

Career Development Interventions and Student Success in Higher Education

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Abstract

This report reviews selected research from vocational psychology, higher education, and career counselling literature examining the impact of career development interventions on student success. Evidence is synthesized across five domains: vocational identity development, academic retention and graduation, post-graduation employment outcomes, equity and support for diverse student populations, and mental health and well-being. Findings consistently demonstrate that structured career development programming produces meaningful gains across all five areas, with particular significance for students from equity-deserving communities, and that embedding career development systematically into the student experience produces stronger outcomes than voluntary or ad hoc provision.

Résumé

Cette rapport recense des recherches choisies en psychologie vocationnelle, en enseignement supérieur et en counseling de carrière portant sur l'incidence des interventions de développement de carrière sur la réussite étudiante. Les données probantes sont synthétisées selon cinq domaines : le développement de l'identité vocationnelle, la persévérance et l'obtention du diplôme, les résultats d'emploi après l'obtention du diplôme, l'équité et le soutien aux populations étudiantes diversifiées, ainsi que la santé mentale et le bien-être. Les constats démontrent de façon constante qu'une programmation structurée en développement de carrière produit des gains significatifs dans ces cinq domaines, avec une portée particulière pour les étudiant.es issu.es de groupes en quête d'équité, et qu'intégrer le développement de carrière de manière systématique à l'expérience étudiante produit de meilleurs résultats qu'une offre facultative ou ponctuelle.

Introduction

Career development has increasingly been recognized as an important component of student success initiatives in higher education. Helping students connect their academic studies with future career opportunities contributes not only to employment outcomes after graduation but also to academic engagement and persistence during their studies. Career development interventions in higher education commonly include career education programs and courses, structured career exploration activities, skills development workshops, career counselling, and individualized advising designed to support students' career decision-making and career planning.

Theoretical foundations for career development interventions are provided by Social Cognitive Career Theory, which explains how career interests, choices, and performance develop through the interaction of self-efficacy beliefs, outcome expectations, and environmental supports (Lent, Brown, & Hackett, 1994). According to this framework, students who develop confidence in their ability to make career decisions and who perceive clear connections between their education and future employment are more likely to engage in career exploration and make purposeful academic choices.

A substantial body of research has examined the effectiveness of career development interventions in higher education. Meta-analytic studies synthesizing multiple intervention studies have consistently found that career counselling and career education programs produce statistically significant improvements in career decision-making and vocational identity development (Brown et al., 2003; Whiston, Li, Mitts, & Wright, 2017). Individual studies examining university career courses have demonstrated improvements in students' career planning confidence and related career development outcomes (Reese & Miller, 2006; Folsom & Reardon, 2003). Longitudinal and institutional studies further suggest that career clarity and alignment between

students' interests and academic programs are associated with stronger persistence and graduation outcomes (Allen & Robbins, 2010; Clayton et al., 2019).

These findings highlight the growing recognition of career development programming as an important contributor to student success in higher education. By helping students explore career options, develop career management skills, and understand labour market opportunities, career development services support both academic success during university and successful transition into the workforce after graduation.

This report summarizes selected research from vocational psychology, higher education, and career development literature examining the impact of career development interventions on student success outcomes.

The following sections summarize research examining the role of career development interventions in five key areas of student success:

1. **Exploration of Career Options and Development of Vocational Identity**
2. **Academic Success, Retention, and Graduation**
3. **Post-Graduation Employment Outcomes**
4. **Addressing Barriers to Success and Supporting Diverse Students**
5. **Mental Health and Well-Being**

1. Exploration of Career Options and Development of Vocational Identity

Career development interventions help students explore career options and develop a clearer vocational identity. Vocational identity refers to the degree to which individuals have a clear and stable understanding of their interests, strengths, and career goals, a construct first systematically defined by Holland, Daiger, and Power (1980), who identified it as a foundational component of effective career decision-making. Skorikov and Vondracek (2011) describe vocational identity development as a lifelong process shaped by educational experiences, self-exploration, and occupational engagement. In this framework, identity achievement, characterized by self-chosen, stable, and flexible career commitments, represents the most adaptive outcome for career and psychosocial functioning. Students who develop clearer career goals and stronger vocational identity often demonstrate greater academic motivation, career decision-making readiness, and psychosocial adjustment (Skorikov & Vondracek, 2011).

