



## A Process Model for Designing Employability Award Programs to Develop Graduate Employability

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### Abstract

Employability awards have been implemented within universities as a strategy to support student development of employability and ultimately attainment of employment. The extant research into employability awards lacks a theoretical approach to designing and evaluating the impact of employability awards on relevant outcomes including employability and employment. This paper, informed by career construction theory, proposes a learner-focused, process model for developing employability. It also paves the way for future research to evaluate the impact of employability award programs.

### Keywords

employability;  
award;  
university;  
student;  
employment;  
career  
adaptability

### Introduction

Employability of university graduates has been of interest to scholars and administrators for several decades. Although a contested term, employability is generally defined as pertaining to the ability of an individual to obtain and maintain employment (e.g., Forrier et al., 2015; Fugate et al., 2004; Yorke & Knight, 2004). Employability is strategically important for universities to position themselves as committed to producing employable graduates (Bennett et al., 2017; Bridgstock & Jackson, 2019). Calls from industry and governments to improve the employability skills of graduates has resulted in universities viewing employability as predominantly concerned with competencies or human capital development (Brown et al., 2022). Accordingly, universities have chosen to enhance graduate employability via the teaching and assessment of graduate attributes (Barrie, 2006; Hammer et al., 2021; Oliver & Jorre de St Jorre, 2018), career development learning (Bridgstock et al., 2019; Brown, Healy, McCredie, et al., 2019; Lin-Stephens et al., 2019), work integrated learning (Jackson, 2015; McIlveen et al., 2011), and employability award programs (Russell & Kay, 2019; Watson, 2011).

Employability awards involve completion of extra-curricular activities—activities that have been a part of university life for generations of students—and employability-focused learning activities within the curriculum. Research into employability awards, co-curricular, and extra-curricular activities, note the contribution of these activities in the development of employability skills (e.g., Al-Saedi et al., 2019; Chilvers & Waghorne, 2018; Clark et al., 2015). Yet, there appears to be mixed aims and expectations of the outcomes of employability awards, and extra-curricular activities more broadly. Students engage in employability awards for a variety of reasons including enjoyment and social interaction (Greenbank, 2015), developing human and social capital (Brown et al., 2021), labour market competitiveness, personal and career exploration, and boosting self-efficacy. However, the contribution of extra-curricular activities and employability awards to the attainment of employment has been somewhat underwhelming (Jackson & Bridgstock, 2021; Jackson & Tomlinson, 2021).

There are several empirical and theoretical reasons for a lack of evidence showing a relation between participation in employability award programs and employment, which will be explored in this paper. This paper will propose a new model for designing employability award programs that is informed by theory. To start, this article provides an overview of employability awards, with an exemplar program to illustrate the common structure. Then a critique of employability awards is offered to highlight opportunities for improving employability awards through research and evidence-based practice. Next, career construction theory will be presented as a suitable theoretical framework to inform the design of employability awards. A review of the research literature on antecedents of employability and employment will be used to clarify the role that employability awards can contribute to the development of employability and employment outcomes. Finally, the process model for developing graduate employability will be presented.

## Employability Awards

Employability awards involve students engaging in employability-focused learning activities inside the curriculum and through participation in extra-curricular activities (Watson, 2011). Watson argues that employability awards are a method of engaging students in the *process* of developing their employability, with the *product* of employability awards being a transcript or certificate of completion. Bennett et al., (2017) noted that employability awards are generally structured in one of three different ways: as a *portfolio* where students access multiple opportunities to develop employability, some of which is within the curriculum and some is non-credit bearing; as an *award*, which is an institution-wide program that formally recognises employability development through a certificate or entry in the academic transcript; and *non-embedded*, which is a centrally delivered program wholly outside the curriculum.

To illustrate how employability awards are structured, six exemplars are described in Table 1. The table lists the university (coded by the author); a summary of how the university website describes the purpose of the employability award; the process through which students engage in the program; and the product of the program, namely how students receive formal recognition of their engagement. The awards were identified by conducting an internet search for *employability awards*. Three universities from Australia and three from the United Kingdom were selected based on providing sufficient information on the university website about the requirements to achieve the award. These six employability awards are described to illustrate the purpose, the process to participate, and the product of each award.

As illustrated in Table 1, the purpose of the employability awards is described on university websites as recognising students' development of skills, professional development, gaining of practical experiences, and engagement in career development learning. These attributes are often highlighted as being highly valued by employers (e.g., AU-02, AU-03, UK-02), although past research has highlighted that there are discrepancies between activities rated as important by employers, academics, and students (Kinash et al., 2016). The process of the awards is through engagement in activities, such as work experience or internships, volunteering, career development learning, mentoring, student clubs and societies, sports, paid employment, and written reflections. Some

employability awards are focused on extracurricular activities, such as AU-01; whereas others emphasise career development learning, such as UK-03. The product of the employability awards is usually the presentation to students of a certificate and in some cases in official university documents, such as academic transcripts, and in the UK exemplars, the Higher Education Achievement Report.

**Table 1: Exemplar Employability Awards at Universities in Australia (AU) and the United Kingdom (UK)**

University	Purpose	Process	Product
AU-01	Recognition of professional development, co-curricular learning, and community contributions undertaken while studying	<ul style="list-style-type: none"> <li>Co-curricular activities (volunteering, leadership roles, professional development activities, online learning courses)</li> <li>Self-reflection activity to identify skills and qualities developed through co-curricular activities</li> <li>Final reflection and interview</li> </ul>	Certificate
AU-02	Develop essential employability skills that employers seek in graduates.	<ul style="list-style-type: none"> <li>Mandatory online orientation</li> <li>Written plan on how to achieve award</li> <li>150 hours of extra-curricular activities</li> <li>Two career development workshops</li> <li>Resume and LinkedIn profile including activities completed in the employability award</li> <li>Written reflection on development of employability skills</li> </ul>	Certificate Award listed on academic transcript.
AU-03	Gain practical, real-world experiences, skills and knowledge highly valued by employers	<ul style="list-style-type: none"> <li>Online career development module and career plan</li> <li>Career events and pre-placement module</li> <li>Work experience</li> <li>Volunteering</li> <li>Supplementary experiential activities (e.g., mentoring, virtual internships)</li> <li>Reflection</li> </ul>	Not stated
UK-01	Supports career and personal development through recognition of extra-curricular activities completed	<ul style="list-style-type: none"> <li>Core activities (skills audit, event attendance, CV and interview preparation, reflection)</li> <li>Optional activities (e.g., career assessment, mentoring, internships, paid employment)</li> </ul>	Digital badges
UK-02	Complements studies through a focus on development of the skills needed to stand out in the employer selection process for internships, placements, and graduate-level jobs	<ul style="list-style-type: none"> <li>40 hours of work or volunteering</li> <li>40 hours of "active interests"</li> <li>Professional profile</li> <li>Employability skills</li> <li>Reflection</li> </ul>	Higher Education Achievement Report
UK-03	Credit for active engagement in career planning activities	<ul style="list-style-type: none"> <li>Induction</li> <li>Career guidance</li> <li>CV and cover letter</li> <li>Employability webinars</li> <li>Career events</li> <li>Job applications and personal statements</li> </ul>	Higher Education Achievement Report Certificate

