging in career planning and a *product* (e.g., a portfolio) that students create and use to support their plans.

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[1] "Using Individualized Learning Plans to Produce College and Career Ready High School Graduates." February 2016. National Collaborative on Workforce and Disability for Youth. p. 1. http://www.ncwd-youth.info/sites/default/files/PolicyBrief-Issue6-ILP.pdf

[2] Bloom, T. and E. Kissane. "Individual Learning Plans: Improving Student Performance." Hobsons, April 2011. p. 6. http://www.mnschoolcounselors.org/Resources/Individual%20Learning%20Plans_Industry%20Report_053012.pdf

[3] "Pilot." Wisconsin Department of Public Instruction. http://dpi.wi.gov/acp/pilot

- **Empirical research examining the relationship between ACP and student decision-making indicates that comprehensive ACP programs can positively impact student attitudes and behavior.** In particular, research on the components of ACP, such as goal setting, career counseling, and career exploration, indicates that these components may have a positive impact on student attitudes and behavior, particularly when they are intensive and led by a trained facilitator. While the existing research into the specific outcomes of ACP programs is very limited, the three studies below have produced some preliminary results:
  - A multi-state study of ACP programs across the United States found that students who participated in these programs selected more rigorous coursework, showed increased academic motivation, and developed better relationships with teachers and adults.
  - Surveys conducted as part of an evaluation of New Jersey's Personalized Student Learning Plan (PLSP) program indicate that the program had a positive impact on student goal-setting behaviors, but a very limited impact on their academic habits. Survey respondents mentioned that students were better able to set short- and long-term academic goals due to the PLSP program, but the program did not have a similar impact on student attendance, study time, or homework completion.
  - An evaluation of an ACP program in the United Kingdom also found that the program improved student self-awareness and planning skills. Moreover, the study, which involved students aged 13-14, found that the program had a greater impact on boys than girls.

- **Many ACP models begin in middle school, though some begin as early as Kindergarten**. Experts note that middle school ACP activities, such as skill and interest inventories as well as career exploration, can help students make decisions about which courses to take in high school. At the elementary level, ACP activities may include the creation of career portfolios, skills, and interest inventories, as well as outreach to parents about post-secondary academic and financial planning.

- **Existing research discusses some best practices on ACP curriculum development and the use of web-based career guidance systems.** Experts encourage districts to form an ACP curriculum development team that includes teachers, administrators, and members of the community. Most districts develop their own curriculum, often communicated in the form of a curriculum crosswalk that outlines activities and products at each grade level. In addition, experts indicate that web-based career guidance systems can be a useful tool to organize student work products and communicate student progress to parents and teachers. Districts in Wisconsin will be required to use a web-based career guidance system, such as Career Cruising, in the 2017-18 school year.

- **Business and community partners can provide valuable in-school and out-of-school career awareness activities to students.** Many Wisconsin districts have developed effective partnerships with local employers to train teachers about the

local economy and job market. District-business partnerships may range from one-time support, such as hosting a table at a career fair or serving as an expert judge of a project competition, to deeper relationships, such as serving on a program advisory committee or providing program resources.

- **ACP programs should integrate existing resources and services to ensure program sustainability.** ACPs bring together services that many schools already provide, including academic planning and one-on-one counseling. However, districts may find the whole-school nature of ACP implementation challenging. The existing literature offers the following strategies to improve efficiency and promote successful program implementation:

  ○ School leaders should clearly communicate the importance of ACP and include teachers and community members in the planning process. Experts indicate that the lack of stakeholder motivation can severely undermine the long-term impacts of ACP.

  ○ Many districts schedule ACP activities during existing flexible time, such as advisory periods. In addition, many schools inform parents about their children's ACP progress during the parent-teacher conference.

  ○ Teachers may require training on how to use web-based career guidance software. Teachers may also benefit from training sessions that cover strategies for engaging students, student reflection, and other topics associated with leading ACP activities. Meanwhile, teachers may need guidance on when they should refer a student to a trained school counselor.

  ○ Districts should collect data to monitor student progress and evaluate program implementation. ACP programs, particularly their associated web-based guidance systems, already produce data about student progress that districts can compare with other performance measures, including attendance, course selection, and behavior. In addition, districts should plan to conduct surveys or other evaluations to determine the ways in which the program achieves its goals and the potential areas for improvement.

SECTION I: LITERATURE REVIEW

The structure and content of ACP programs vary across states and districts. Generally, the literature describes ACP as "student-centered, wherein students take an active role in assessing, reflecting on, and planning based on their academic, career, and personal goals."[4] Comprehensive ACP programs typically comprise both the *process* of engaging in career planning, and a *product* (e.g., a portfolio) that a student creates and uses to support their academic and career planning.[5] In a 2012 document prepared for the Wisconsin Governor's Council on College and Workforce Readiness, the Wisconsin Department of Public Instruction (DPI) outlined four key components of ACP, summarized in Figure 1.1 below.

Figure 1.1: Wisconsin ACP Components

- **Individual goal setting.** Students set short- and long-term personal, educational, and career goals.
- **Self-awareness and exploration activities.** Through assessment instruments, self-reflection activities, and guided critical analysis students identify their personal interests, skills, and values and how they connect to their future plans and decisions.
- **Career awareness, assessment, and exploration activities.** Students explore career clusters, career pathways, and individual occupations that match their interests, skills, and values. This includes examination of the skills and educational preparation required for those occupations and the earnings and projected labor market demand for that occupation.
- **Academic and career planning and management.** Students identify coursework that is explicitly connected to their career interests. Students engage in work-based learning opportunities and other extracurricular activities connected to their interests. Students identify postsecondary training options related to their chosen career field and develop a financial plan to cover the costs of that training.

Source: Wisconsin Department of Public Instruction[6]

This section of the report examines empirical research on the impact of ACP programs and their related services on students' academic habits and postsecondary decision-making.

IMPACT OF COMPREHENSIVE ACP PROGRAMS

Empirical research into the impact of comprehensive ACP programs on student outcomes is limited.[7] As a 2014 report from the Pathways Research Center notes, "Very little empirical research currently exists to support the efficacy of [individual learning plans] as a comprehensive system. Much of what is available …. tends to be perceptual in nature."[8] For example, several educators and researchers who participated in ACP programs have published descriptive reports about the success and challenges associated with their

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[4] Fox, H. "Achieving Their Goals: Implementing an Individualized Learning Plan Process to Build Student Success." Pathways Resource Center (University of Illinois), March 2014. p. 6.
http://occrl.illinois.edu/docs/librariesprovider4/prc/ilp-guide.pdf?sfvrsn=4

[5] "Advancing Academic and Career Plans." Wisconsin Department of Public Instruction, September 2012. p. 2.
http://dpi.wi.gov/sites/default/files/imce/acp/Advancing%20ACP's%20Council%20Subgroup%20Findings%20%20
Recommendations.pdf

[6] Figure content adapted from: Ibid., pp. 2–3.

