The Impact of Career Management Interventions in Higher Education

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One of the aims of UK higher education (HE) is to encourage students to develop a critical stance, broadly speaking to examine the merits and defects of any idea or belief. It seems therefore appropriate that higher education careers services should also critically examine their own performance, for example through quality standard accreditation processes.

This paper sets out to explore *why* it is important to evaluate the impact and analyse the costs and benefits of career management interventions, discusses some of the difficulties associated with such evaluation, and offers some proposals to underpin more effective practice. The MS Excel spreadsheet and User Guide 'Cost Effective Career Development' available from http://www.rdg.ac.uk/ccms/events/Parallel_day1.php explore *how* the cost effectiveness of career management interventions might be estimated.

Employability

Cost-effective career management is part of a broader aspiration for cost-effective higher education. Aston (2003) questions whether all university education delivers excellent value for money to students. Measuring students' value for money and return on investment is not straightforward. Many intangible student outcomes are associated with higher education: for example, a history of accomplishment, positive self-efficacy beliefs and a robust sense of capability. As a higher education outcome, employability is sometimes criticised as being rather limited, but perhaps it is unexamined social and personal constructs of employability that are responsible for this criticism. Broader understandings of employability might include the motivation and ability to add value in a range of informal 'employment', such as managing a children's football team, organising a group holiday or supporting a partner and children's emotional well-being.

Evidence of a problem

This section outlines evidence of difficulties with on-programme career management learning that careers specialists encounter in higher education.

Evidence from UK HE careers guidance professionals

In July 2005 I used AGCAS-SERVICELINK to survey UK higher education careers advisers to explore pre-entry guidance and embedded career management in higher education institutions (HEIs). The survey received responses from 27 HEIs, a low response rate, but including both new and old universities from across the UK. In their responses, higher education careers specialists:

- estimated that underdeveloped career management skills were a major obstacle to securing graduate-level employment for around half of undergraduate finalists[1];
- reported that undergraduate courses typically used occasional teaching with little or no assessment to develop graduates' ability to manage their careers and professional development;
- typically rated graduates' career management performance as ineffective.

Fewer than 40% of respondents described students as typically receiving good value for money from HE as a stepping stone into a graduate-level working life.

Evidence from curriculum-based career management learning

This next section explores two curriculum-based career management programmes at the University of Plymouth:

- Geography and Careers, a credit-rated module for around 170 stage-three students;
- Pre-Placement Preparation, a module with no academic assessment for all stage-two Faculty of Technology students.

Careers advisers compared the results of assessed on-programme career management activities (such as written application assignments, selection interview simulations and written career planning assignments) with indications of graduates' actual early career management performance from DLHE data (for the geographers) and industry placement records (for the technology students).

An end-of-module evaluation indicated that 84% of geography finalists agreed that the Geography and Careers module was a valuable part of their undergraduate

[1] The survey asked 'In your experience, underdeveloped career management skills (i.e. self-awareness, opportunity awareness, decision making and transition skills) are a major obstacle to securing graduate level employment for what proportion of undergraduate finalists (not necessarily at your institution)?' and offered five possible responses: (a) Less than 20%; (b) 20 to 40%; (c) 40 to 60%; (d) 60 to 80%; (e) More than 80%. The responses were (a):3; (b):7; (c):14; (d):6; (e):2. The number of responses (32) exceeds the number of HEIs (27) that responded to the survey because more than one AGCAS-SERVICELINK user responded from some HEIs.

education. Only one student disagreed with this statement. Perhaps surprisingly, on-programme assessment indicated that relatively few (perhaps 10%) of the final-year geographers wrote application forms which careers advisers expected would attract interviews, and that many struggled to provide compelling evidence of graduate competencies commonly valued by employers. Nonetheless, evidence from the DLHE survey suggests that 56% of graduates entered occupations described as graduate-level by Elias and Purcell (2004), with an additional number in subject-related trainee positions, for example in town planning.

Results from the non-credit bearing Faculty of Technology industry placement preparation programme followed a similar pattern. Having sensibly prioritised deadlines for assessed coursework from other parts of the degree programme, very few students achieved module learning outcomes, such as demonstrating an awareness of their strengths and skills by attempting a CV writing coursework. Nonetheless, many students successfully secured rewarding industry placements.

In the case of both programmes, the assessment results did not reliably predict the students' career management performance. We therefore began to wonder whether the assessments did not sufficiently recognise some of their learning and development.