In essence, employability awards are a collection of activities—that students are most likely already engaged in—rather than purposefully designed programs. Some employability award programs require students to complete a minimum number of eligible activities, whereas others encourage students to reflect on their development of skills (Russell & Kay, 2019). It seems that the aim of many employability awards is to increase the range and volume of activities that students do in the hope that this will give them the edge over less proactive students. At first glance, this seems a reasonable strategy, as research has found that students narrowly focus on the development of human and social capital, namely through work experience and networking activities (Brown et al., 2021; Brown, Healy, Lexis, et al., 2019; Jorre de St Jorre et al., 2019). However, there are problems with this approach. First, the extra-curricular activities commonly included in employability awards, such as internships and mentoring, have been found to be beneficial for employability development, but not for attaining employment (Jackson & Bridgstock, 2021). Second, in many employability awards there appears to be a lack of consideration of how to identify which aspects of an individual's employability could be further developed.

## Employability and Career Development Theories

Central to employability is the idea that employability represents the ability of individuals to obtain and maintain employment. Yet, the higher education literature has been found to draw on very little of the vocational psychology literature (Healy et al., 2022) that has extensive research contributing to theories that drive understanding of the psychosocial factors and behaviours that are related to employment outcomes, career success, and satisfaction. This process model of graduate employability draws on dispositional employability (Fugate, 2006; Fugate et al., 2004; Fugate & Kinicki, 2008) as a conceptualisation of a psychosocial model of employability and career construction theory (Savickas, 2005, 2013) to inform the design of employability programs.

### Dispositional Employability

Dispositional employability (Fugate, 2006; Fugate et al., 2004; Fugate & Kinicki, 2008) is conceptualised as a psychosocial process that supports individuals' engagement in proactive behaviours directed toward obtaining and maintaining employment. Dispositional employability is an interaction between personal attributes, including human and social capital, and an individual's engagement in proactive career behaviour, leading to the achievement and maintenance of employment. This is an important distinction to other models of employability that focus primarily on the possession of forms of capital, including human, social, psychological, cultural, and identity (Tomlinson, 2017).

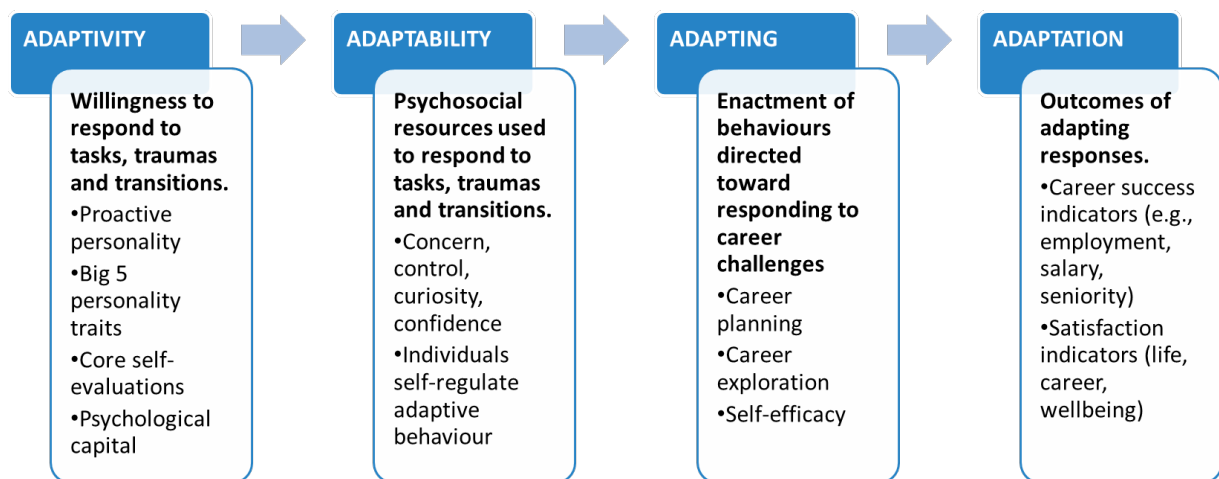
Dispositional employability recognises that employment cannot be achieved in the absence of behaviour (Fugate & Kinicki, 2008). The career adaptive behaviours students engage in for employability awards are ostensibly developmental activities focussed on various forms of capital and more specifically employability skills. To achieve an employment outcome, individuals must engage in a complex sequence of career adaptive behaviours, including engagement in job search, preparing and submitting job applications, and interacting with an employer through job interviews, to demonstrate possession of the requisite knowledge, skills, and other attributes required to perform well in the role. This distinction is important, as development of employability should be the primary focus of employability award programs, rather than achievement of employment outcomes. Programs to directly support attainment of employment are more precisely focussed on job search skills and behaviours (Fernandez-Valera et al., 2020; Guan et al., 2014; Liu et al., 2014).

Next, career construction theory (Savickas, 2005, 2013) is presented as a way to conceptualise how employability can support the attainment of employment via the interactions of psychosocial processes and career adaptive behaviours.