[7] Ibid., p. 3.

[8] Fox, Op. cit., p. 2.

implementation process. [9] For example, a 2015 report described the process of implementing ACP at Joliet Township High School in Illinois, with a particular focus on the challenges associated with integrating ACP into the mainstream curriculum, but did not attempt to assess the impact of the program.[10] The predominantly qualitative nature of the existing ACP research may reflect the fact that many ACP programs are still relatively new, and the diversity of program structure and content precludes cross-program comparisons.

However, a small number of studies have employed a more rigorous research methodology, and thus produced more nuanced findings about the impact of comprehensive ACP programs. One of the most commonly-cited studies, a largely qualitative study involving ACP programs in multiple states, indicates that **comprehensive, individualized career development programs can have a positive impact on some aspects of student habits and behavior.** In addition, two comprehensive evaluations of ACP programs in New Jersey and the United Kingdom provide further details on how students' involvement in ACP programs impacts their academic and career decision-making. While all three studies evaluated the ACP programs in their initial years of implementation – when processes and practices were still being finalized – they provided some preliminary insights into how ACP programs may shape students' attitudes towards their post-secondary future.

MULTI-STATE STUDY

A multi-state study, led by V.S. Solberg of Boston University, a prominent ACP researcher, focused on the process of implementing ILPs and revealed the ways in which the ILPs impacted student behavior. In the study, Solberg and his colleagues conducted a series of 53 focus groups with students, teachers, and parents at 14 schools in four states that mandate ILPs. In addition, students responded to a series of online questionnaires that measured their self-reported attitudes and competencies against competencies outlined in *Guideposts for Success*, a document published by the National Collaborative on Workforce and Disability for Youth (NCWD/Youth).[11]

Upon analyzing the results of the focus groups and the questionnaire responses from 558 students, the Solberg et al. described the impact of the ILPs as follows:[12]

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[9] [1] Malin, J., A. Hamilton, and D. Hackmann. "Individualized Learning Plans: Implementation in Joliet Township High School District 204." Pathways Resource Center (University of Illinois), December 2015. http://occrl.illinois.edu/docs/librariesprovider4/prc/joliet.pdf
[2] Gibson, D. and J. Clarke. "Toward Systemic Change: Developing Personal Learning Plans at Montpelier High School." REL-Northeast, 2000. https://www.brown.edu/academics/education-alliance/sites/brown.edu.academics. education-alliance/files/publications/Grow_Sys_Change.pdf

[10] Malin, Hamilton, and Hackmann, Op. cit.

[11] [1] Solberg, V.S. et al. "Use of Individualized Learning Plans as a Promising Practice for Driving College and Career Readiness Efforts: Findings and Recommendations from a Multi-Method, Multi-Study Effort." National Collaborative on Workforce and Disability for Youth, 2014. p. 21. http://www.ncwd-youth.info/sites/default/files/ILPs-%20A-Promising-Practice-for-Driving-College-and-Career-Efforts.pdf
[2] "Guideposts for Success." National Collaborative on Workforce and Disability for Youth. http://www.ncwd-youth.info/sites/default/files/Guideposts-for-Success-(English).pdf

[12] Bulleted text adapted from: [1] Solberg, V.S. et al. "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy." *Journal of Career Development*, 39:6, 2012. p. 502.

- Selection of more rigorous coursework;

- Improved relational connections between teachers and students, parents and the school, and parents and their children;

- Access to a wider range of career exploration activities;

- More clarity regarding their postsecondary college and training opportunities; and

- Increased academic motivation, goal setting, and career search competence.

Published reports describing the study do not provide further details about the survey responses or focus group discussions. However, the study's authors conclude that ILPs support career readiness efforts by "enabling youth to develop career goals that are commensurate with their interests, skills, and values, and pursue academic courses and postsecondary training and degree programs needed to enter those careers" and "encouraging youth to pursue out of school learning and work-based learning opportunities to continue developing their workforce readiness skills."[13]

NEW JERSEY PSLP PROGRAM

In 2009, the New Jersey Department of Education (NJDOE) launched the Personalized Student Learning Plan (PSLP) pilot program at a representative group of 16 middle and high schools across the state. The NJDOE did not require a specific curriculum or format for the PSLP programs; instead, the state intended to use the pilot to identify promising components of schoolwide PSLPs.[14]

The Heldrich Center for Workforce Development at Rutgers University monitored the first three years of the PSLP pilot program implementation through annual surveys, interviews with school program coordinators, and visits to some of the pilot schools.[15] Each year, the Heldrich Center surveyed teachers and other school staff involved in the program and asked them to assess the impact of the program on 14 student outcomes according to a five-point Likert scale that ranged from "very negative" to "very positive". Figure 1.2 below presents a summary of the survey results.

http://sites.bu.edu/miccr/files/2015/03/The-nature-and-use-of-individualized-learning-plans-as-a-career-intervention-strategy.pdf

[2] Solberg et al., "Use of Individualized Learning Plans as a Promising Practice for Driving College and Career Readiness Efforts: Findings and Recommendations from a Multi-Method, Multi-Study Effort," Op. cit., p. 19.

[13] Solberg et al., "Use of Individualized Learning Plans as a Promising Practice for Driving College and Career Readiness Efforts: Findings and Recommendations from a Multi-Method, Multi-Study Effort," Op. cit., p. 22.

[14] "New Jersey Department of Education Personalized Student Learning Plan Pilot Program, 2011-2012 Evaluation Report." John J. Heldrich Center for Workforce Development, October 2012. p. 1. http://www.state.nj.us/education/cte/pslp/EvaluationReportY3.pdf

[15] Ibid., p. 8.