Evidence from performance development through the HE experience

Computer-assisted assessment data from the stage-three Geography and Careers module provided evidence of difficulties underlying students' patchy career management performance. Their STAR (situation, target, action, results) responses to competency-based questions revealed:

- limited high-level experience: few students provided performance development evidence from challenging *situations*;
- limited drive to improve their performance: students seldom described setting themselves demanding *targets*;
- limited initiative in students' *action*: students often simply described following standard procedures;
- limited achievement: students often described *results* such as 'the presentation went well and we received a good grade'.

Reviewing the results of this kind of final-year assignment highlights the developmental opportunities that are available to, but are often missed by, students during their university lives. Knight and Yorke (2002) identify self theories such as malleable intelligence and efficacy beliefs that underpin graduates' employability and can be changed through positive interventions. Higher education in the round, including sports, clubs and societies, social activities, work-based learning and performance management systems (such as personal tutoring and PDP) underpins and grows students' employability.

Evidence from correlating DLHE data and career management module scores

We had expected competent career managers to secure the more attractive and better-paid early career employment; however, there was little consistent correlation between finalists' Geography and Careers module scores and their DLHE salaries. Nonetheless, closer inspection of the DLHE data revealed that the students with the higher module scores were able to use their degree to greater advantage (DLHE field 15) in selecting an early graduate occupation. There appeared to be some evidence of a link between students' on-programme career management performance and their subsequent graduate employment destinations.

Warburton (2000) reminds us that correlation does not necessarily suggest cause. It suits careers advisers to believe that a correlation between the Geography and Careers module scores and early career management performance is evidence of the effectiveness of the module. But we might also entertain alternative explanations: for example, that the students who are more organised and motivated are likely to achieve higher module scores and secure higher-level jobs. Similarly, trainers might prefer to believe that teaching career management skills will produce competent career managers, but many higher education careers specialists recognise the development of career management behaviours as a symptom of some more profound development in the student's motivations and beliefs.

Understanding the difficulties

This section explores three difficulties that may reduce the impact of curriculum-based career management interventions.

The hidden curriculum

Evidence from the stage-three Geography and Careers module evaluation forms demonstrates that when students are invited to describe how their higher education experience has prepared them for professional life, some (in the words of one student) 'end up lying to produce something easily markable'. Snyder (1971) described a hidden curriculum, which students discover and address in order to pass academic assessments.

Egan (2002) describes three stages explored by the client in a developmental process: *What's going on?, What solutions make sense to me?, and How do I get what I want or need?* The DOTS model describes three similar tasks: *self-awareness raising, opportunity awareness raising,* and *decision making*.

Students attending to Snyder's hidden curriculum may respond to the three stages of these models without necessarily achieving any significant career management learning.

Diagram 1

Egan Model Stages	DOTS Model Stages	Hidden Curriculum
What's going on?	Where am I know?	"I am at the beginning of an academic module"
What solutions make sense to me?	Where do I want to be?	"67%" (i.e. a good academic grade)
Hoe do I get what I want or need?	How will I get there?	"I will write an assignment that will satisfy the assessment criteria set out in the module handbook"

Career management is a context where differences between the value added by deep and surface learning are particularly conspicuous; students who are actually doing something, in addition to writing something, about managing their careers tend to occupy the graduate-level jobs in the DLHE data.

The process of change

Both the academic and popular literatures provide process-based descriptions of human development and growth. Authors such as Gyatso (the current Dalai Lama) and Cutler (1998), and Prochaska and DiClemente (1992) examine the determinants of change. Both put forward five-stage process models in which each stage forms part of the conditions necessary to bring about the next stage; effective action is very unlikely in the absence of preceding underpinning stages.

Gyatso and Cutler describe learning as a first step in bringing about change. This helps to develop conviction, which in turn strengthens the determination to change that underpins action and effort. Prochaska and DiClemente describe *pre-contemplation, contemplation, preparation, action* and *maintenance*, and highlight the importance of relapse as a sixth component which may replace any of the previous five. In Prochaska and DiClemente's view: 'People, including professionals, often erroneously equate action with change. As a consequence, they overlook the requisite work that prepares changers for action and the important efforts necessary to maintain the changes following action' (1992, p.1104).