## Career Construction Theory's Model of Career Adaptation

Career construction theory (CCT) (Savickas, 2005, 2013) provides an avenue for research to explain how employability contributes to achievement of important outcomes. CCT argues that careers are socially and individually constructed representations of reality. Taking a constructivist approach, Savickas views the development of individuals' careers as being the result of adaptation to the environment. There are three components to individuals' self-construction. First, the *self as actor* represents the behaviours individuals engage in from childhood through to adulthood, that develop their interests, skills, abilities, and habits. Second, the *self as agent* represents aspirations to engage in the world and the adaptation to vocational tasks, transitions, and traumas. Third, the *self as author* represents the stories that people tell of their career that narrates an identity.

Pertinent to employability, CCT asserts that individuals adapt to vocational development tasks (i.e., preparation for entering the workforce), occupational transitions (i.e., from one job to another), and work traumas (i.e., unplanned and unwanted career events) (Savickas, 2013). This adaptation process is understood in terms of four factors conceptualised as a chain of effects: Adaptivity → Adaptability → Adapting → Adaptation (Savickas, 2013; Savickas & Porfeli, 2012). This chain of effects is evident in studies of direct and indirect relations among adaptivity, adaptability, and adapting (Hirschi et al., 2015; Perera & McIlveen, 2017; Rudolph, Lavigne, Katz, et al., 2017; Rudolph, Lavigne, & Zacher, 2017).



**Figure 1: Career Adaptation Model**

*Note.* This is a visual representation of the career adaptation model (Savickas, 2005, 2013)

*Adaptivity* is conceptualised as the dispositional traits that represent an individual's *readiness* and *willingness* to respond to vocational developmental tasks, occupational transitions, and work traumas (Savickas, 2013). Adaptivity has been found to include dispositional traits such as proactive personality (Hirschi et al., 2015), core self-evaluations (Hirschi et al., 2015), psychological capital (Buyukgoze-Kavas, 2016; Pajic et al., 2018), and distinct latent profile combinations of Big Five personality (Perera & McIlveen, 2017). A meta-analytical study (Rudolph, Lavigne, & Zacher, 2017) found that dispositional traits explained 50-60% of the variance in career adaptability.

Savickas (2005) conceptualises career *adaptability* as psychosocial resources an individual uses to respond to vocational developmental tasks, occupational transitions, and work traumas. Savickas theorised that career adaptability contains four dimensions of psychosocial resources: *concern*, representing an orientation towards the future, such as having career goals or aspirations; *control*, representing personal agency to make decisions and take actions in relation to one's career; *curiosity*, representing an interest in exploring career opportunities; and *confidence* in their ability to respond to the career development needs. Career adaptability has been found to positively relate to proactive career behaviour (Spurk et al., 2020), self-perceived internal and external marketability (Spurk et al., 2016), career planning, career exploration, and self-efficacy (Rudolph, Lavigne, Katz, et al., 2017).

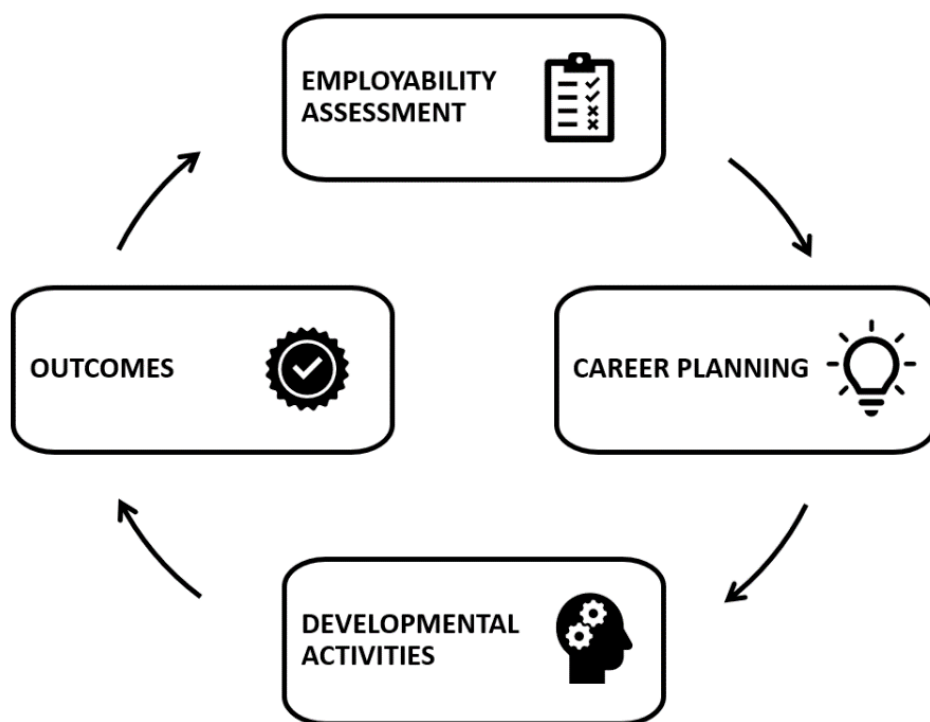
Career adaptability and proactive career behaviour has been found to grow in parallel over time; however, individuals self-regulate their engagement in proactive behaviour in relation to their adaptive resources (Spurk et al., 2020). Somewhat surprisingly, individuals with high levels of career adaptability have been found to decrease their engagement in proactive career behaviours, whereas, individuals who have low levels of career adaptability have been found to increase their proactive career behaviours (Spurk et al., 2020). Spurk and colleagues reason that this observation can be explained in one of two ways. First, individuals with high career adaptability might be self-regulating behaviour, so that they only engage in career adaptive behaviours when they need to do so. Second, individuals with high career adaptability might decrease engagement in career adaptive behaviours due to over-confidence in achieving their goals. This finding may explain a challenge that many universities face in engaging large proportion of students in employability awards—students who are confident of obtaining employment might conserve their resources by not engaging in additional activities outside their academic studies, or they might delay engaging in proactive career behaviour until they are ready to start applying for work.

*Adapting* responses are the enactment of proactive career behaviours directed toward resolving career changes (Savickas, 2013), such as career planning, career exploration, occupational self-efficacy and career decision-making self-efficacy. These adapting responses have been found to be positively related to career adaptability (Johnston, 2018; Rudolph, Lavigne, Katz, et al., 2017). Brown et al. (2021) found that students' decisions about selecting activities to complete as part of an employability award were influenced by career adaptability dimensions of concern, control, curiosity, and confidence. For example, students whose responses indicated a dominance of career adaptability dimension of curiosity, chose activities such as volunteering to explore themselves or the world of work. Whereas students whose responses indicated a dominance of career adaptability dimension of control chose activities such as internships to build skills and make connections with potential employers.