Figure 1.2: Impact of the New Jersey PSLPs on Student Outcomes

INDICATOR	YEAR 1	YEAR 2	YEAR 3
Goal-Setting Behaviors			
Ability to set long-term career-related goals	73.3%	80.0%	63.9%
Ability to set long-term academic goals	71.3%	78.7%	64.8%
Ability to set short-term career-related goals	65.7%	78.3%	66.5%
Ability to set short-term academic goals	53.9%	77.2%	68.2%
Academic Behaviors			
Help seeking	72.2%	66.1%	64.5%
Study time	54.3%	48.3%	49.7%
Attendance in class	59.8%	43.3%	47.9%
Homework completion	52.4%	48.8%	44.2%
Other Indicators of Success			
Student-teacher interaction	74.5%	79.2%	67.3%
Understanding the importance of decision making	70.0%	73.8%	74.8%
Understanding the academic expectations and requirements of their school	62.1%	73.9%	69.5%
Overall motivation to succeed in school	70.7%	71.4%	63.3%
Participation in class	70.6%	64.4%	55.1%
Participation in clubs	71.7%	53.8%	54.9%

Percent of respondents answering "positive" or "very positive." n=203-251.
Source: Heldrich Center for Workforce Development[16]

The New Jersey study found that the PSLP program had a greater impact on student goal-setting behaviors than on their academic habits. In all three years of surveys, PSLP stakeholders were more likely to say that the program had a "positive" or "very positive" impact on the indicators related to goal setting and success than indicators related to academic behaviors. Among the indicators related to goal setting, teachers and staff gave higher ratings to the impact of PSLPs on long-term career and academic planning than short-term planning. The surveys also indicated that the program had a positive impact on students' understanding of the importance of their decision-making and their overall motivation to succeed in school. However, while ratings remained consistent from Year 1 to Year 2, ratings across all indicators fell in Year 3.[17] More specifically, "positive" or "very positive" ratings decreased in Year 3, while ratings of "no impact" increased.[18]

Like the other studies described in this section of the report, the New Jersey study evaluated the impact of the PSLP program as a whole, and therefore did not identify which components of the program were most strongly linked to the indicators of program success. In addition, the evaluation found that schools followed very different approaches to

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[16] Ibid., p. 12.
[17] Ibid., p. 18.
[18] Ibid., p. 29.

implementation. In particular, many schools did not implement goal setting in the program's third year.[19] Therefore, in some cases, the results of the surveys may reflect the variations in program implementation across the schools, rather than the impact of the PSLP program itself. Similarly, the study did not compare the opinions of teachers in the pilot schools to those at schools that did not participate in the program. Consequently, it is not possible to discern whether some of the impacts reported in the study may have occurred in the absence of the PSLP interventions.

U.K. PLP PROGRAM

The mixed results from the New Jersey study are similar to the results from a larger study conducted 15 years ago in the United Kingdom that involved middle-school aged students. Beginning in the 1996-97 school year, 30 schools in the east of England participated in a pilot program that engaged all Year 9 students (ages 13-14) in Personal Learning Planning (PLP). Led by school-based PLP coordinators, the initiative aimed to "integrate the processes of records of achievement, careers education and guidance, and action planning within three key developmental strands: personal, academic, and career- or work-related."[20] While this program predates many of the ACP models currently being implemented in the United States, it appears to include several common features (e.g., comprehensive scope, action planning) of these U.S. models.

In the fall and spring of the school year, researchers administered a 28-question survey to a roughly consistent and demographically representative group of students (1,348 students took a survey in November 1996 and 1,211 students took a second survey in May 1997). The survey questions measured students' views on how PLP impacted various constructs related to career planning, including target setting, motivation, and attitudes towards learning using a seven-point Likert scale. The researchers compared the mean scores for each question in the November and May surveys to determine whether PLP had a positive or negative impact on those constructs.

The results of the surveys, described in Figure 1.3 below, indicate that **the PLP program had the greatest impact on student's attitudes towards planning and personal understanding**. Overall, mean student scores improved from November to May on 17 questions, while scores lowered on 10 questions and unchanged for one question. When the scores were grouped and analyzed by construct, the surveys indicate that PLP had a positive impact on most of the constructs. Questions related to planning showed the greatest shift in student attitudes, particularly related to the question "How clear are you about which courses or options are best for you next year?" The researchers note that the positive shift associated with this question and the question about using the careers library, together with students' responses to open-ended questions, indicate that the PLP program was helping "pupils

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[19] Ibid., p. 19.
[20] Bullock, K. and F. Wikeley. "Improving Learning in Year 9: Making Use of Personal Learning Plans." *Educational Studies*, 25:1, 1999. p. 20.

understand and become confident in the processes for making appropriate and sensible decisions."[21]

Figure 1.3: Impact of PLP on ACP-Related Constructs

CONSTRUCT	NO. OF QUESTIONS	SHIFT NOV. TO MAY			OVERALL SHIFT
		POSITIVE	NEGATIVE	SAME	
Personal Understanding	3	2	1	0	Positive
Motivation	3	2	1	1	Same
Planning	3	3	0	0	Positive
Target Setting	2	1	1	0	Positive
Talking to People	5	5	0	0	Positive
Making Choices	2	2	0	0	Positive
Using the Careers Library	1	1	0	0	Positive
Attitude to Learning	8	1	7	0	Negative

Source: Educational Studies[22]

However, the study finds that students struggle "to appreciate the potential, wider outcomes" towards academic and career planning.[23] Specifically, students reported high levels of motivation, but lukewarm opinions on PLP's role in helping immediate academic and personal development. In particular, the researchers note: [24]

> Pupils tended to see PLP more as a future career plan than a process to help them achieve now in school or, even less, at home. They had not yet recognized the incremental and cyclical nature of action planning which could lead to lifelong achievement.

Additionally, **the U.K. study revealed that the PLP program had a greater impact on boys than girls.** For many questions, girls responded less positively compared to boys. For example, on two key questions evaluating the overall impact of PLP ("How much has your PLP helped you to achieve something better at school?" and "How much has your personal learning plan helped you with your life outside of school?"), scores given by girls decreased from November to May, while scores given by boys remained relatively constant.[25] Based on the comments from the surveyed teachers (tutors), the researchers suggest that this difference may be due to the earlier maturation of adolescent girls: [26]

> At age 13, boys enter PLP with greater reluctance to analyze and plan their lives and the impact of the one-to-one conversation with a tutor may have been significant. Girls, on the other hand, may already be confident enough to initiate such conversations, and thus, are more cynical about the structured PLP process. Conversely, it may be that girls begin to lose confidence at this stage in their lives.

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[21] Ibid., pp. 23–24.
[22] Ibid., p. 24.
[23] Ibid., p. 25.
[24] Ibid.
[25] Ibid., p. 28.
[26] Ibid., p. 28–29.

While many ACP programs target middle and high school students, this observation suggests that the different levels of developmental growth among adolescents may shape program outcomes differently, particularly at the middle school level.