All of these authors recognise the significance of a process underpinning action. Prochaska and DiClemente suggest interventions that are appropriate to clients at various stages in their development, and suggest that 'professionals approaching communities and worksites with only action-oriented programs are likely to underserve, misserve, or not serve the majority of their target population.' This seems consistent with our experience of delivering action-oriented curriculum-based career management programmes. Students give the appearance of change but in the absence of *conviction or preparation* often achieve only surface learning.

From this perspective, it is hardly surprising that undergraduates under-perform during pre-placement and final-year career management modules. The modules occur in term one of stages two and three of their programmes. At this stage most students prioritise academic achievement and are *pre-contemplative* or *contemplative* in terms of Prochaska and DiClemente's Transtheoretical Model. The action into which credit-rated assessments will drive students is action without psychological *preparation*. In this state, students are unlikely to express sentiments described by Prochaska and DiClemente as characterising the *action* stage. These might be paraphrased in terms of career management as 'I am really working hard to manage my career' or 'Anyone can talk about managing their career; I am actually doing something about it'.

In a study of social and cognitive factors affecting student learning performance, Jakubowski and Dembo (2002) describe assessing undergraduate's readiness to change using a study skills inventory, based on the University of Rhode Island Change Assessment Scale (URICA) developed by McConnaughy, Prochaska and Velicer in 1983. Moving from measurement to intervention, Prochaska et al. (2001) propose strategies for supporting change at each stage. Similar approaches might add value to career management learning practice in higher education.

Career management programmes that acknowledge readiness to change may be able to move students through *pre-contemplation* and *contemplation*, so that students are more able to move independently into *preparation, action* and *maintenance*. Unfortunately, many finalists will not re-engage with career management until they have completed their dissertations and exams. They then pass into the *preparation* and *action* stages of their career management, but may be disadvantaged in the labour market by the number of new graduates and by employers' recruitment timetables.

Factors influencing students' career management performance

It is important to understand other issues that significantly influence finalists' performance, so that these can be accommodated in designing career management interventions. Clearly, developing such an understanding could be a lifetime's work, so this section indicates opportunities to inform our practice from this literature by outlining two examples.

For some time, psychologists such as Yerkes and Dodson (1908) have recognised a link between arousal and performance. When highly aroused, for example anxious or upset, people perform simple work well, but struggle with complex tasks. The Yerkes-Dodson Law suggests that finalists facing challenging stage-three modules and completing independent research projects are likely to struggle with complex tasks such as accurately assessing their strengths, values and preferences, systematically surveying opportunities, making well-informed decisions, and presenting themselves effectively to employers.

While mid-life higher education careers advisers may seek to satisfy self-esteem needs through work, Maslow (1970) suggests that students may tend to focus on safety needs such as paying the rent before attending to higher-level needs as they plan their transition into graduate life. This may be a particular difficulty for students from families who do not seek to satisfy self-esteem needs through work, and for younger students who have no experience of successfully meeting their own security needs. The DLHE questionnaire invites graduates to describe their reasons for taking their job, and response options such as "It fitted into my career plan" or "In order to earn a living" may indicate which needs the graduate aimed to address through their work.

The benefits of assessing impact and cost effectiveness

Metrics are a more significant feature of the quality-management literature around manufacturing than around service industries. Authors such as Oakland (2003) describe why measurement is needed: for example,

- to ensure that customers' needs are met;
- for setting standards, objectives and improvement priorities;
- to provide feedback to drive improvement;
- to provide a visible scoreboard with which individuals can monitor and improve their personal performance;
- to justify the use of resources;
- to indicate the cost of poor quality.

Clearly, measuring the impact of career management interventions and the employability of graduates can inform the process of improving career management interventions. Watts and Dent (2006) discuss a range of approaches to measuring the productivity of career management interventions, comparing economic, social, behavioural and learning outcomes, and reviewing impact and cost effectiveness meta-studies. They encourage careers services to examine their opportunities for improving productivity, and identify a creative potential that drives service development in the tensions between business modernisers' concern with modern efficient systems and professional guardians' attention to professional standards (Watts, 2005).

Carl Rogers (1967) asserted that 'the facts are always friendly'. If our best-integrated curriculum-based career management module fails to engage up to half of participants, then Rogers suggests we are better off acknowledging this, questioning constraints that limit performance, and addressing those limitations, for example by influencing the development of personal tutoring and what Pauline Kneale (2004) refers to as Performance Development Planning (PDP).

