

# Research into Career-related Interventions for Higher Education: What Do We Know and What Do We Need to Know?

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This article relates to the findings of a systematic literature review (Bimrose, Barnes and Brown, 2005) that was undertaken on behalf of HECSU. The review is part of a broader research programme funded by HECSU, referred to as *Career Making*, which comprises a five/six-year HE student tracking study, *Futuretrack*, and a range of subsidiary studies on issues emerging from *Futuretrack* and other contemporary research. The other major component of 'Career Making' is an initiative referred to as PROP (*Putting Research Outcomes into Practice*) which brings together career guidance practitioners and researchers in developing innovative ways of using research evidence. The literature review was a key component in launching *Career Making* and in establishing the extent and nature of existing literature on this topic.

The main question to be addressed by the review, specified by HECSU, was: 'What curricular and extra-curricular interventions appear to assist students and graduates to make career-related decisions, engage in career learning/development, and progress towards entry into the labour market?' The related sub-question was: 'What social, economic, or demographic factors appear to impact upon career decision-making, career learning and occupational progression?' A systematic review methodology was used, based on the work of the EPPI-Centre at the Institute of Education, University of London (for further details, see: <http://eppi.ioe.ac.uk/cms/>). Crucial to this process is the rigorous monitoring and recording of all the references selected and screened. Whilst this approach was found to have some limitation (for example, restricting the scope for researcher discretion in selecting texts for inclusion) it provided a sound framework for undertaking a comprehensive and transparent assessment of available research. In this review, researcher judgement did play a significant role. This was justified on the basis that the research team possesses very considerable prior knowledge of the operation of career development in higher education in the UK.

Career-related interventions in higher education, together with their impact on students' career-related decisions, career learning and progression towards the labour market have been well researched. Initial searches yielded 77,272 references. Of the 18,189 references identified for inclusion in the in-depth review, a rigorous process of progressive focusing enabled a total of 59 empirical studies to be selected as the basis for the review (for full details of the methodology, see Bimrose *et al.*, 2005). Countries from which studies originated included the United Kingdom, the United States, Canada, Taiwan, Brazil, Europe and Australia. Whilst the review process yielded a mixture of qualitative and quantitative research approaches, little relevant longitudinal research was found.

This article will: summarise the findings of the review; explore constraints which operate on career decision-making processes; discuss the implications for policy and practice; and identify future research needs.

## Career-related interventions for higher education

Career-related decision-making, career learning/development and progression are regarded as desirable outcomes from a wide range of interventions provided to support individuals in making successful career transitions throughout their lifetimes (Bimrose, Barnes, Hughes and Orton, 2004). However, there is little clarity about the precise nature of the interventions that are required to achieve these outcomes, or the conditions necessary to support their successful implementation. Even at a basic level, career progression is contested. For example, whilst some regard it essentially as a technically rational and linear process (Holland, 1992), others argue that it is the result of more affective processes (Savickas, 1997), whilst yet others that it is constrained largely by external factors (Roberts, 1997). Similarly, there are varied conceptions of career learning and how this relates to career-decision making (Hodkinson *et al.*, 1996; Hodkinson *et al.* 1997). There exists, therefore, a wide and fluid framework within which what 'counts' for this literature review had to be determined.

Relatively little evidence was found on career-related pre-entry interventions and interventions for graduates. Similarly, defining and searching for 'extra-curricular' interventions proved complex, as this term is broad and

encompasses a variety of activities. Researcher judgement has therefore been critical to the process of identifying activities categorised under this heading. Curricular interventions were easier to define. From the empirical studies collected, it appears that that much of the evidence relates to on-course curricular and extra-curricular interventions, with similar numbers of studies on these two types of interventions included in the review. Six distinctive categories emerged from the literature relating to the main review question: career-related interventions; curricular interventions to support vocational trajectories; curricular-related interventions; extra-curricular interventions; pre-entry curricular interventions; and multicultural curricular interventions. Brief summaries of findings on each of these are summarised next.