IMPACT OF ACP COMPONENTS

While the existing research has not yet produced conclusive findings about the impact of comprehensive ACP *programs*, research into the role of specific ACP *components* in student decision-making has produced additional insights into the role that ACP may play in students' post-secondary planning. In particular, studies of goal setting, career counseling, and career exploration indicate that these activities may have a positive impact on student attitudes and decisions.

GOAL SETTING

Researchers argue that goal setting is a key indication of improved student motivation. In particular, theorists of goal-setting behavior suggest that there are two types of goals in education: "mastery" goals in which students strive to develop deeper understanding or skills, and "performance" goals in which students try to achieve a pre-set performance level or to outperform others. Studies find that students who develop mastery goals "exhibit deeper cognitive processes, strategize more effectively, and are more adaptable to challenges."[27]

In addition, a 2010 study published in *The Counseling Psychologist* suggests that **students are more likely to meet academic goals if they link them to career goals**. Researchers from the University of Michigan evaluated Grade 8 students who attended three middle schools with high enrollment of African American and Latino students to determine their academic and career aspirations. While most students indicated that they wanted to go to college, those who aspired to a profession that required a college education were more likely to spend time on homework and maintain a higher GPA. The researchers argue that by linking academic goals to professional goals, students link a strategy – strong academic performance – to an identity of their future selves.[28]

CAREER COUNSELING

The existing research related to the work of school counselors, who often provide career-counseling services at the secondary level, indicates that **counselors have a positive impact on students' ability to plan for their post-secondary career.** For example, an article published in the *Journal of Counseling and Development* in 2011 discussed the results of a meta-analysis involving 117 experimental-control studies conducted between 1980 and 2004. The study found that school counselors had a moderately positive impact on students'

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[27] "Can Goals Motivate Students?" Center on Education Policy. p. 2. http://www.cep-dc.org/cfcontent_file.cfm?Attachment=UsherKober_Background3_Motivation_5.22.12.pdf
[28] Oyserman, D. and M. Destin. "Identity-Based Motivation: Implications for Intervention." *The Counseling Psychologist*, 38:7, 2010.

career development and decision-making (pooled mean effect size of 0.20) and a larger impact on students' career knowledge (0.67). [29]

In addition, **some research that focuses specifically on career counseling interventions finds that these interventions are most effective when they are intensive and led by a trained facilitator or counselor**. [30] For example, a 2003 meta-analysis, published in the *Journal of Vocational Behavior*, compared the outcomes of career interventions involving a counselor and those that did not. The analysis, which analyzed 57 studies, discovered that the interventions that did not use counselors (e.g., a computerized career guidance system) had a smaller impact on student decision-making compared to counselor-facilitated interventions such as groups, workshops, and classes.[31]

CAREER EXPLORATION

Career exploration may range from classroom exercises to learn about different occupations to extended work experience at a job site. Research into the impact of these programs indicates that such experiences can have a positive impact on student decision-making. For example, a 2004 study, published in *Phi Delta Kappan*, analyzed the data of nearly 9,000 students who participated in the National Longitudinal Survey of Youth (NLSY) in 1997. The study found that students who participated in career exploration programs, such as internships, job shadowing, and mentoring, were better prepared for college.[32] Specifically, students who participated in career exploration programs were more likely than nonparticipants to:[33]

- **Take college entrance exams.** Students participating in career majors, job shadows, school-based enterprises, internships, and mentoring programs were significantly more likely to take college entrance exams than nonparticipants. Tech-prep and cooperative-education students, on the other hand, were equally or somewhat less likely to take these tests.

- **Take Advanced Placement (AP) exams.** Students in career exploration programs — mostly those in career majors and internships — were somewhat more likely to take at least one AP exam than were nonparticipants. Students in tech-prep, job-shadow, cooperative-education, and mentoring programs were not more likely to take an AP class than other students.

- **Graduate from High School.** Students in internships and mentoring programs had the lowest dropout rates.

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[29] Whiston, S. et al. "School Counseling Outcome: A Meta-Analytic Examination of Interventions." *Journal of Counseling & Development*, 89, 2011. pp. 39–40.

[30] Bernes, K., A. Bardick, and D. Orr. "Career Guidance and Counselling Efficacy Studies: An International Research Agenda." *International Journal for Educational & Vocational Guidance*, 7, May 2007. p. 3.

[31] [1] Whiston, S., B. Brecheisen, and J. Stephens. "Does Treatment Modality Affect Career Counseling Effectiveness?" *Journal of Vocational Behavior*, 62, 2003. As described in: Whiston, S. and R. Quinby. "Review of School Counseling Outcome Research." *Psychology in the Schools*, 46:3, 2009. p. 269.
[2] "Does Treatment Modality Affect Career Counseling Effectiveness?" Education Resources Information Center. http://eric.ed.gov/?id=EJ670779

[32] Visher, M., R. Bhandari, and E. Medrich. "High School Career Exploration Programs: Do They Work?" *Phi Delta Kappan*, October 2014. p. 136.

[33] Bulleted text taken verbatim, with minor edits, from: Ibid., pp. 137–138.

- **Attend a two-year, rather than four-year institution.** Career exploration programs helped push students who otherwise might not have gone to college to enroll, with most enrolling in two - year rather than four- year colleges.

SECTION II: BEST PRACTICES IN IMPLEMENTING ACP PROGRAMS

The processes of implementing ACPs at the school or district levels can be a complex and resource-intensive endeavor. In order to support SWSA's member districts in prioritizing the most important and impactful ACP practices, this section of the report discusses the expert-identified core components of ACP, as well as strategies to promote ACP resource efficiency and program sustainability. Information in this section is drawn from published ACP implementation guides as well as the experiences of the 25 Wisconsin districts involved in the ACP pilot program.[34]

KEY COMPONENTS OF ACP

ACP programs are comprehensive in scope, though the content of these programs varies from district to district.[35] While researchers have not yet examined the impact of specific ACP program components on student outcomes, a 2011 report from the Rennie Center for Education Research & Policy notes that state ACP initiatives (referred to as SLP initiatives in the report) share many common elements, including the following:[36]

- **Collaborative development.** All states that require SLPs require that plans [be] developed collaboratively by students, parents, and school-based staff.

- **Comprehensive focus.** SLPs generally focus on three key goal areas: academic goals (both secondary and postsecondary), career goals, and personal goals.

- **Skill and interest assessments.** All states include a process for students to assess and document their skills and interests as part of the planning process.