In practice, examining difficulties with our work is not straightforward. The process of bidding for and presenting the results of employability projects typically involves a focus on the positive that retreats from a balanced critical view. Tensions exist between pragmatic management and rigorous quality review and improvement in institutional practice. Merton (1973) describes these difficulties. Many co-ordinated institutional practices such as teaching are underpinned by a shared commitment to accepted beliefs which are maintained by loyalty, adherence and respect. Detached scrutiny may not be immediately welcomed when it challenges these attitudes, but, as Zella King and Lucinda Becker suggested at the 2007 CCMS conference, it is likely to inspire the confidence of academics' colleagues who operate Merton's organised scepticism as a professional norm.

The most significant practical purpose of career management performance indicators may be to engage academics in a dialogue around what constitutes a successful career outcome from their programme and how this can most economically be achieved. This can:

- serve as a prelude to embedding career management and student Performance Development Planning (PDP) activities in the curriculum and the broader student experience;
- provide careers advisers with evidence to influence curriculum design and student performance management systems such as personal tutorials and Performance Development Planning;

- enable a responsive service to avoid being drawn away from its expertise by naïve requests such as 'Can you do a careers talk for the finalists?' from influential academics.

Career management interventions

Evaluating the performance of career management interventions through academic assessment is difficult because:

- outcomes that are easily measured, such as the quality of written applications, may be less meaningful indications of career management performance than outcomes that are more difficult to measure, such as students' ability to vary the content of their written applications with the requirements of the opportunity, or students' progress through Prochaska and DiClemente's stages of change;
- students addressing the hidden curriculum may achieve high scores with little career management learning;
- on-programme career management performance may not be a reliable predictor of graduate career management performance: at the time of the assessment student performance may be affected by factors such as other coursework deadlines;
- students' difficulties with self-assessment may mask career management performance in self-audits.

Employability performance indicators

The MS Excel spreadsheet and User Guide 'Cost Effective Career Development' sets out a method for estimating the cost-effectiveness of career management interventions. This tool is intended:

- to demonstrate that it is possible to investigate impact and cost-effectiveness, and promote basic data collection - for example, success rates from employment interview preparation;
- to disaggregate the impact of students' self-directed career management from the impact of curriculum-based interventions;
- to provide evidence of the benefits of credit-bearing assessment, that can be used in negotiations with academic programmes;
- to inform the development of methods for measuring quality and supporting improvement.

In the spreadsheet, cost-effectiveness is calculated as 'the number of hours (of careers adviser time) per appropriate job offer (for the student or graduate)'. This is not a perfect performance indicator. It ignores other positive outcomes from career management interventions, and must accommodate uncertainties about what constitutes an 'appropriate' job for the individual graduate.

Nonetheless, this performance indicator is not a completely arbitrary measure. Employers describe seeking graduates with any track record of employing their 'know-how', so early paid employment might be expected to indicate graduates' broad capacity to add value. Furthermore, it is possible to examine graduates' early career management performance from the DLHE data. For example, few effective career managers will be in full-time employment:

- that is classified as 'non-graduate' by Elias and Purcell (DLHE field 11), and
- in which their degree is no advantage (DLHE field 15), and
- that pays a salary of less than perhaps £14,000 (DLHE field 14), and
- that was the best or only job offer they received (DLHE field 18).

Transparency

As Rogers suggests, transparency is not without its benefits. For example, presenting stage-one students with a complete list of the job titles, employers and salaries of their programme's most recent graduates enables them to recognise the opportunities and pitfalls associated with their higher education, and may move them towards career management *action.* Presenting students with similar data for other programmes can promote discussion and stimulate demand for on-programme career management learning. It is our experience that presenting this DLHE data to students in the presence of senior academics stimulates demand for on-programme career management learning from all sides. In a similar way, candid discussions about the impact of career management interventions present opportunities to name and explore ownership of the difficulties, and to work together to devise more effective solutions.

Managing increased demand for career management learning

Involving students and academics in a transparent discussion of graduate employability is likely to increase demand for on-programme career management learning. This can provide an opportunity to review the role of the careers service.

It is clearly not feasible for careers advisers to deliver learning opportunities to all stages of all programmes across an HEI, so a discussion of this sort is an opportunity to reassert the expertise of careers specialists as:

- career management learning and teaching experts;
- capability builders, providing academic staff development opportunities and support;
- resource co-developers, with an enthusiasm for adapting and handing over resources to academic colleagues;
- career management learning quality managers.