*Adaptation* results are the outcomes of adapting responses (Savickas, 2013) and include objective measures of employment, and income; and subjective measures of career, life, job, and school satisfaction; affective organisational commitment; lower job stress; work engagement; and career identity (Rudolph, Lavigne, Katz, et al., 2017). Recognition that a broad range of potential outcomes could be used to evaluate the effectiveness of employability award programs in higher education. Subjective outcomes can be measured at completion of engagement in employability awards, whereas objective outcomes might not occur for months or years after engagement in the activities.

## **A Process Model for Developing Graduate Employability**

This process model, informed by career construction theory (Savickas, 2013), provides a framework for the design of institution-wide employability programs that enable students to identify their employability development needs. This model presented in Figure 2, shows the conceptual diagram of the proposed developmental process, commencing with an employability assessment, engagement in career planning, participation in developmental activities, and reflection on employability outcomes. Aligned with a lifelong learning approach, the process can continue in a cyclical manner through re-assessment of employability and selecting new or additional developmental activities to engage in.



**Figure 2: Process Model for Developing Graduate Employability**

### **Stage 1: Induction and Employability Assessment**

To commence the process for facilitating students to design a personalised employability development program, students complete an induction workshop or online module. The purpose of the induction is to explain to students how the program operates, what they are expected to do to achieve the employability award, and the expected benefits for participation. It is also recommended that the induction includes information to define employability and how this differs from employment.

For the employability assessment, students are invited to complete a battery of measures. Table 2 includes a list of exemplar assessments across the four components of the career adaptation model. These include measures of dispositional employability (Fugate & Kinicki, 2008), graduate capitals (Tomlinson et al., 2021), generic skills or institutional graduate attributes, and personality (Open-Source Psychometrics Project, 2019). Those responsible for designing an employability award, will need to select measures that are appropriate to use with the participants, are relevant, and will not take too long to complete. Once students have completed the assessment, they can then commence the career planning phase.

### **Stage 2: Career Planning**

Career planning is the process of exploring and making career decisions. It is an ongoing process that acknowledges the non-linearity of career development (Pryor & Bright, 2011). As part of an employability award, career planning can be used to support students to identify opportunities to develop graduate capitals, gain experiences, and explore occupations and industries.

Having completed the employability assessment in stage 1, students then attend a career planning workshop. In this workshop, a career development practitioner or educator commences with providing students information about the battery of tests they completed and instructions on interpretation of their scores. Whiston et al. (2017) found that group test interpretation to be moderately effective in supporting career decisions. The group interpretation of test results should take a strengths-based approach (Littman-Ovadia et al., 2014) to acknowledge the knowledge, skills,

and other attributes the students already have developed. The focus then will be on students reflecting on areas of development they wish to focus.

Next, the educator facilitates a process for students to identify strategies to further develop their employability. A list of activities and programs that the university recognises through the employability award is recommended to be supplied to students at this point. Either individually or in small groups, students identify which of those activities could support their employability development needs. From here, students write down their employability development strategy, or where appropriate, sign up to programs and activities available in the employability award. Written activities are a critical ingredient in successful career choice interventions, particularly when students are required to write goals identifying actions to take (Brown et al., 2003). For curriculum-based classes, an employability plan or reflective essay could be used as an assessment task, motivating students to engage more deeply in the activity, and benefitting from feedback from the educator (Brown, Healy, Lexis, et al., 2019).

### ***Stage 3: Participation in Developmental Activities***

In supporting students to select activities to complete in their personalised employability award program, it is important to provide students with information as to the expected benefits from engagement in career adaptive behaviours. It should be emphasised that these activities, in most instances, do not directly lead to gaining employment, but they support development of employability, accumulation of knowledge about potential career options, building social networks, and increasing confidence to search for and obtain employment. Table 2 lists suggested developmental activities linked to the four components of the career adaptation model and are expanded on in this section.

Adaptivity includes psychosocial resources and individual traits such as human, social, and psychological capital (Hirschi et al., 2015; Rudolph, Lavigne, Katz, et al., 2017). In considering activities for students to engage in that will further develop these resources, there is evidence in the literature that extra-curricular activities and employability-focused curricula support the development of human, social, and psychological capital. For example, internships have been found to enhance career resources and employability through changes in career identity, self-efficacy, competencies, and skills (Inceoglu et al., 2019). Volunteering has been found to develop self-confidence, leadership and interpersonal skills (Clark et al., 2015), and on-campus employer events can help students to develop social networks (Bridgstock, 2019; Bridgstock et al., 2019). Psychological capital interventions have been studied over the past 15 years and have been found to increase psychological capital, although the effect sizes are modest (Salanova & Ortega-Maldonado, 2019).



**Table 2: Measures of Career Adaptation Factors and Related Developmental Activities**

<b>Measures</b>	<b>Developmental Activities</b>
<i>Adaptivity</i> Dispositional Measure of Employability (Fugate & Kinicki, 2008) Graduate Capitals Scale (Tomlinson et al., 2021) Generic skills or institutional graduate attributes Personality (Open-Source Psychometrics Project, 2019)	<i>Activities to develop graduate capitals</i> Internships or work integrated learning Volunteering Service learning Employment Entrepreneurship programs, hackathons Psychological capital interventions
<i>Adaptability</i> Career AdaptAbilities Scale (Savickas & Porfeli, 2012) Career Futures Inventory-Revised (Rottinghaus et al., 2012)	<i>Activities to engage in career exploration</i> Industry talks Career fairs Field trips Informational interviewing Labour market research Career counselling Mentoring programs Virtual internships
<i>Adapting</i> Job Search Self-Efficacy (Saks et al., 2015) Student Career Construction Inventory (Savickas et al., 2018) Career Exploration and Decision Learning Experiences (Lent et al., 2017) Proactive Career Behaviour (Strauss et al., 2012)	<i>Activities that facilitate proactive career behaviour</i> Career development learning Applying for internships, volunteering opportunities, employment Networking Making decisions about study (e.g., Selecting majors and electives, applying for postgraduate courses)
<i>Adaptation</i> Employment or graduate destinations (Social Research Centre, 2020) Course satisfaction (Griffin et al., 2003) Life satisfaction (Santilli et al., 2017) Career satisfaction (Rothwell & Arnold, 2007) Perceived employability (Rothwell et al., 2008) Career identity (Rottinghaus et al., 2005; Wendling & Sagas, 2022)	<i>Activities to reflect on outcomes</i> Written activities documenting skill development Job interview preparation Updating CV/resume Reflective essays ePortfolios