## Findings

For specialist career-related interventions, evaluations were generally positive. These comprised career courses and modules, computer programs designed to support, for example, career decision-making, one-to-one interviews and e-guidance. Curricular interventions to support vocational trajectories have been designed to support the choice of a subject specialism for particular vocational areas (for example, medical-related careers, like nursing or surgical specialism). Examples of curricular-related interventions are mentoring and shadowing, both used successfully to support groups of under-represented students in their career progression. Structured work-placement schemes are an example of extra-curricular interventions used to develop career learning and decision-making, with positive evaluations of their impact usually provided by participants. Of the range of pre-entry curricular interventions (such as structured support programmes for students from a district with poor educational provision), many were used constructively to support transitions into higher education of under-represented groups. Finally, multicultural curricular interventions (like involvement of parents and/or elders, peer support) for targeted groups (for example, minority ethnic groups on science, engineering and mathematics courses) have been found to enhance career-decision-making and learning.

An important finding from the review was that although there is a substantial literature on different interventions, which may influence students' learning, progression and career-decision making, evidence relating to the efficacy of these interventions is limited. However, three issues need to be highlighted when considering omissions in evidence available in academic journals. The first is that the orientation of those designing or implementing curricular or extra-curricular interventions may be driven by pragmatism, with a focus on 'what works'. It may not, therefore, be a priority for practitioners to publish findings from evaluations undertaken following implementation.

The second issue relates to possible problems of the transferability of interventions to other contexts. Curricular interventions not only have to be fit for purpose: they also have to be fit for context. The third issue is that significant attempts to support career learning and development are often not distinct curriculum interventions, but rather built into the initial framework and curricular thinking of many programmes in higher education (for example, Foundation Degrees). It may, therefore, be the case that significant progress has been made in establishing which interventions are effective in particular learning contexts, but that this has not been documented, so is not available in the literature.

## Constraints on career decision-making and learning

The sub-question for review was: What social, economic or demographic factors appear to impact upon career decision-making, career learning and career progression. Gender, ethnicity and socio-economic background were all found to influence career-related behaviour, with career-related interventions designed and implemented to counter some of the more negative impacts. Other constraints on the career behaviour of students were identified as the individual's experience of the higher education environment, age and disability.

Whether the research populations used were new graduates, women returners or undergraduates, gender emerged as a significant factor in career-related behaviour. For example, a strong relationship was found to exist between gender and subject choice or gender and employment. Similarly, ethnicity and race are strong influences on career decision-making, career learning and occupational progression. Existing evidence on socio-economic factors relates to parental income, financial constraints more generally and student perceptions of the value of educational qualifications to their career progression. Whilst no studies were identified that specifically identified disability or age, limited evidence on cross-cutting disadvantage is beginning to develop (for example, the combined affects of age and socio-economic status, or of disability and age).

## Evaluating effectiveness

Models that have been developed to evaluate the effectiveness of career guidance interventions are limited in number. Indeed, it has been suggested (Sampson *et al.*, 2003) that the apparent lack of progress in the development of useful accountability and evaluation models is linked to the absence of conceptual and operational constructs that define the outputs of career service interventions.

In seeking to assess and measure the effectiveness of career-related interventions in higher education, it is crucial to understand and take account of existing complex inter-relationships and variables. This includes: the way that individuals vary in respect of their personal circumstances, such as gender, age, ethnicity and attainment; the contexts in which clients operate, that vary in relation to their domestic situation, geographical location, mobility and labour market status; and the career-related interventions to which individuals have access, in terms of the type, intensity and duration of the intervention(s), the resources available, the nature of the specific needs of clients, the experience and training of the practitioner, and the discrete nature of provision (for instance, whether it is experienced as a specific activity or as part of an integrated, on-going learning programme).