- **Connection to career pathways.** Plans help students to select specific courses of study aligned with their postsecondary goals and career aspirations.

- **Flexibility.** All states that require SLPs provide provisions for plans to be updated at regular intervals (usually annually) to ensure that plans are responsive to students' changing interests and connect them to school and community-based opportunities.

- **Portfolios.** Most states include portfolio development as part of the planning process to provide students an opportunity to document their academic, extra-curricular, work and personal experiences and achievements to assist in the development of college applications and resumes.

- **Career guidance.** Many states that require all students to develop SLPs have implemented new career guidance initiatives to improve access to regular postsecondary advising through comprehensive K-12 school counseling programs aligned with the American School Counselor Association's national standards.

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[34] "Pilot," Op. cit.

[35] "Using Individualized Learning Plans to Produce College and Career Ready High School Graduates," Op. cit., p. 1.

[36] Bulleted text taken verbatim from: "Student Learning Plans: Supporting Every Student's Transition to College and CAreer." Rennie Center for Education Research & Policy, June 2011. pp. 6–7.
http://www.renniecenter.org/research/StudentLearningPlans.pdf

The Wisconsin ACP components, shown in Figure 1.1 in the previous section, appear to align with these common themes.

GRADE LEVELS

Most ACP programs begin in middle school, though some districts introduce students to ACPs as early as Kindergarten. Experts do not explicitly recommend an optimal starting grade in the literature and note that further research is needed to determine whether starting programs at the elementary or middle school level makes an ACP program more effective.[37] However, researchers describe how students begin to reflect on their own skills and interests and explore careers at the middle school level. Therefore, an example of middle to high school ACP progression, developed by the Pathways Resource Center at the University of Illinois, is shown in Figure 2.1 below.

Figure 2.1: ACP Middle to High School Progression

	GRADES 6-7	GRADES 8-9	GRADES 10-12
Exploration	Skills and Interests Inventories		
	Career Exploration		
	Reflection		
Planning		Customized Course Plan	
		Career Cluster Selection	
		Career Experiences	
	Transitioning		Choosing a Path

Source: Pathways Resource Center[38]

Specifically, middle school ACP programming can be used to help students transition to high school. For example, students at River Bluff Middle School in Stoughton, Wisconsin, begin ACP through enrichment activities in Grade 6 and counselor-led sessions in their classrooms. In Grade 7, students complete personal globe inventories, research careers, and explore career clusters and pathways. Grade 8 students participate in individual planning conferences with teachers and an adult from home, and attend a high school orientation to learn more about required and elective classes.[39]

In addition, many of the Wisconsin ACP pilot districts have extended their ACP programs into elementary schools. However, the extent and intensity of the programming varies considerably, especially since many districts are in their initial years of ACP implementation. For example:

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[37] Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 510.

[38] Figure content adapted from: Ibid., pp. 6–7.

[39] Koenecke, L. "Bridging Middle School Programming and Counseling as Preparation for High School ACP." presented at the Wisconsin School Counselors Association 2015 ACP Conference, November 15, 2015. pp. 10–14. http://dpi.wi.gov/sites/default/files/imce/acp/ppt/mstohsacp.pptx

- In **Pewaukee School District**, the elementary counselor is part of the district-level and school-level ACP teams.[40]

- In **New Berlin School District**, students begin their ACP portfolio in Grade 5. The district extends its secondary-level career days to the elementary schools.[41]

- In **Elkhorn School District**, students begin career portfolios in Grade 1. The district uses the Paws in Jobland software in Grades K-2 and administers a multiple intelligence survey in Grade 4. The district also conducts career and financial planning outreach to families as early as 4K (four-year-old Kindergarten).[42]

- In **West Allis-West Milwaukee School District**, elementary students participate in two half-hour ACP-related lessons per week.[43]

CURRICULUM

Experts recommend that districts develop a cross-grade ACP curriculum. Many districts develop an ACP curriculum that incorporates both web-based guidance systems and internally created activities. The NJDOE guide says that districts should begin by establishing an ACP curriculum development team that includes administrators, teachers, and school counselors, as well as parents and the members of the community. After reviewing the standards and goals, the ACP curriculum development team should create a document (or "crosswalk") that aligns the proposed ACP activities to the existing standards. The document should specify the grade in which the activity will take place, and the staff members (e.g., teachers, school counselors) that will be responsible for developing that activity.[44]

As noted in Section I, experts underscore that ACP is both a process and a product. In panel discussions at the 2015 Wisconsin School Counselors Association ACP Conference, ACP leaders from ACP pilot districts acknowledged that they struggled to determine what the "product" portion of the ACP program would include. Many district leaders noted that students were required to maintain the portfolios of their ACP-related work, including planning documents, interest surveys, and resumes.[45] For instance, New Berlin School District developed a detailed curriculum that outlined both the process activities and the products that students would complete at each grade level, as demonstrated in Figure 2.2.

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[40] Adriana Plach, Pewaukee School District. In: Kroyer-Kubicek, R. et al. "Suburban/Medium ACP Pilot School Districts." presented at the Wisconsin School Counselor Association 2015 ACP Conference, November 15, 2015. https://www.youtube.com/watch?v=TlVxF8qLfXo&feature=youtu.be

[41] Laura Schmidt, New Berlin School District. In: Ibid.

[42] Brian Schopf, Elkhorn School District. In: Ibid.

[43] Joanne Quick, West Allis – West Milwaukee School District. In: Kroyer-Kubicek, R. et al. "Urban/Large ACP Pilot Districts." presented at the Wisconsin School Counselor Association 2015 ACP Conference, November 15, 2015. https://www.youtube.com/watch?v=4TZy95cWIvo

[44] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs." (New Jersey Department of Education, April 2014). pp. 16–21. http://www.state.nj.us/education/cte/pslp/PSLPGuide.pdf

[45] Kroyer-Kubicek et al., "Suburban/Medium ACP Pilot School Districts," Op. cit.

