Perspectives on motivation and engagement in an extracurricular project

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Abstract

To enhance employability opportunities, a range of co-curricular opportunities are offered to Nutrition students at Kingston University. Student uptake of these opportunities tends to be limited to a small group of highly motivated students. Using an unpaid public health project undertaken as a staff-student partnership as a case study, both the processes involved in the project and the motivation of staff and student partners are explored. Understanding what elements of motivation were involved may help to pinpoint aspects of co-curricular work to focus upon in order to increase student uptake, thus potentially enhancing graduate employability.

Background

Employability is a key issue for graduates (Pegg et al, 2012); in a competitive jobs market they must demonstrate evidence of key personal, transferable and subject-specific skills and competencies. Gaining practical skills whereby students can apply theoretical learning to 'real life' scenarios can be challenging within the university setting, outside of the traditional laboratory. Employability can be defined as the set of achievements making graduates more likely to attain employment and success (Yorke, 2006), but is also considered to be about more than just getting a job; rather it is about the development of critical, reflective abilities which empower and enhance the learner (Harvey, 2003).

In order to enhance employability prospects for our undergraduate Nutrition students, at Kingston University (KU) we have developed a thriving co-curricular programme of activities. However we have observed that it is often the same students who take up multiple opportunities, while others do not avail themselves of any. The motivation of students identifying opportunities and choosing to take them up is of interest; identifying what it is that interests them in specific projects may help us broaden their appeal. Motivation is considered to be a critical component of learning, in driving student engagement as well as how much they will learn from different activities (Trigwell & Prosser, 1991; Kember et al, 1997; Deci & Ryan, 2004). Most theories of motivation begin by distinguishing between different types of motivation: for example intrinsic motivation (IM; driven from within, inspiring action for the value of or pleasure in the activity itself even without expectation of reward) and extrinsic motivation (EM; externally driven by the wish to achieve reward or avoid punishment) (Vansteenkiste et al, 2006). The self-determination theory explores the quality of motivation for learning (Deci & Ryan, 2004). IM is viewed as self-determined and autonomous, while EM reflects a lack of self-determination (Kyndt et al, 2011). Within education, intrinsic motivation is considered to be most valuable, resulting in deeper learning and engagement (Trigwell & Prosser, 1991; Kember et al, 1997; Deci & Ryan, 2004). However there is a continuum

along which motivation is experienced. Some types of EM are considered more autonomous and self-determined, closer to IM than others (Kusurkar et al, 2011).

This paper examines an unpaid project carried out over the summer holidays. The project was a public health one, which aimed to explore the extent to which the local retail food environment reflected public health recommendations for healthy eating, as typified by the Eatwell plate, (now the Eatwell Guide) (Public Health England, 2014). Since many food-related decisions are made without conscious thought (Wansink & Sobal, 2007), understanding the extent to which there is a match or mismatch between the actual and recommended food environment has implications for public health practice.

The motivation of student and staff involved is explored. IM is widely recognised as a powerful tool for learning (Knowles et al, 2005), and it has been suggested that intrinsically motivated learners are higher achievers academically as well as better able to apply their learning (Ryan & Deci, 2000a, b). Identifying what factors comprised the motivation for both the staff and student involved in the project could be beneficial in terms of applying the learning to the wider student body. This has the potential to encourage greater student uptake of co-curricular activities which enhance employability.

Methods

Posthoc analysis of motivation

On completion of the project (published in Mulrooney & Bell, 2016), both the staff supervisor and the student completed the Academic Motivation Scale (Vallerand et al, 1992). This is a 28 statement tool in which statements are rated from 1 to 7 using a Likert rating scale, and both intrinsic and extrinsic motivation are assessed.

In addition, both completed the Motivated Strategies for Learning Questionnaire (MSLQ), an 81 statement questionnaire in which statements are rated using a Likert rating scale from 1 to 7. This tool measures intrinsic and extrinsic motivation as well as learning strategies (Pintrich et al, 1993).

Results

Staff and student motivation: **The Academic Motivation Scale** (Vallerand et al, 1992).

This tool measures types of intrinsic motivation (IM) and extrinsic motivation (EM), as well as amotivation. Both staff and student scored highly for all types of IM and for identified EM. Scores for less autonomous forms of EM were lower in both and lowest for measures of amotivation (Table 1).

	#1 (HM)	#2 (JB)
IM: to know	6.5	7.0
IM: accomplish	6.0	7.0
IM: stimulation	6.5	6.25
EM: identified	6.75	5.75
EM: introjected	5.25	4.25
EM: external	5.0	4.0
Amotivated	1.0	1.0

Table 1 The Academic Motivation Scale results for staff (HM) and student (JB)

Staff and student motivation: the Motivated Strategies for Learning Questionnaire (Pintrich et al, 1993)

Again, both staff and student scored highly for measures of IM as well as for task value (Table 2). In terms of learning strategies, both scored more highly for effort regulation than other categories, and scores for both were lowest in the peer-learning and help-seeking categories. Results suggested that a range of learning strategies were used by both (Table 3).