Career adaptability has been found to be enhanced through engagement in career exploration activities (Johnston, 2018). Career exploration activities are an important set of career adaptive behaviours that involve information-gathering about the environment and the self. Activities that are commonly delivered by university careers services or included in the curriculum that aid in career exploration include: attending guest talks by industry professionals, career fairs, careers and employability learning, career counselling, and engaging in internships and volunteering (Bridgstock, 2019; Brown, Healy, Lexis, et al., 2019; Dean et al., 2022). These activities can increase occupational knowledge, optimism, curiosity, and personal agency (Jiang, 2017; Rottinghaus & Eshelman, 2015).

Jiang (2017) notes that career exploration involves different tasks across the lifespan. For young adults in universities, career exploration is about developing a career identity, firming occupation choices, and making the transition from university to work. Established adults in universities might use career exploration for making occupational and job changes. Praskova et al. (2015) found that young adults who engaged more in career exploration and career planning activities had clearer career identities, which led to reduced career uncertainty, anxiety, and career distress. However, Praskova and colleagues found that ongoing career exploration has the potential to increase uncertainty, stress, and anxiety for those without clear a career identity. These findings emphasise the importance for university students to make informed choices about the type of career exploration activities that would be beneficial.

Activities to support engagement in adapting responses, or proactive career behaviour, include careers and employability learning, applying for internships, volunteering, and employment opportunities, and help- and information-seeking behaviours. Careers and employability learning (e.g., resume writing, job search strategies, interviews), support increasing students' job search self-efficacy, and engagement in job search behaviour (Watts, 2006). Applying for internships, volunteering opportunities, part-time employment are strategies to engage students in those activities, and in addition, aid confidence through known sources of self-efficacy (e.g., mastery experiences, feedback) (Lent et al., 2017). Other activities, such as making decisions about study (e.g., selecting majors and electives, applying for postgraduate courses), mentoring programs, and career counselling (group or individual), can support students' career decidedness and career identity achievement.

Finally, adaptation, or outcomes of engaging in the employability award can be explored through activities to document skill development, prepare job application documentation, and reflect on learning through ePortfolios and other reflective practices. This forms the final stage of the process model and is discussed in the next section.

#### **Stage 4: Reflection on Employability Outcomes**

The final stage of the process model to develop employability is a reflection on employability outcomes, utilising data obtained through qualitative and quantitative sources. Ideally, this process should be facilitated by a career development practitioner or educator; however, a well-designed workbook or assignment could step students through the reflection process.

The first part of the reflection is for students to write descriptions of the activities completed and identify key knowledge, skills, and other learning outcomes from those activities. This qualitative reflection on gains from the experience is important for students to articulate this value in various parts of the recruitment process (e.g., including descriptions of extra-curricular activities in resumes, responding to behavioural questions in job interviews). Tomasson Goodwin et al. (2019) taught university students to articulate employability skills using the STAR technique and found that the experimental group were better able to articulate employability skills than the control group. To extend this reflection, workshop activities where students share their insights into learning gains from the development activities can increase social learning, which is a source of self-efficacy (Lent et al., 2017).

Next, a quantitative component can be added. Students would complete the measures outlined in the section on Employability Assessment, so as to obtain a comparison of scores from the start to end of the employability award program. A facilitated discussion will assist students to identify the subscales where scores increased or decreased after completing the development activities, and to understand the significance of those changes in terms of magnitude and direction, and consideration of the attribution of those changes, such as increased knowledge resulting in more realistic self-perceptions of employability. Other employability outcome measures that could be utilised include self-perceived employability (Rothwell et al., 2008), employability capital (Tomlinson et al., 2021), and engagement in career adaptive behaviours (Savickas et al., 2018).

Through the reflection on their engagement in development activities, students will be able to make decisions about further engagement in lifelong learning processes to continue the development of employability and achievement and maintenance of employment.

#### **Conclusion**

Employability award programs are popular devices within universities, particularly in the United Kingdom and Australia, for the dual purpose of engaging students in activities to develop their employability and consequently improve institutional graduate employment outcomes. However, employability award programs are largely a collection of the types of co- and extra-curricular activities that students have been engaging in for decades. The programs are designed in absence of theory,

and beyond setting rules on the minimum number of activities or skills to be developed, do not provide students with adequate guidance on which activities within an award program will assist them to achieve their personal development needs or goals.

Informed by dispositional employability (Fugate et al., 2004; Fugate & Kinicki, 2008) and career construction theory (Savickas, 2005, 2013), this paper outlined a process model for developing student employability that addresses the shortcomings of universities' current approach to facilitating student employability development. The design of this process model enables students to personalise their employability award program, to more easily identify activities that support their unique needs, strengths, and career aspirations. The first stage inducts students into the program and enables students to understand their current level of employability through completion of quantitative measures of human, social and psychological capitals (Fugate & Kinicki, 2008). This assessment enables students to enter the next stage of the process, career planning, where they can personalise their employability program through selecting activities that are relevant to their development needs. After completion of the employability award program, students engage in a guided process to document and reflect on their learning gains.

Although the focus of this process model is on the design of employability award programs, the model could be applied in other contexts, such as secondary schools, vocational education, and workforce development. Indeed, employability has been well researched in workplace settings (De Vos et al., 2017; Forrier et al., 2015; Fugate & Kinicki, 2008; Spurk et al., 2016), with implications on how employability supports lifelong career management and transitions to new jobs.

For educators and career practitioners, the design of the program builds in a structured approach to evaluate the effectiveness of each stage of the process model in developing student employability. Existing employability award programs could be reconfigured to be aligned with the process model. There is a need to conduct more longitudinal research to test the career adaptation model (Rudolph, Lavigne, Katz, et al., 2017). Employability award programs provide opportunities to conduct such research, as researchers could compare changes in subjective career success and satisfaction measures, career identity, perceived employability, between program participants and non-participants over several semesters.