Figure 2.2: New Berlin School District ACP Process and Artifacts

GRADE	PROCESS ACTIVITIES	ARTIFACTS	
		1st Semester	2nd Semester
6	▪ Understands definitions and terms related to the Academic and Career Plan. ▪ Learn and explore each of the 16 Programs of Study and develop Programs of Study to explore further. ▪ Develop an initial six-year plan to modify over time.	▪ N/A	▪ N/A
7	▪ Complete inventories that help students understand themselves and use the concept of a personal brand and use the inventories to identify potential career interests to explore further. ▪ Understand how to set academic and personal goals, and use school resources including the Course Offerings to develop a six-year academic plan. ▪ Understand how to align course selection with potential career interests.	▪ Interest inventory ▪ Goal setting lesson ▪ Work skills, interests, and values assessment ▪ Career cluster activity	▪ All about me business letter ▪ Career presentation ▪ Course planning activity ▪ Smartgoals ▪ Completed ACP
8	▪ Understand graduation requirements, what makes up a high school transcript, and the high school timeline of College and Career Readiness events. ▪ Review the High School Course Offerings to revise the six-year course plan, and use the Programs of Study to select courses that support personal goals.	▪ Course plan ▪ Career day activity ▪ Personal statement and goals	▪ Goal setting
9	▪ Update personal inventories to identify any key changes that could affect goals or plans. ▪ Be exposed to the concept of a "post-secondary alignment," available opportunities and financial planning that supports post-secondary.	▪ Work skills, interests, and values assessment ▪ Career Day activity ▪ Goal setting activity ▪ Personal statement and goals	▪ Everfi financial literacy certificate ▪ Course plan
10	▪ Conduct structured research on potential careers. ▪ Identify roles and responsibilities, skills and dispositions, education/training needed for identified careers. ▪ Understand how to research job opportunities, create and use a network to find employment, and leverage labor market projections to assess future job opportunities. ▪ Learn how to create a resume and understand the importance of building resumes over time. ▪ Learn about Career and Service Based Learning Opportunities.	▪ Career Day activity ▪ Personal statement and goals	▪ Functional resume

GRADE	PROCESS ACTIVITIES	ARTIFACTS	
11	■ Understand how to evaluate post-secondary opportunities, do a college search, and locate and complete a college application. ■ Review assessment results and how they support post-secondary choices. ■ Understand financial implications for alternative post-secondary options along with resources available.	■ Transcript review ■ Career Day activity ■ Personal statement and goals	■ College search ■ Junior Conference Action Plan ■ Refining your career focus
12	■ Develop a financial plan to support post-secondary transition. ■ Ensure their Academic and Career plan and related documents accurately reflects all honors, credentials, endorsements, etc. that comprise their high school portfolio. ■ Transition their Academic and Career Plan portfolio elements to ensure access after graduation.	■ Transcript review ■ Personal statement and goals	■ Making a budget ■ ACP End-of-Year reflection

Source: New Berlin School District[46]

Multiple sources recommend that schools integrate the career clusters model into their ACP curriculum.[47] Developed by the National Association of State Directors of Career Technical Education Consortium (NASDCTEC), the career clusters model outlines 16 occupational categories ("clusters"), ranging from business and administration to law and public safety. For each cluster, the NASDCTEC developed an accompanying "program of study" of secondary and postsecondary courses that Grade 9 students should complete if they choose to pursue that career path.

WEB-BASED SYSTEMS

Many districts choose to use web-based electronic tools, such as Naviance, Career Cruising, and WISCareers, as part of their ACP service delivery.[48] Districts in Wisconsin are required to provide each student in Grades 6-12 with "access to an academic and career planning software tool that allows pupils to engage in career exploration and career planning and preparation."[49] The Wisconsin DPI has contracted with Career Cruising to provide ACP services during the 2016-17 school year, but districts are allowed to choose another vendor at their own expense.[50]

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[46] Curtis, G. et al. "Academic and Career Planning 202." presented at the Wisconsin School Counselors Association ACP Pre-Conference, February 16, 2016. p. 69. 75.

[47] [1] Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 505.
[2] Fox, Op. cit., p. 2.

[48] [1] Bobek, B. et al. "Training Counselors to Use Computer-Assisted Career Guidance Systems More Effectively: A Model Curriculum." *The Career Development Quarterly*, 53, June 2005. p. 363.
[2] Koenecke, Op. cit., p. 5.

[49] "Career Cruising FAQs." Wisconsin Department of Public Instruction, April 25, 2016. p. 2.
http://cdn.careercruising.com/clientservice/Career%20Cruising%20Wisconsin%20FAQs.pdf?cdn=a0b9c8

[50] Ibid., pp. 2–3.

Web-based guidance systems can be a valuable tool to support ACP programs.[51] Hobsons, the firm that developed Naviance, argues that the use of web-based systems is a way for school officials to monitor student ACP progress and provide targeted supports:[52]

> Online ILPs help states determine which students are receiving specific supports, whether academic, counseling, or interventions. Moreover, online formats also allow for easier sharing and communication between students, parents, and school staff. … Online ILPs provide data for district administrators to monitor anticipated enrollment in gatekeeper courses like Algebra I in the eighth grade. If enrollment does not represent the school's diversity, principals can work with school counselors and math teachers to prepare more students for rigorous course taking. Without equal access to rigorous courses, schools will not be able to close the achievement gap.

In addition, a guide published by the NJDOE notes that **web-based tools can be effective in facilitating parent engagement**. For example, the guide notes, "a parent may use the system to follow his/her son or daughter's college application process by reviewing the student's college selections, as well as their scholarship submissions."[53]

The NJDOE guide states that there is no "best" web-based guidance program. Instead, the guide encourages schools to consider how the students, teachers, and parents will use the system when designing it. For example, districts should determine what kind of documents and data the system can generate, whether the interface is available in multiple languages, and whether the system provides parent access to student accounts. In addition, the district should consider subscription costs, as well as the time and costs required for related staff training.[54]

BUSINESS AND COMMUNITY ENGAGEMENT

While many ACP guides encourage districts to engage parents and other community stakeholders, **Wisconsin appears to place a greater emphasis than other states on partnerships with local businesses and employers**.[55] Leaders from Wisconsin ACP pilot districts noted that partnerships with the business community, as well as local institutions of higher education, were important in providing students with access to engage in internships, dual enrollment courses, job shadowing, and other opportunities for external career exploration and preparation.[56]

The Wisconsin DPI suggests that local chambers of commerce and the state economic development regions can be helpful in identifying and facilitating productive industry and

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[51] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., p. 9.
[52] Bloom and Kissane, Op. cit., p. 8.
[53] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., p. 10.
[54] Ibid., pp. 10–11.
[55] Ibid., p. 8.
[56] "Advancing Academic and Career Plans," Op. cit., p. 7.

business partnerships.[57] For example, the West Allis-West Milwaukee School District partners with the Chamber of Commerce, Milwaukee County Technical College, community businesses (such as local hospitals), and community organizations (including Rotary Clubs and the Lions) through its ACP program.[58]

Business and community partners can offer valuable in-school and out-of-school career awareness activities. The National Center for College and Career Transitions (NC3T) published a list of ways in which local businesses can support ACP programs, with little or no cost to the district. The suggested business partnership activities range from one-time support, such as hosting a table at a career fair or serving as an expert judge of a project competition, to deeper relationships, such as serving on a program advisory committee or providing program resources. Figure 2.3 below presents the full list of NC3T strategies for business and community involvement.

