



K-12 Career Readiness Programs

Executive Summary

Individual Career and Academic Plans (ICAP) are optional, individualized plans for students created with inputs from parents or guardians and guidance counselors. Many states require or encourage students to develop ICAPs. [House Bill 2171](#) and [Senate Bill 703](#) would make these plans mandatory for public school students before they enter the 9th grade and would require yearly reviews from 9th–12th grade. Additionally, the proposed legislation would require most students to complete the Free Application for Federal Student Aid (FAFSA) and declare their post-graduation plans prior to graduating. Finally, it would require students in Missouri school career centers to be informed about federal aid available through the [Workforce Innovation and Opportunity Act](#).

Highlights

- Linking student skills to career options during middle school can **improve student motivation** by allowing students to create high school and career plans based on their skills and interests.
- Due to high ratios of students to counselors, middle school **counselors have limited time to spend on individual career planning**.
- There is significant variation between middle school career readiness training (including elective or online programs) and standards between states in the U.S.

Limitations

- There is a large lag between middle school and career outcomes for most students. Because many of these programs have been recently implemented, it is difficult to measure which programs are associated with improved college and career readiness.
- The effects of a specific career readiness course on student performance are difficult to evaluate because student outcomes are impacted by a range of additional factors such as academic performance, family resources, institutional rigor, and support.

Research Background

Benefits of Middle School Career Readiness Preparation

Students in the middle grades (6–8), especially those in high-poverty environments, are developmentally positioned to benefit from career readiness training.¹ Career preparation and counseling in middle school impacts student choices during high school and allows them to more closely link their coursework and activities to their postsecondary goals.² Several middle school factors—achievement levels, behavior, motivation, and family circumstances—have been

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associated with postsecondary preparedness, as measured by college readiness test scores (i.e., ACT, SAT).³

High student-to-counselor ratios, teacher shortages, instructional time requirements, and basic achievement deficits from elementary school have made it more challenging to implement statewide career readiness programs during middle school. Lack of broadband access and incomplete information, especially for students who would be the first in their family to attend college, makes it likely that even if states provide online career assessment resources, only a subset of students will access these resources on their own.⁴ Centralized career readiness programming for the middle grades is likely to help ensure that every student has access to the same information and resources to identify their strengths, post-high school options, and career goals. This is particularly important for low-income and minoritized students, as well as students with disabilities.^{4,5}

Career Preparation in Missouri Middle Schools

During elementary school in Missouri, students are exposed to six general career paths (Building and Fixing, Business, Creative, Health, Helping, Nature). Middle school students are then encouraged to focus on one of sixteen [career clusters](#), eventually identifying a specific career pathway to guide their program of study during high school. As part of Missouri [SB 638](#) in 2016, school counselors are authorized to help students develop Individual Career & Academic Plans (ICAPs) in order to guide their high school and postsecondary planning. [House Bill 2171](#) and [Senate Bill 703](#) would make ICAPs mandatory, require FAFSA completion as a condition of graduation, and would require students in Missouri school Career and Technical Education (CTE) programs to be informed about federal aid available through the [Workforce Innovation and Opportunity Act](#). For more information, see our Science Notes on [FAFSA Completion](#) and [CTE](#).

The Department of Elementary and Secondary Education (DESE) website provides several [college and career readiness resources](#), including career readiness standards, lesson plans, and a free career exploration tool ([Missouri Connections](#)) that aligns with the career clusters and pathways identified in schools.

2018 Task Force

Missouri [HB 1606](#) (2018) established a Career Readiness Course Task Force to explore the feasibility and need for a mandatory career readiness course in the 8th or 9th grade. The task force distributed an email survey and held three public meetings (Park Hills, Rolla, and Mexico) to learn about existing career readiness services in the state.⁶ Of the 179 total survey respondents, 75% were teachers and administrators, while counselors and parents accounted for 18% and 10% of responses, respectively. Overall, survey respondents and public meeting attendees recognized that career readiness skills were important. Most respondents indicated that district counselors were primarily responsible for providing existing career readiness

resources. Some argued that counselors were already fulfilling this need, while others noted that counselors have a range of duties and therefore limited time to spend with each student.

There were also several concerns about adding a mandatory course to existing requirements, especially in high school. While the task force report is informative, there were several limitations of its findings. First, the number, geographical distribution, and demographic characteristics of the school districts represented in the survey and public hearings is not clear. Additionally, counselors were underrepresented in the survey sample. Because they most directly work with students on career and academic planning, decision-makers could consider the counselors' current workload and ability to spend time working with individual students on career and academic planning. For example, although the American School Counselor Association recommends a student to counselor ratio of no more than 250:1, Missouri had a 339:1 ratio of students to counselors in the 2018-19 school year.⁷ There is also evidence that school counselors take on a number of non-counseling duties which can also limit the time they have available to work with students on individual career counseling.⁸

	Full-time course	Limited or optional instruction	Individualized academic/career planning	Online resources	Pilot program or working group established
Arizona	x		x	x	
Arkansas			x	x	
Florida	x		x	x	
Hawaii			x	x	x
Indiana				x	x
Iowa			x	x	
Kentucky		x	x	x	
Maine		x		x	x
Maryland					
Montana					
Nebraska	x		x	x	
New Hampshire					
New Jersey				x	
New York					x
Pennsylvania				x	
Tennessee		x			
Utah	x				
Virginia	x		x	x	
West Virginia			x	x	
Wyoming		x			

Table 1: Comparison of state middle school career readiness programs. This table summarizes the characteristics of middle school career readiness programs in states with middle school career readiness standards. An “x” indicates that the component is available; green indicates that the component is required.

Middle School Career Readiness Programs in the United States

Around 20 states have established some form of career and college exploration standards for middle school.⁹ Thirty-six states prioritize or support counseling for college and career readiness during middle school. **Table 1** highlights the range of state career readiness programs that exist. Arizona, Florida, Utah, and Virginia have established statewide requirements for a college and/or career exploration course during middle school. Pennsylvania has created a “Career Readiness Indicator” for grades 5, 8, and 11, which allows schools to track student engagement and identify at-risk students for early intervention. Because each state (as well as some districts) have implemented varying career readiness strategies at the middle school level, there is not strong evidence for the effectiveness of specific program types on improving student performance or career outcomes at this point. Some smaller studies have shown minor improvements in student achievement but have not yet been able to follow subjects past high school graduation, where we would expect to see some of the impacts.

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