## Acknowledgements

This work was supported in part through an Australian Government Research Training Program Scholarship.

## References

- Al-Saedi, A., Bell, J., Boorman, A., Cameron, E., Castleman, Z., Flanagan, C., Fraser, C., Pearson, J., Philp, A., Robinson, K., Silva, F., Taki, A., Tubeileh, D., Vosters, R., & Mulrooney, H. M. (2019). Public health teaching in practice, peer learning and partnership working: The cook school project. *New Directions in the Teaching of Physical Sciences*, 12(1). <https://eprints.kingston.ac.uk/id/eprint/44687/1/Mulrooney-H-44687-VoR.pdf>
- Barrie, S. C. (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51, 215–241. <https://doi.org/10.1007/s10734-004-6384-7>
- Bennett, D., Knight, E., Divan, A., Kuchel, L., Horn, J., van Reyk, D., & Burke da Silva, K. (2017). How do research-intensive universities portray employability strategies? A review of their websites. *Australian Journal of Career Development*, 26(2), 52–61. <https://doi.org/10.1177/1038416217714475>
- Bridgstock, R. (2019). Graduate Employability 2.0: Learning for life and work in a socially networked world. In J. Higgs, G. Crisp, & W. Letts (Eds.), *Education for Employability (Volume 1): The employability agenda*. Brill. [https://doi.org/10.1163/9789004400832\\_008](https://doi.org/10.1163/9789004400832_008)
- Bridgstock, R., & Jackson, D. (2019). Strategic institutional approaches to graduate employability: Navigating meanings, measurements and what really matters. *Journal of Higher Education Policy and Management*, 41(5), 468–484. <https://doi.org/10.1080/1360080x.2019.1646378>
- Bridgstock, R., Jackson, D., Lloyd, K., & Tofa, M. (2019). Social connectedness and graduate employability: Exploring the professional networks of graduates from business and creative industries. In R. Bridgstock &

- N. Tippett (Eds.), *Higher education and the future of graduate employability*. Edward Elgar Publishing.  
<https://doi.org/10.4337/9781788972611.00012>
- Brown, J. L., Dollinger, M., Hammer, S., & McIlveen, P. (2021). Career adaptability and career adaptive behaviors: A qualitative analysis of university students' participation in extracurricular activities. *Australian Journal of Career Development, 30*(3), 189–198.  
<https://journals.sagepub.com/doi/abs/10.1177/10384162211067014>
- Brown, J. L., Hammer, S., Perera, H. N., & McIlveen, P. (2022). Relations between graduates' learning experiences and employment outcomes: A cautionary note for institutional performance indicators. *International Journal for Educational and Vocational Guidance, 22*, 137–156.  
<https://doi.org/10.1007/s10775-021-09477-0>
- Brown, J. L., Healy, M., Lexis, L., & Julien, B. (2019). Connectedness learning in the life sciences: LinkedIn as an assessment task for employability and career exploration. In R. Bridgstock & N. Tippett, *Higher Education and the Future of Graduate Employability* (pp. 100–119). Edward Elgar Publishing.  
<https://doi.org/10.4337/9781788972611.00015>
- Brown, J. L., Healy, M., McCredie, T., & McIlveen, P. (2019). Career services in Australian higher education: Aligning the training of practitioners to contemporary practice. *Journal of Higher Education Policy and Management, 41*(5), 518–533. <https://doi.org/10.1080/1360080x.2019.1646380>
- Brown, S. D., Ryan Krane, N. E., Brecheisen, J., Castelino, P., Budisin, I., Miller, M., & Edens, L. (2003). Critical ingredients of career choice interventions: More analyses and new hypotheses. *Journal of Vocational Behavior, 62*(3), 411–428. [https://doi.org/10.1016/S0001-8791\(02\)00052-0](https://doi.org/10.1016/S0001-8791(02)00052-0)
- Buyukgoze-Kavas, A. (2016). Predicting career adaptability from positive psychological traits. *The Career Development Quarterly, 64*(2), 114–125. <https://doi.org/10.1002/cdq.12045>
- Chilvers, L., & Waghorne, J. (2018). Exploring PASS leadership beyond graduation. *Journal of Peer Learning, 11*, 5–26. <http://ro.uow.edu.au/ajpl/vol11/iss1/2>
- Clark, G., Marsden, R., Whyatt, J. D., Thompson, L., & Walker, M. (2015). 'It's everything else you do...': Alumni views on extracurricular activities and employability. *Active Learning in Higher Education, 16*(2), 133–147.  
<https://doi.org/10.1177/1469787415574050>
- De Vos, A., Forrier, A., Van der Heijden, B., & De Cuyper, N. (2017). Keep the expert! Occupational expertise, perceived employability and job search. *Career Development International, 22*(3), 318–332.  
<https://doi.org/10.1108/cdi-12-2016-0229>
- Dean, B. A., Ryan, S., Glover-Chambers, T., West, C., Eady, M. J., Yanamandram, V., Moroney, T., & O'Donnell, N. (2022). Career development learning in the curriculum: What is an academic's role? *Journal of Teaching and Learning for Graduate Employability, 13*(1), 142–154.  
<https://doi.org/10.21153/jtlge2022vol13no1art1539>
- Fernandez-Valera, M. M., Meseguer de Pedro, M., De Cuyper, N., Garcia-Izquierdo, M., & Soler Sanchez, M. I. (2020). Explaining job search behavior in unemployed youngsters beyond perceived employability: The role of psychological capital. *Frontiers in Psychology, 11*. <https://doi.org/10.3389/fpsyg.2020.01698>
- Forrier, A., Verbruggen, M., & De Cuyper, N. (2015). Integrating different notions of employability in a dynamic chain: The relationship between job transitions, movement capital and perceived employability. *Journal of Vocational Behavior, 89*, 56–64. <https://doi.org/10.1016/j.jvb.2015.04.007>
- Fugate, M. (2006). Employability in the new millennium. In J. H. Greenhaus & G. A. Callanan (Eds.), *Encyclopedia of Career Development* (Vol. 1, pp. 267–270). Sage.
- Fugate, M., & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology, 81*(3), 503–527. <https://doi.org/10.1348/096317907x241579>
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior, 65*(1), 14–38. <https://doi.org/10.1016/j.jvb.2003.10.005>
- Greenbank, P. (2015). Still focusing on the “essential 2:1”: Exploring student attitudes to extra-curricular activities. *Education + Training, 57*(2), 184–203. <https://doi.org/10.1108/et-06-2013-0087>
- Griffin, P., Coates, H., McInnis, C., & James, R. (2003). The development of an extended course experience questionnaire. *Quality in Higher Education, 9*(3), 259–266. <https://doi.org/10.1080/135383203200015111>
- Guan, Y., Guo, Y., Bond, M. H., Cai, Z., Zhou, X., Xu, J., Zhu, F., Wang, Z., Fu, R., Liu, S., Wang, Y., Hu, T., & Ye, L. (2014). New job market entrants' future work self, career adaptability and job search outcomes: Examining mediating and moderating models. *Journal of Vocational Behavior, 85*(1), 136–145.  
<https://doi.org/10.1016/j.jvb.2014.05.003>
- Hammer, S., Ayris, P., & McCubbin, A. (2021). Style or substance: How Australian universities contextualise their graduate attributes for the curriculum quality space. *Higher Education Research & Development, 40*(3), 508–523. <https://doi.org/10.1080/07294360.2020.1761304>