Additional issues include: how should change in the student/client participating in career-related interventions be evaluated; and which sources of information should be used to evaluate resulting changes (i.e. the student/client, the practitioner, a 'significant other', or perhaps an independent expert in career guidance)? Whilst the student/client's perspective is important, potential complexities need to be acknowledged. For example, whilst some benefits of effective career-related interventions are immediate and recognisable (e.g. entry to an educational course) others are likely to accrue over an extended time period. It is not unusual for student/clients to recognise only with the benefit of hindsight over a number of years that career interventions contributed to their personal development. Additionally, the extent to which beneficiaries of career guidance are able to distinguish and recognise the value of an effective career guidance intervention in enhancing their educational progress is likely to be problematic, since student/clients may place more value on tangible results (e.g. placement into a career) than on the process of the intervention itself. Finally, a positive and valuable outcome might be facilitating a student/client's acceptance that their aspirations are unavailable. This could be (and often is) regarded negatively by the participants in the intervention, even though retrospectively its value is recognised (Bimrose, 2004).

### Research gaps and future research

The parameters of this review were defined by the review question and sub-question. However, reframing the main question (What curricular and extra-curricular interventions appear to assist students and graduates to make career-related decisions, engage in career learning/development and progress towards entry into the labour market?) into two separate parts helps point to omissions in the existing research evidence. The first part of the question re-framed for this purpose would relate to the curricular and extra-curricular interventions that are designed to support career learning/development, broadly defined. The second would relate to how students and graduates make career-related

decisions, engage in career learning/development and progress towards entry into the labour market. Additionally, it may be helpful to reflect upon which theories of learning underpin interventions designed to support more informed career-related learning and development. Overall, the review argues for future research that is theoretically-informed and goes beyond a consideration of which interventions work to an examination of how they work.

Given the challenges inherent in evaluating the outcomes of career guidance, the most obvious need is for longitudinal research that tracks the development of career biographies of individuals as they move into, through and out of higher education at different phases of their lives, with special reference to their engagement (or not) with particular curricular or extra-curricular interventions designed to support their career learning and development. These 'career narratives' would not only be invaluable in understanding career learning and development, but crucially they could also be adapted as a tool to help the career decision-making, learning and development of students and graduates. Additionally, they could form the basis for multi-professional collaboration between careers practitioners, teaching staff and researchers in finding more robust ways to conceptualise the process of career learning and development.

### Conclusions

Conclusions that can be drawn from the review are limited due, at least in part, to the restricted nature of the research available, particularly in relation to: problems defining 'curricular' and 'extra-curricular' interventions; limited evidence on the influence and efficacy of interventions; and often impressionistic reporting of soft outcomes from interventions. For example, some articles identified in the full review include how one-to-one career interventions were found useful by students as they gave access to specialist knowledge, supported positive outcomes, provided a positive experience, and promoted constructive change. However, disadvantaged students found this type of intervention of limited value unless practitioners had specialist knowledge of their circumstances and needs. Multicultural curriculum interventions appear to have the potential to support entry to and progression within higher education, provided these interventions focus on the particular needs of target groups. Research evidence also suggests that mentoring offers multiple advantages and has been used successfully to support under-represented students (e.g. minority ethnic students) and those entering non-traditional areas (e.g. women into science). Access courses continue to provide an effective means of supporting career decision-making, learning and progression, and the benefits of different types of structured work-experience were highlighted. Finally, the potential of e-guidance as a positive initiative is indicated.

Within career-related guidance and support in HE, the role of the career guidance practitioner is central in the articulation of both student needs and the range and type of intervention offered; the boundary between researcher and practitioner in this context is often unclear and overlapping. This leads us to consider the place of practitioner research (or action research or reflective practice) as a route to better understand why interventions are developed and utilised. In particular we are currently pursuing practitioner research through the PROP project; here we are exploring not only practitioners' understanding of researched findings but also the ways in which they make 'professional sense' of and use researched findings within the context of their own practice. To do this we are setting up a series of projects, where researchers and practitioners working together develop innovative ways of responding to issues raised by the review and other relevant research.

Finally, the findings of this first review suggest that whilst there is much to celebrate in relation to the potential of interventions to have positive effect on outcomes, there remains a need for further research to be undertaken before career guidance practice can be claimed to be delivered within a robust theoretical framework.

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