Research examining career exploration consistently shows that structured exploration activities strengthen vocational decision outcomes and improve clarity regarding career goals (Kleine, Schmitt, & Wisse, 2021; Whiston, Li, Mitts, & Wright, 2017). These activities encourage students to reflect on their interests, values, and skills while gaining exposure to potential career paths. Flum and Blustein (2000) further argue that vocational exploration is not simply an information-gathering activity but a fundamental process of identity construction, through which individuals develop a coherent and personally meaningful sense of self in relation to their career goals.

Taken together, this research demonstrates that career exploration and vocational identity development play an important role in helping students make informed academic decisions. By clarifying career goals and

strengthening alignment between students' interests and their academic programs, career development interventions can contribute to stronger academic engagement and persistence.

2. Academic Success, Retention, and Graduation

Research consistently demonstrates that career development interventions contribute to improved academic engagement and persistence. Meta-analytic research examining career counselling and career education programs has found that structured career interventions significantly improve vocational decision outcomes and career planning behaviors (Whiston, Li, Mitts, & Wright, 2017). Interventions that include individualized feedback, written exercises, occupational information, and opportunities for reflection tend to produce the strongest outcomes (Brown et al., 2003).

University career courses represent one common form of structured career intervention. Research examining university career courses, including both individual studies and broader reviews, consistently reports improvements in career planning confidence, occupational choice certainty, and exploratory behaviors among participating students (Folsom & Reardon, 2003; Reese & Miller, 2006).

The role of career clarity in academic persistence is also well supported in the literature. A longitudinal study examining more than 13,000 university students found that alignment between students' vocational interests and their chosen academic major significantly predicted timely degree completion (Allen & Robbins, 2010).

Institutional studies further demonstrate measurable retention benefits associated with career development programming. In a large-scale evaluation of a university career intervention program involving more than 14,000 students, Clayton et al. (2019) found that students who participated in structured career development activities had one-year retention rates 8.8 percentage points higher than nonparticipants and four-year graduation rates approximately 15 percentage points higher.

These findings suggest that career development interventions support persistence by helping students develop a clearer sense of academic purpose and strengthen the connection between their studies and future career goals.

3. Post-Graduation Employment Outcomes

Career development interventions contribute to stronger post-graduation employment outcomes by helping students develop career management competencies, professional identity, and labour market awareness. Contemporary research on graduate employability emphasizes that successful transition to work depends not only on disciplinary knowledge but also on the ability to navigate labour market opportunities and manage one's career proactively (Jackson, 2016).

Career development programming supports the development of these competencies by helping students identify transferable skills, develop job search strategies, and build professional networks. Research on graduate employability has identified career management skills such as labour market awareness, networking, and career planning as critical predictors of employment outcomes (Bridgstock, 2009).

Models of graduate employability also emphasize the importance of combining disciplinary knowledge with career development learning and practical experience. Dacre Pool and Sewell (2007) identify career

development learning as a key component of employability because it enables students to understand how their skills and experiences translate into employment opportunities.

Evidence from a large-scale national study of more than 28,000 Australian bachelor graduates provides empirical support for these connections. Jackson (2014) found that generic skill development increased the odds of securing full-time employment by 19%, while the formation of a positive graduate identity increased the likelihood of employment by 10%. Networking as a job search strategy, a key component of career management, was associated with a 54% increase in the odds of job attainment, underscoring the importance of developing professional networks during university.

Drawing on quantitative data from 370 business undergraduates across Australian and UK universities, Jackson and Wilton (2017) found that career management competencies and perceived employability were significant predictors of career choice satisfaction among undergraduates. Notably, students at the institution that embedded career self-management as a core curriculum unit demonstrated considerably higher career choice satisfaction than those at the institution where career development engagement was optional, suggesting that structured and integrated career development programming produces stronger outcomes than ad hoc provision.

Taken together, these findings suggest that career development programming plays a meaningful role in preparing graduates not only to enter the workforce but to navigate it successfully over the longer term.

4. Addressing Barriers to Success and Supporting Diverse Students

Career development programs can also help address barriers faced by students from diverse backgrounds. Students from historically underrepresented or first-generation backgrounds often have less access to professional networks and career-related information. Research indicates that first-generation college students face distinct external barriers in their career development, including limited family context for navigating career pathways, lower levels of social support, and constrained access to career-related resources and networks (Tate et al., 2015; Toyokawa & DeWald, 2020). These programs can help reduce these barriers by providing guidance, mentorship, and opportunities for career exploration.