- Healy, M., Hammer, S., & McIlveen, P. (2022). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in Higher Education, 47*(4), 799–811. <https://doi.org/10.1080/03075079.2020.1804851>
- Hirschi, A., Herrmann, A., & Keller, A. C. (2015). Career adaptivity, adaptability, and adapting: A conceptual and empirical investigation. *Journal of Vocational Behavior, 87*, 1–10. <https://doi.org/10.1016/j.jvb.2014.11.008>
- Inceoglu, I., Selenko, E., McDowall, A., & Schlachter, S. (2019). (How) Do work placements work? Scrutinizing the quantitative evidence for a theory-driven future research agenda. *Journal of Vocational Behavior, 110*, 317–337. <https://doi.org/10.1016/j.jvb.2018.09.002>
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education, 40*(2), 350–367. <https://doi.org/10.1080/03075079.2013.842221>
- Jackson, D., & Bridgstock, R. (2021). What actually works to enhance graduate employability? The relative value of curricular, co-curricular, and extra-curricular learning and paid work. *Higher Education, 81*(4), 723–739. <https://doi.org/10.1007/s10734-020-00570-x>
- Jackson, D., & Tomlinson, M. (2021). The relative importance of work experience, extra-curricular and university-based activities on student employability. *Higher Education Research & Development, 41*(4), 1119–1135. <https://doi.org/10.1080/07294360.2021.1901663>
- Jiang, Z. (2017). Proactive personality and career adaptability: The role of thriving at work. *Journal of Vocational Behavior, 98*, 85–97. <https://doi.org/10.1016/j.jvb.2016.10.003>
- Johnston, C. S. (2018). A systematic review of the career adaptability literature and future outlook. *Journal of Career Assessment, 26*(1), 3–30. <https://doi.org/10.1177/1069072716679921>
- Jorre de St Jorre, T., Elliott, J., Johnson, E. D., & Bisset, S. (2019). Science students' conceptions of factors that will differentiate them in the graduate employment market. *Journal of Teaching and Learning for Graduate Employability, 10*(1), 27–41. <https://doi.org/10.21153/jtlge2019vol10no1art795>
- Kinash, S., Crane, L., Judd, M. M., & Knight, C. (2016). Discrepant stakeholder perspectives on graduate employability strategies. *Higher Education Research & Development, 35*(5), 951–967. <https://doi.org/10.1080/07294360.2016.1139555>
- Lent, R. W., Ireland, G. W., Penn, L. T., Morris, T. R., & Sappington, R. (2017). Sources of self-efficacy and outcome expectations for career exploration and decision-making: A test of the social cognitive model of career self-management. *Journal of Vocational Behavior, 99*, 107–117. <https://doi.org/10.1016/j.jvb.2017.01.002>
- Lin-Stephens, S., Kubicki, J. M., Jones, F., Whiting, M. J., Uesi, J., & Bulbert, M. W. (2019). Building student employability through interdisciplinary collaboration: An Australian case study. *College & Undergraduate Libraries, 26*(3), 234–251. <https://doi.org/10.1080/10691316.2019.1674027>
- Littman-Ovadia, H., Lazar-Butbul, V., & Benjamin, B. A. (2014). Strengths-based career counseling: Overview and initial evaluation. *Journal of Career Assessment, 22*(3), 403–419. <https://doi.org/10.1177/1069072713498483>
- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological Bulletin, 140*(4), 1009–1041. <https://doi.org/10.1037/a0035923>
- McIlveen, P., Brooks, S., Lichtenberg, A., Smith, M., Torjul, P., & Tyler, J. (2011). Career development learning frameworks for work-integrated learning. In S. Billett & A. Henderson (Eds.), *Developing learning professionals: Integrating experiences in university and practice settings* (pp. 149–165). Springer. [https://doi.org/10.1007/978-90-481-3937-8\\_9](https://doi.org/10.1007/978-90-481-3937-8_9)
- Oliver, B., & Jorre de St Jorre, T. (2018). Graduate attributes for 2020 and beyond: Recommendations for Australian higher education providers. *Higher Education Research & Development, 37*(4), 821–836. <https://doi.org/10.1080/07294360.2018.1446415>
- Open-Source Psychometrics Project. (2019). *Big five personality test*. <https://openpsychometrics.org/tests/IPIP-BFFM/>
- Pajic, S., Ulceluse, M., Kismihok, G., Mol, S. T., & den Hartog, D. N. (2018). Antecedents of job search self-efficacy of Syrian refugees in Greece and the Netherlands. *Journal of Vocational Behavior, 105*, 159–172. <https://doi.org/10.1016/j.jvb.2017.11.001>
- Perera, H. N., & McIlveen, P. (2017). Profiles of career adaptivity and their relations with adaptability, adapting, and adaptation. *Journal of Vocational Behavior, 98*, 70–84. <https://doi.org/10.1016/j.jvb.2016.10.001>
- Praskova, A., Creed, P. A., & Hood, M. (2015). Career identity and the complex mediating relationships between career preparatory actions and career progress markers. *Journal of Vocational Behavior, 87*, 145–153. <https://doi.org/10.1016/j.jvb.2015.01.001>
- Pryor, R., & Bright, J. (2011). *The chaos theory of careers: A new perspective on working in the twenty-first century*. Routledge.

