Students today are both excited and nervous about their life after high school. While still dreaming of what the future may hold, they must also map out a future for themselves that is both in line with their career interests and their educational expectations. That’s why cultivating a student’s understanding of their career aspirations and making certain that their educational goals are aligned with their career objectives are vital to a student’s long-term success. Career exploration is the cornerstone of this process, and research suggests that middle school is the most effective time for career guidance to occur. Evidence shows that career guidance works; it is associated with both positive educational and employment outcomes, keeps students engaged in school, and allows them to develop a better sense of self. As we encourage students to dream about their futures, we must give them the knowledge and tools to succeed and support the interventions that have proved benefits. Middle school career exploration is one of those interventions.

**Key Findings**

- Having career aspirations linked to an educational goal impacts the likelihood that a student will achieve his or her goals.

- Career exploration plays an important role in the process by allowing students to gain knowledge about their interests and skills as well as the career pathways available.

- Research finds that middle school is the most effective time for career guidance programs.

- Middle school students are already thinking about their futures and are open to career exploration. They want information that can help them match their specific skills and interests with potential careers.

- Career education works; career education is associated with positive educational and employment outcomes.
Middle School Years Offer an Untapped Opportunity for Career Exploration

Career awareness and exploration should be a process that takes place over a student’s educational journey and evolves as students develop and mature, not as a single event with a start and end point. These programs offer students an opportunity to better understand their strengths and interests, to gain awareness of different career pathways, and help students better understand labor market trends and future opportunities. This type of exploration can be helpful for all students and should be neither a reward for the high-achieving students nor a way to track students into specific careers. Every student should be given the tools and opportunities to explore their future.

Researchers have conducted several meta-analyses of career guidance programs in order to learn more about what works and when is the most effective time for the guidance. The research suggests that middle school is the most effective time for career guidance. In two studies, conducted ten years apart, researchers found career guidance interventions had positive effects, and that guidance activities directed at middle school students had the largest effect sizes.¹ In their meta-analysis, Oliver and Spokane (1988) define career intervention as “any treatment or effort intended to enhance an individual’s career development or to enable the person to make better career-related decisions.” Their research suggests that career guidance efforts may be the most effective with younger teenage students, although they also find a positive impact of career guidance on high school students.

A second meta-analysis by Whiston, Sexton, & Lasoff (1998) confirms the positive effects of targeting younger teenage students for career guidance. They also find that career guidance interventions had a positive effect with most age groups, and that interventions targeting middle school students had the largest effect sizes.² Based on their review of all extant research, Hughes and Karp (2004) also conclude that middle school should be the time to focus on career guidance. They find that students “seem to benefit, both vocationally and academically, from participation in career courses. In particular, they seem to increase their knowledge of careers and their ability to make career-related decisions.”³ The research suggests that career guidance is effective with middle-school students.

Meta-analytic research as recent as 2017 (Whiston, Rossier, & Barón, 2017) established middle school students as the population most receptive to positive change following a career development intervention.⁴ Citing Whiston et al. (1998),⁵ Turner and Conkel (2010),⁶ Turner and Lapan (2005),⁷ and Hirschi and Lage (2008),⁸ the authors found profound differences between middle school students in a career development program relative to a control group. Here, the effect sizes were so large as to indicate the average student in the career development group outperformed up to 79 percent of those in the control group on key outcomes related to career interests, career self-efficacy, and career planning and exploration (Cohen’s d = .79). The authors ultimately conclude that “there is substantial evidence that career development interventions should begin at least by the middle school level” (Whiston, Rossier, & Barón, 2017, p. 5).

In addition, the reality is that many middle-school students want career guidance. Middle school students are already thinking about their futures and it is a source of stress for them. Middle-schools students want guidance that will help them uncover their interests and match their interests with potential careers. According to ASA’s survey of middle and high school students:

- **Half of middle school students** reported “picking the right career for me” as a source of stress;
- **41 percent** reported that “thinking about the future and what I will need to do to reach my future goals” as a source of stress;
- **87 percent** of middle school students are interested in ways to match their specific skills and interests with potential careers; and
- **85 percent** are interested in ways to learn the education and experience requirements needed for the careers they are interested in.⁹
While some may be concerned that middle school is too early for career exploration, ASA's survey research combined with the academic research strongly reaches the opposite conclusion. Middle-school students want the opportunity to explore career options and middle school is an effective time to allow students to explore career possibilities, broadening their horizons to the possibilities that may be of interest to them.

Creating opportunities for middle-school students to explore career options offers other important advantages. Middle school is a time of lower stress for students. According to ASA's research the student stress levels increase as students' progress through high school. The stakes are lower in middle school leaving students more open to opportunities to explore and experiment, and their exploration can be a source of positive motivation in middle and high school.

Middle school is also an important time of transition for teenagers. Robert Balfanz's research has documented the importance of the middle-school years on closing the achievement gap, increasing high school graduation rates, and improving college readiness. He recommends that fifth through eighth grades “need to be seen as the launching pad for a secondary and post-secondary education system that enables all students to obtain the schooling and/or career training they will need to fully experience the opportunities of 21st century America.” In particular, for students living in high-poverty areas, a student's middle grades experience strongly impacts that student's odds of graduating from high school.¹⁰

Students face an increased risk of disengaging from school during the transition to middle school. TNTP’s recent research found that student engagement sharply declines during the middle school years and the decline continues throughout high school. A majority of students report their schoolwork is not engaging or worthwhile.¹¹ To prevent their disengagement, middle schools need to better match the adolescent developmental stage. Adolescence is a time when students seek relevancy to their areas of study. Robert Balfanz has found that math utility (the extent to which students believed that the mathematics that they were studying would be useful in life) was the strongest predictor of student effort.¹² As they enter middle school, adolescents also have greater capacity to think about and plan for the future. Career awareness and exploration can be an effective strategy to keep students engaged in school and connect what they are learning to the world around them.¹³