Figure 2.3: Strategies for Business and Community Involvement

- **Help students build career understanding.** Host a table at a career or industry fair. Offer a work-site tour. Grant a career interview. Offer resume writing and mock job interviews support. Invite students to join you at a work event.

- **Facilitate classroom presentations and/or lead small group discussions.** Talk to students about your career or industry sector. Talk to students about a specific technical skill or use of equipment. Talk to students about general workplace skills and culture. Talk to students about career exploration and career navigation.

- **Assist students with career or leadership projects.** Act as an expert judge. Act as project coach. Assist teachers with career-related units of study.

- **Offer experiences outside of school.** Host student job-shadows. Host student internships. Host teacher externships.

- **Support program improvement and advancement.** Serve on a program advisory committee. Act as an advocate. Collaborate in a new program start-up or in the restructuring of existing programs. Provide program resources. Share your professional expertise.

Source: National Center for College and Career Transitions[59]

While districts often pursue business partnerships to identify opportunities for students, the partnerships can also support teachers and staffing needs. In the Appleton Area School District, one of its approximately 70 business partners funds a dedicated career advocate to work in the district.[60] In the Wisconsin Rapids School District, school officials have forged partnerships with the community's large manufacturers to support teachers. The district developed a summer course for teachers that jointly taught by a leader of the local paper company and a district official. As part of the course, teachers visit multiple companies in the community and learn about the workforce needs. Those teachers – including teachers in math, social studies, and other subjects – are then positioned to help students understand

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[57] Ibid., p. 10.
[58] Curtis et al., "Academic and Career Planning 202," Op. cit., p. 90.
[59] "Five Key Strategies for Business and Community Involvement." National Center for College and Career Transitions, June 2015. http://dpi.wi.gov/sites/default/files/imce/acp/pdf/eistrategies.pdf
[60] Eric Mueller, Appleton Area School District. Kroyer-Kubicek et al., "Urban/Large ACP Pilot Districts," Op. cit.

the connection between their studies and potential future careers. As the ACP program in Wisconsin Rapids continues, the district hopes to collect feedback from its business partners to determine whether the partnerships produced workforce-ready students.[61] However, the existing literature has not yet explored the impact of ACP on a district's local economy or businesses.

RESOURCE EFFICIENCY AND SUSTAINABILITY

As many ACP programs are new, program evaluators are only beginning to learn which elements of the program's administration and resource allocation may lead to program success. However, the existing literature on ACP highlights five key components that underpin program efficiency and sustainability: stakeholder motivation, resources, use of time, staff training, and data collection.

STAKEHOLDER MOTIVATION

Implementing an ACP program is a complex process that requires the cross-departmental support of multiple school staff members.[62] The NJDOE guide notes that, "Staff motivation to implement PSLPs is typically affected by the staff's assessment of the importance of the program and confidence in their ability to implement it."[63] In the multi-state study (described in Section I), Solberg et al. found that the lack of stakeholder motivation at the schools studied severely undermined the impact of ACP.[64] In an article in the *Journal of Career Development*, Solberg and his colleagues elaborate on the ways in which districts may anticipate and counter staff opposition to ACP. They recommend that districts:[65]

- Achieve a common understanding of why ACP is important;
- Offer professional development opportunities to acquire the skills needed to engage in ACP;
- Provide incentives for engaging in ACP;
- Allocate enough resources such as time and administrative coordination; and
- Establish an implementation and evaluation plan that clearly identifies roles, responsibilities, and timelines.

Frequently, the ACP planning process begins with the formation of an ACP team, comprised of devoted educators at all levels of the school community.[66] Figure 2.4 below outlines the

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[61] Kathy Stebbins, Wisconsin Rapids School District. Kroyer-Kubicek et al., "Suburban/Medium ACP Pilot School Districts," Op. cit.

[62] Malin, Hamilton, and Hackmann, Op. cit., p. 1.

[63] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., p. 29.

[64] Solberg, V.S., J. Willis, and D. Osman. "Promoting Quality Individualized Learning Plans: A 'How to Guide.'" National Collaborative on Workforce and Disability for Youth, 2012. p. 4. http://www.ncwd-youth.info/sites/default/files/NCWDYouth-ILP-How-to-Guide-Feb2013.pdf

[65] Bulleted text adapted from: Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 506.

[66] Solberg, Willis, and Osman, Op. cit., p. 26.

typical members of an ACP planning team and the roles that they play in communicating program goals and ensuring effective program implementation.

Figure 2.4: Typical Roles and Responsibilities of ACP Team Members

STAKEHOLDER ROLE	ACP ROLE
Principal	▪ Sets priority and commitment of the PSLP program. ▪ Selects Program Coordinator. ▪ Provides administrative and vocal support.
Program Coordinator	▪ Organizes all PSLP activities. ▪ Distributes responsibilities to PSLP team members. ▪ Serves as the program champion.
Teachers	▪ Provide input and feedback to the PSLP team throughout the development of the curriculum. ▪ Provide recommendations to the PSLP team to address challenges related to implementing the program. ▪ Solicit input from teachers and act as a liaison between the teaching staff and the PSLP team.
School Counselors	▪ Provide recommendations to the PSLP team that establish the counselor's role throughout the implementation of the PSLP program. ▪ Solicit input from school counselors and act as a liaison between the counseling staff and the PSLP team. ▪ Help teachers involve parents and community members in the PSLP program
Parents	▪ Collaborate with members of the PSLP team to develop strategies to facilitate student engagement in the PSLP program both in the classroom and at home.
Community	▪ Partners with the PSLP team to develop strategies that address students' needs throughout the PSLP program.

Source: New Jersey Department of Education[67]

RESOURCES

The existing literature on ACP programs does not directly address the resources required to support a successful program. However, it is worth noting that ACP programs typically do not require the purchase of expensive materials or technology. This is especially true in Wisconsin, where districts will be able to access the Career Cruising platform provided by the Wisconsin DPI at no cost. In addition, several of the published ACP guides, such as those published by the NJDOE and the National Collaborative on Workforce and Disability for Youth (NCWD/Youth), list dozens of online curricular, assessments, and information resources that teachers can access for free or with a small fee.[68]

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[67] Figure content adapted from: "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., p. 8.
[68] [1] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit.
    [2] Solberg, Willis, and Osman, Op. cit. p. 36.