- Rothwell, A., & Arnold, J. (2007). Self-perceived employability: Development and validation of a scale. *Personnel Review*, 36(1), 23–41. <https://doi.org/10.1108/00483480710716704>
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(1), 1–12. <https://doi.org/10.1016/j.jvb.2007.12.001>
- Rottinghaus, P. J., Buelow, K. L., Matyja, A., & Schneider, M. R. (2012). The Career Futures Inventory-Revised: Measuring dimensions of career adaptability. *Journal of Career Assessment*, 20(2), 123–139. <https://doi.org/10.1177/1069072711420849>
- Rottinghaus, P. J., Day, S. X., & Borgen, F. H. (2005). The Career Futures Inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment*, 13(1), 3–24. <https://doi.org/10.1177/1069072704270271>
- Rottinghaus, P. J., & Eshelman, A. J. (2015). Integrative approaches to career intervention. In P. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career intervention. Volume 2: Applications*. (pp. 25–39). American Psychological Association. <https://doi.org/10.1037/14439-003>
- Rudolph, C. W., Lavigne, K. N., Katz, I. M., & Zacher, H. (2017). Linking dimensions of career adaptability to adaptation results: A meta-analysis. *Journal of Vocational Behavior*, 102, 151–173. <https://doi.org/10.1016/j.jvb.2017.06.003>
- Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior*, 98, 17–34. <https://doi.org/10.1016/j.jvb.2016.09.002>
- Russell, L., & Kay, J. (2019). Building student employability from day one. In J. Higgs, G. Crisp, & W. Letts (Eds.), *Education for Employability* (Vol. 2, pp. 133–142). Brill.
- Saks, A. M., Zikic, J., & Koen, J. (2015). Job search self-efficacy: Reconceptualizing the construct and its measurement. *Journal of Vocational Behavior*, 86, 104–114. <https://doi.org/10.1016/j.jvb.2014.11.007>
- Salanova, M., & Ortega-Maldonado, A. (2019). Psychological capital development in organizations: An integrative review of evidence-based intervention programs. In L. E. Van Zyl & S. Rothmann Sr (Eds.), *Positive psychological intervention design and protocols for multi-cultural contexts* (pp. 81–102). Springer. [https://doi.org/10.1007/978-3-030-20020-6\\_4](https://doi.org/10.1007/978-3-030-20020-6_4)
- Santilli, S., Marcionetti, J., Rochat, S., Rossier, J., & Nota, L. (2017). Career adaptability, hope, optimism, and life satisfaction in Italian and Swiss Adolescents. *Journal of Career Development*, 44(1), 62–76. <https://doi.org/10.1177/0894845316633793>
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). John Wiley & Sons.
- Savickas, M. L. (2013). Career construction theory and practice. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed.). John Wiley & Sons.
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661–673. <https://doi.org/10.1016/j.jvb.2012.01.011>
- Savickas, M. L., Porfeli, E. J., Hilton, T. L., & Savickas, S. (2018). The Student Career Construction Inventory. *Journal of Vocational Behavior*, 106, 138–152. <https://doi.org/10.1016/j.jvb.2018.01.009>
- Social Research Centre. (2020). *2020 Graduate Outcomes Survey methodological report*. [https://www.qilt.edu.au/docs/default-source/default-document-library/2020-gos-methodological-report.pdf?sfvrsn=9a350998\\_3](https://www.qilt.edu.au/docs/default-source/default-document-library/2020-gos-methodological-report.pdf?sfvrsn=9a350998_3)
- Spurk, D., Kauffeld, S., Meinecke, A. L., & Ebner, K. (2016). Why do adaptable people feel less insecure? Indirect effects of career adaptability on job and career insecurity via two types of perceived marketability. *Journal of Career Assessment*, 24(2), 289–306. <https://doi.org/10.1177/1069072715580415>
- Spurk, D., Volmer, J., Orth, M., & Göritz, A. S. (2020). How do career adaptability and proactive career behaviours interrelate over time? An inter- and intraindividual investigation. *Journal of Occupational and Organizational Psychology*, 93(1), 158–186. <https://doi.org/10.1111/joop.12288>
- Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology*, 97(3), 580–598. <https://doi.org/10.1037/a0026423>
- Tomasson Goodwin, J., Goh, J., Verkoeyen, S., & Lithgow, K. (2019). Can students be taught to articulate employability skills? *Education + Training*, 61(4), 445–460. <https://doi.org/10.1108/ET-08-2018-0186>
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338–352. <https://doi.org/10.1108/et-05-2016-0090>
- Tomlinson, M., McCafferty, H., Port, A., Maguire, N., Zabelski, A. E., Butnaru, A., Charles, M., & Kirby, S. (2021). Developing graduate employability for a challenging labour market: The validation of the graduate capital

- scale. *Journal of Applied Research in Higher Education*, 14(3), 1193-1209. <https://doi.org/10.1108/jarhe-04-2021-0151>
- Watson, R. (2011). A rationale for the development of an extracurricular employability award at a British university. *Research in Post-Compulsory Education*, 16(3), 371–384. <https://doi.org/10.1080/13596748.2011.602248>
- Watts, A. G. (2006). *Career development learning and employability*. Learning and Employability Series 2. The Higher Education Academy. <http://www.qualityresearchinternational.com/esecttools/esectpubs/watts%20career.pdf>
- Wendling, E., & Sagas, M. (2022). Development and validation of the Career Identity Development Inventory. *Journal of Career Assessment*, 30(4), 678–696. <https://doi.org/10.1177/10690727211063374>
- Whiston, S. C., Li, Y., Mitts, N. G., & Wright, L. (2017). Effectiveness of career choice interventions: A meta-analytic replication and extension. *Journal of Vocational Behavior*, 100, 175–184. <https://doi.org/10.1016/j.jvb.2017.03.010>
- Yorke, M., & Knight, P. (2004). *Embedding employability into the curriculum*. Learning & Employability Series 1. The Higher Education Academy. [http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding\\_employability\\_into\\_curriculum.pdf](http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding_employability_into_curriculum.pdf)