Widespread concern about the state of middle schools exists across the country. The Educational Commission of the States (ECS) goes so far as to say that “the middle grades are in crisis.” To improve student success, the ECS recommends helping middle school students explore career options, set goals, and see relevance of their studies.¹⁴ Without taking a position on the level of crisis of middle schools, it is nonetheless clear that expanding career exploration in middle schools would be positive on a number of levels. A wide range of research points to the importance of offering middle-school students the opportunity to engage in career awareness and exploration. Researchers find that the middle-school years as the most effective time for the exploration. Middle-school students want to engage in career exploration. Moreover, career exploration can be an effective strategy to keep middle-school students engaged during the school years that matter and when students are at-risk of disengaging from school.

Benefits of Improved Career Education and Exploration

Career education works. Students who participate in career education can expect to have more positive educational and labor market success, compared with their peers who do not participate in these programs. Existing research finds that career education is associated with improved academic achievement. In a review of 45 studies that analyzed the impact of career education on educational outcomes, researchers found that 60 percent showed largely positive findings, 17 studies found mixed findings, and only 1 study linked career education to negative educational outcomes. The positive educational outcomes varied and included increased high school graduation rates, enrolling in more advanced courses, enrolling in higher education, and completion of higher education.¹⁵ In addition, other research has analyzed the positive impact of interventions that specifically target at-risk students. In one such intervention,
a career exploration program specifically for at-risk middle school students led to improved school behavior, including decreased disciplinary problems, and increased attendance.¹⁶ It is important to note the wide variation in career exploration programs in terms of the content, duration, and overall approach. These differences matter in terms of its efficacy and need to be better understood with future research. Overall, research findings from across many different programs demonstrate that career education is linked with positive educational outcomes.

In addition to the educational benefits, career education is also associated with positive economic and employment outcomes. Of 27 studies that focused on employment outcomes resulting from career education, 63 percent found positive economic outcomes, 37 percent had mixed outcomes, and no study found negative economic outcomes. The nature of the outcomes, which varied in the different studies, primarily included employment levels, wages, and type of occupation. What is key is that these studies were able to connect these longer-term labor market outcomes to students who participated in some type of career education while in secondary school. Researchers also speculate that career education might have the biggest impact on at-risk young people and others who might not otherwise have good access to the labor market.¹⁷

The labor market is constantly changing, and we are in the midst of a period of a great change largely due to technological innovations that are reshaping the jobs of the future. Career education can play a critically important role in disseminating information about the labor market trends and future opportunities. Preparing students for their future includes helping them to understand what types of job are projected to grow and which are projected to declines. Ideally, students’ aspirations should reflect the future job market. According to the OECD Pisa 2018 surveys, large numbers of students are still interested in occupations that are likely to diminish.¹⁸ While we can’t predict with complete certainty what jobs will exist in the future, enough is known about the likely trends and skills that will be in demand to help guide students. We owe our young people accurate information about the future job market that they will be entering.

Overall, the research on career education finds that it is effective and is associated with positive educational and employment outcomes. There is also some evidence that career education is also associated with improvements in self-efficacy, self-confidence, and decision-making skills.¹⁹ Career education can and does make a difference in preparing students for the future. As we encourage our students to dream about their futures, we should also give them the tools to help put them on a pathway to success.

**Concluding Thoughts**

Middle and high school students want more opportunities to explore their interests and to connect their interests with possible career pathways. College students wished that they had had the opportunity to explore and think more about different careers or fields of study that might interest them before they started college. Career exploration has value for all students. In particular, the research suggests that career exploration might be even more important for at-risk students, students of color, female students, and first-generation students. Career exploration offers an opportunity to make certain that a student’s aspiration and educational expectation are aligned, and this alignment has proven to be an important influence on a student’s future. An opportunity exists to help young students identify their aspirations and their educational goals to achieve those aspirations.

At the same time, there is still much to be learned about what type of career education is most effective for which students at which developmental stage. Career education currently varies considerably. Programs differ in terms of their goals, audience, dosage, duration, and curriculum. Existing research has begun to identify the characteristics of effective career education. **Based on an international review of existing research, Deirdre Hughes and her colleagues find that features of effective practice include:**

- Career Reflection
- Career Exploration;
- Career Action;
- Career Dialogue; and
- Networking²⁰
Of course, what these elements look like in practice may vary depending on the age of the participants and the goals of the program. There is a clear need for more research, and particularly longitudinal research that can further identify the “how to best do it” – the essential characteristics of high-quality career education.

Several researchers have identified middle school as the most effective time for career guidance, but this raises many questions for school administrators. Time is often the scarcest resource in schools. Determining when and how to incorporate career guidance within the school day is an enormous challenge. Can career guidance pair with other activities within the school day, such as social-emotional learning efforts or project-based learning? Or, alternatively, is it most effective as a standalone activity? What are the curricular options? How do you most effectively incorporate career exploration into the fabric of a student’s learning and not just give them a one-time experience? As we realize its importance, these questions and others must be addressed. Identifying and learning from exemplary middle schools that have already incorporated career exploration into their schools is an important starting point.

As schools prepare students to lead productive and full lives, helping them be able to make informed choices about college and career should be a priority. As students develop their aspirations, we owe them the knowledge and tools that can help them reach their goals. Career exploration and education during their K-12 schooling has been shown to make a positive impact on students’ lives decades later. As we encourage our students to dream about their futures, we should also give them the tools to help put them on a pathway to success.
ENDNOTES

²⁰Hughes, D., et al. (2016), p1