In addition, **effective ACP programs provide systems of support to students, including counseling services, special education, and English Learner programs**. As a counselor at the Northwood School District in Minong, Wisconsin, noted, many staff at the district's initial ACP in-service meeting were surprised to learn that the district was already doing many of the activities associated with the proposed ACP.[69] In order to determine the best way to approach service integration, a report from the Pathways Resource Center notes that districts may benefit from examining the way in which Individualized Education Plans (IEPs) are implemented in its schools. ACP is not intended to replace IEPs, but both processes are student-centered, student-driven, and designed to serve every student in need.[70]

USE OF TIME

Time can be the most precious resource – and biggest barrier – in implementing an ACP. Wisconsin ACP pilot districts report that finding time in busy student and teacher schedules for ACP activities and training can be difficult.[71] If schedule allows, experts recommend that teachers have dedicated time for ACP activities. Teachers say that regularly scheduled ACP time allows them to develop productive mentoring relationships with students that can be maintained throughout their secondary career.[72]

Many districts schedule ACP activities during existing flexible time, such as advisory periods.[73] Some districts also choose to deliver reports on student's ACP progress during parent-teacher conferences. In New Jersey, PSLP pilot schools schedule time in one of the following ways:[74]

- A previously scheduled period of time when everyone in the school was doing the same thing (e.g., a homework or special activity period).

- A class period in which the school substituted a traditional lesson with the PSLP curriculum; this typically happened in subject areas, such as Health, in which all students in a grade were required to take the course.

- A custom period of time expressly set aside to accommodate the implementation of PSLP (e.g., some schools establish a special day periodically and shave ten minutes off the end of each regular period to create time for a PSLP period).

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[3] "Individual Learning Plans Program Guide." Providence Public High Schools, March 2007. p. 12. http://education.vermont.gov/documents/EDU-PLP_Providence_Program_Guide.pdf

[69] Natasha Kildow, Northwood School District. Curtis, G. et al. "Academic and Career Planning: 101." presented at the Wisconsin School Counselors Association ACP Pre-Conference, February 16, 2016. p. 66. https://media.dpi.wi.gov/acp/pdf/acp_101.pptx

[70] Fox, Op. cit., p. 1.

[71] Curtis et al., "Academic and Career Planning: 101," Op. cit., p. 62.

[72] Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 504.

[73] Malin, Hamilton, and Hackmann, Op. cit., p. 4.

[74] Bulleted text taken verbatim from: "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., p. 28.

In regards to teacher planning time, experts recommend that schools integrate ACP into the existing Professional Learning Communities (PLCs) and other staff planning time.[75]

PROFESSIONAL DEVELOPMENT

Teachers may require training in the use of web-based career guidance software. As Solberg et al. indicate in the *Journal of Career Development,* the use of web-based career guidance systems can enhance teachers' role in the ACP process: [76]

> [teachers] do not need to become experts in career development in order serve in a mentoring role because labor market information, educational pathways, and information on using career assessments are incorporated into the systems.

However, teachers may require training to gain a basic familiarity with the guidance system's functionalities and learn troubleshooting tips. The NJDOE recommends that the district invite a representative from the company that produced the web-based guidance system to provide the training. The district ACP coordinator and members of the district ACP team may also lead the training sessions.[77]

In addition, **teachers may benefit from training sessions that cover strategies for engaging students, student reflection, and other topics associated with leading ACP activities.** Non-technical training sessions are also an opportunity for ACP leaders to communicate the rationale behind the ACP program and the changes in student attitudes that teachers may see in their classrooms. In addition, the NJDOE notes that staff may need "clear explanations to ensure that they understand that they are not expected to take on the role of school counselor."[78]

DATA COLLECTION

Data collection is embedded in the ACP process. In many districts, students build a portfolio of their work, including assessment scores, personal statements, and other written documents. In addition, web-based guidance systems such as Career Cruising collect data on student performance and can produce data reports for district leaders to review.[79] As a result, ACPs can generate a rich and valuable dataset because they contain "information not traditionally collected in student data systems, including a multiyear academic plan, career interests, student reflection data, personality and learning style assessments, and action plans."[80]

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[75] Solberg, Willis, and Osman, Op. cit., p. 33.

[76] Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 506.

[77] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit., pp. 26–27.

[78] Ibid., p. 26.

[79] [1] Solberg, Willis, and Osman, Op. cit., p. 21.
[2] Malin, Hamilton, and Hackmann, Op. cit., p. 5.

[80] [1] Bloom and Kissane, Op. cit., p. 2.
[2] Solberg, Willis, and Osman, Op. cit., p. 21.

District leaders should collect data that allows them to track student progress towards their stated goals. School counselors should use student data regularly to make decisions about how to assist students, according to the American School Counselor Association (ASCA) National Model.[81] School leaders can compare ACP-generated data with the data that the school already collects, including attendance records, standardized test scores, and behavior records.[82] In addition, the ACP-generated dataset can be used to conduct a more nuanced analysis of the factors impacting student achievement generally.[83]

In addition, **experts encourage districts to use data to evaluate the progress of ACP program implementation.** ACP evaluation data to be collected may include the following:[84]

- Process Data: What was done for whom?

- Results Data: What are the outcomes?

- Perception Data: What do people think they know? What do they believe? What can they do?

ACP guidebooks present a range of data collection tools to support program evaluation, including questionnaires, student worksheets, and teacher observation forms.[85] In addition, districts may choose to partner with interested scholars at local institutions of higher education to evaluate the success of the ACP program.[86]

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[81] "ASCA National Model: A Framework for School Counseling Programs." American School Counselor Association. http://schoolcounselor.org/ascanationalmodel/media/anm-templates/anmexecsumm.pdf

[82] Solberg et al., "The Nature and Use of Individualized Learning Plans as a Promising Career Intervention Strategy," Op. cit., p. 510.

[83] Bloom and Kissane, Op. cit., p. 2.

[84] Bulleted text adapted from: "Individual Learning Plans Program Guide," Op. cit., p. 47.

[85] [1] "Individual Learning Plans Program Guide," Op. cit.
[2] "A Guide for Implementing Personalized Student Learning Plan (PSLP) Programs," Op. cit.

[86] See for example: Malin, Hamilton, and Hackmann, Op. cit.

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