Conclusions: towards more effective practice

Career management performance is an important factor determining students' ability to add value in their graduate lives, and there is scope for improving the performance of curriculum-based career management learning in higher education.

There are opportunities to improve delivery. Prochaska and DiClemente's work suggests that action-oriented career management interventions will only be effective for students who are prepared for change. Assessment evidence indicates that many students do not experience curriculum-based career management as part of their process of change, and are not purposefully improving their performance and their employability throughout their higher education.

There are opportunities to improve impact assessment. Merton suggests that detached scrutiny of institutional practice may be initially unwelcome. Nonetheless, the benefits of evaluation are clear, and in HEIs an excellent range of data is available from careers service user records, academic assessment and the DLHE survey.

Improving return on investment seems increasingly important as higher education costs are increasingly borne by the student. In enhancing the cost-effectiveness of their work, university careers specialists might consider:

- Enabling students to construct enlightened personal meanings for 'employability' and examine their individual purpose for, and the function of, their higher education
- Re-examining the outcomes of career management interventions, perhaps using the 'Cost Effective Career Development' spreadsheet and user guide available from http://www.rdg.ac.uk/ccms/events/Parallel_day1.php to separate the impacts of self-directed and curriculum-based career management
- Using cost-effectiveness data to influence the design of curriculum-based career management interventions, for example by demonstrating the impact of credit-rated assessment and student performance management systems such as Performance Development Planning and personal tutoring
- Accommodating students' 'readiness to change' in the development of institutional career management practice
- Measuring the impact on graduates' employability of participation in the broader university experience
- Managing increasing demand for on-programme career management by establishing their role as building institutional career management capability, rather than responding to service-delivery requests.

References

Aston, L. (2003). The poor don't buy flimsy money-back guarantees. *Times Higher Education Supplement,* 10 January.

Egan, G. (2002). The Skilled Helper. California: Wadsworth.
Elias, P. and Purcell, K. (2004). SOC (HE): *A classification of occupations for studying the graduate labour market* [available online] http://www2.warwick.ac.uk/fac/soc/ier/research/completed/7yrs2/rp6.pdf [accessed 23 January 2007]

Gyatso, T. and Cutler, C. (1998). *The Art of Happiness.* London: Hodder and Stoughton.

Jakubowski, T., and Dembo, M. (2002). Social Cognitive Factors Associated with Academic Self-Regulation of Undergraduate College Students Enrolled in a Learning and Study Strategies Course. [available online] http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/0d/f3/1e.pdf [accessed 14 March 2007]

Kneale, P. (2004). Motivating student personal development planning by making links with employability. *Journal of Geography in Higher Education,* 13, 20-21.
Knight, P. and Yorke, M. (2002). *Employability through the Curriculum* [available online] http://www.qualityresearchinternational.com/ese/relatedpubs/Employability%20through%20the%20curriculum.pdf [accessed 23 January 2007]

McConnaughy, E., Prochaska J., Velicer W. (1983). Stages of change in psychotherapy: Measurement and sample profiles. *Psychotherapy: Theory, Research, and Practice,* 20, 368–375.

Maslow, A. (1970). *Motivation and Personality.* New York: Harper and Row.

Merton, R. (1973). *The Sociology of Science.* Chicago: University of Chicago Press.

Oakland, J.S. (2003). *TOM Text with Cases,* London: Butterworth Heinemann.

Prochaska, J.M., Levesque, D., Prochaska, J.O., Dewart, S., Wing, G. (2001). *Mastering Change: A Core Competency for Employees* [available online] http://brief-treatment.oxfordjournals.org/cgi/reprint/1/1/7 [accessed 14 March 2007]

Prochaska, J.O., Diclemente, C., Norcross, J. (1992). In search of how people change. *American Psychologist,* 47(9), 1102-1114.

Snyder, B. (1971). *The Hidden Curriculum.* Cambridge, MA: MIT Press.

Warburton, N. (2000). *Thinking from A to Z.* London: Routledge.

Watts, A.G. and Dent, G. (2006). The 'P' word: productivity in the delivery of career guidance services. *British Journal of Guidance and Counselling,* 34(2), 177-189.

Watts, A. G. (2005). *Careers Scotland: Progress and Potential.* Glasgow: Careers Scotland

Yerkes, R. and Dodson, J. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology,* 18, 459-482.

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