Research in multicultural career counselling has consistently demonstrated that race and ethnicity play a significant role in shaping individuals' career development experiences and opportunities (Kantamneni & Fouad, 2023). Culturally responsive career interventions can support vocational goal clarification and career exploration among diverse student populations by addressing the environmental and structural factors that shape career trajectories (Flores & Heppner, 2002; Kantamneni & Fouad, 2023). By providing targeted support and career-related information, career development programs can help students navigate structural barriers and develop confidence in their occupational choices.

International students may face additional challenges when transitioning from higher education into the labour market, including limited professional networks, unfamiliarity with local employment practices, and uncertainty regarding immigration and employment regulations. Research examining international students' career expectations and transition experiences highlights challenges related to labour market knowledge, employability preparation, and immigration constraints (Nilsson & Ripmeester, 2016; Arthur, 2013). Barriers to participation in work-integrated learning and access to professional networks further affect international students' ability to gain career-relevant experience (Gribble & McRae, 2017). Career development and counselling interventions can help address these challenges by supporting international students in cultural navigation, vocational planning, and employment pathway development in their host countries (Chen, 2023).

Career development programming thus serves an equity function as well as an academic one, helping to level the playing field for students who face structural disadvantages in navigating their career paths.

5. Mental Health and Well-Being

Career uncertainty is a common source of stress among university students (Kwok, 2018). This uncertainty can manifest as anxiety about future career prospects and difficulty making occupational decisions, particularly among emerging adults navigating both academic and career demands simultaneously. Career development interventions help reduce this uncertainty by supporting students in clarifying goals, exploring options, and strengthening their sense of direction. Research and practice literature suggests that effective career development interventions influence variables such as confidence, hope, motivation, and sense of purpose, which are associated with positive mental health outcomes (Redekopp & Huston, 2019; Robertson, 2013).

Beyond intervention effects, research has also shown that vocational identity development and purpose-related orientations are positively associated with life satisfaction and psychological well-being among emerging adults (Hirschi, 2011). In addition, research on career adaptability and related career development constructs has found consistent positive relationships with indicators of life satisfaction and psychological well-being (Rudolph, Lavigne, Katz, & Zacher, 2017).

Meta-analytic evidence further supports the relationship between career counselling and mental health outcomes. Milot-Lapointe and Arifouline (2025) conducted a meta-analysis of 35 independent samples and found that individual career counselling produced a significant medium-large effect on mental health outcomes ($g = 0.68$), with particularly strong effects on psychological distress ($g = 0.90$) and life satisfaction ($g = 0.79$). These findings suggest that career counselling can function as a valuable mental health intervention, particularly when career-related concerns and mental health difficulties are intertwined.

Because mental health and well-being influence students' engagement, motivation, and ability to cope with academic challenges, career development interventions that strengthen purpose and vocational clarity may also indirectly support academic persistence and overall university success, suggesting that investment in career development services represents an investment in student mental health as well as academic outcomes.

Conclusion

The research reviewed in this report provides compelling evidence that career development interventions contribute to student success across multiple dimensions. Taken collectively, the findings from vocational psychology, higher education research, and career counselling literature paint a consistent picture: students who receive structured career development support demonstrate stronger academic engagement, higher retention and graduation rates, better post-graduation employment outcomes, and improved psychological well-being.

The empirical case for career development programming has strengthened considerably in recent years. Large-scale studies demonstrate that participation in structured career development activities is associated with retention rates nearly nine percentage points higher and graduation rates approximately fifteen

percentage points higher than among non-participants (Clayton et al., 2019). At the individual level, career management competency development has been shown to increase the odds of graduate employment by meaningful margins (Jackson, 2014), while meta-analytic evidence confirms that individual career counselling produces significant effects on both career outcomes and mental health (Milot-Lapointe & Arifouline, 2025). These are not modest findings. They represent substantial returns on investment in career development services.

Career development programming also serves an equity function. First-generation students, students from underrepresented backgrounds, and international students face structural barriers that career development interventions are uniquely positioned to address. By providing targeted guidance, mentorship, and access to career-related resources, career services can help level the playing field and support equitable participation in both higher education and the workforce.

Institutions that treat career development as a peripheral or optional service risk underestimating its contribution to the outcomes they most value. Student retention, graduation, graduate employability, and student well-being are all demonstrably influenced by the quality and accessibility of career development programming. The evidence reviewed here suggests that embedding career development learning systematically into the student experience, rather than relying on voluntary engagement, produces meaningfully stronger outcomes. Career development is not simply a service for students who are uncertain about their futures. It is a core component of a high-quality higher education experience for all students.

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