	#1 (HM)	#2 (JB)
Intrinsic goal orientation	6.5	6.8
Extrinsic goal orientation	5.8	6.3
Task value	6.7	7.0
Control beliefs about learning	6.5	6.3
Self efficacy for learning & performance	3.1	5.5
Test anxiety	6.4	4.8

Table 2 The Motivated Strategies for Learning Questionnaire: motivation & attitudes results for staff (HM) and student (JB)

	#1 (HM)	#2 (JB)
Rehearsal	7.0	5.5
Elaboration	6.7	6.2
Organisation	7.0	6.5
Critical thinking	5.2	5.2
Metacognitive self-regulation	5.6	5.1
Time & study environment	6.3	6.8
Effort regulation	7.0	7.0
Peer learning	3.7	4.0
Help-seeking	3.8	3.3

Table 3 The Motivated Strategies for Learning Questionnaire: learning strategies results for staff (HM) and student (JB)

Discussion

This project was of interest for a number of reasons. It came about because of a combination of factors: a highly motivated student who volunteered to work without payment over the holidays, and a member of staff who had a question but no time to answer it. The first step in this project was student-led; without it, this work would not have come about. The student had just finished his first year on the BSc Nutrition, and the project proposed was clearly highly relevant to this subject area which may have helped improve his motivation to carry out the work. It has been suggested that relevance of a task is an important driver of learning (Dewey, 1933; Brown et al, 1989; Blumenfeld et al, 2006). In addition, the student was actively involved in the development of the methodology and data collection, and active involvement of students is recommended within the literature to facilitate deeper learning (Chickering & Gambon, 1987; Modell & Michael, 1993; Michael, 2001, 2004). This project also epitomised student-centred learning, since the student influenced the content, materials and pace of learning (Collins & O'Brien, 2003). It has been suggested that this results in more positive attitudes towards what is being learnt (Barr & Tagg, 1995). How students build their knowledge is thought to influence their learning (Johnson et al, 1991; Ramsden, 1992), and the concept of student engagement assumes that how students participate in learning activities affects their learning (Coates, 2005). Learning is not however solely down to the student but a joint activity between students, the institution and academic staff (Davis & Murrell, 1993). Staff facilitate learning in students using opportunities other than solely formal teaching sessions (McKimm & Jollie, 2007). In this case, an informal extracurricular opportunity to enhance learning was used.

Results of both tests for motivation demonstrate high levels of IM in both the staff and student. Academic curiosity was a strong driver for the staff member, who also works in public health, and has a specific interest in this area. Both could see the worth of the activity; task value was rated highly by both. In the case of the academic staff this may be explained by

specific interest in and experience of this area of work. In the case of the student, it may be the relationship between theoretical topics and 'real life' (Kolb, 1984), which engaged his interest. Additionally, the student has a history of involvement in co-curricular activities and is highly engaged in his studies. In this project staff and student worked closely together. It has been suggested that increased contact with staff enhances student engagement (Chickering & Gambon, 1987). However, in reality EM was also a factor. Although the initial driver for both parties was highly intrinsic in nature in that no explicit reward was expected, the quality of data collected meant that publication of the work was possible, so over the course of the project a more obvious element of EM developed. The student was keen to gain skills and experience for his curriculum vitae, so EM was an important part of his drive to carry out this work. The exploration of types of motivation using the Academic Motivation Scale (Vallerand et al, 1992) showed that both staff and student scored highest for IM, identified and introjected EM, both of which are considered more autonomous forms of EM (Kusurkar et al, 2011). Scores were lowest for amotivation and the less autonomous forms of EM.

In this case, the student was clear about the task value and the worth of carrying out the work. However not all students see the link between co-curricular activities and gaining evidence of skills, competencies and experience for their curriculum vitae. From anecdotal student evidence, there appears to be a mismatch between their perception of the value and utility of a learning activity versus its cost. If an opportunity offered is paid, they think they are not good enough to take it up and conversely if it is unpaid, they think the activity is not worth doing. It is important that students understand that the worth of an activity extends beyond the obvious. Students need to think in terms of professional skills and competencies gained. The fact that many students choose not to engage with co-curricular activities suggests that this is a link that they are not making. Our BSc Nutrition is externally accredited by the Association for Nutrition (http://www.associationfornutrition.org/), and skills and competencies which must be demonstrated by graduates are clearly defined. Through the Personal Tutor Scheme (PTS) at the university we encourage students to log evidence of specific skills and competencies achieved through curricular, co-curricular or external activities. It is clear that students need help in understanding the worth and utility of activities, both subject and non-subject specific. In order to build upon this case study, a project to identify barriers to, and facilitators of, co-curricular opportunities is currently underway. This will explore motivation in students and will identify which activities most interest students, and what the real and perceived barriers to involvement are from their perspective. It will specifically explore with those who have not chosen to participate to date their reasons for not doing so. Students will be invited to suggest future activities that would interest them. In addition, co-curricular activities have been added as a specific section in the Student Evaluation and Reflection Log (SERL) that all students complete as part of the PTS. This explicitly links activities to skills and competencies and also provides an annual timetable of activities so that students can plan ahead, and have time to explore different opportunities. It is recognised that this small case study is limited in scope. Nonetheless the findings suggest that work identified as relevant, and that which enhances intrinsic motivation by actively involving the student in project planning and delivery is likely to encourage involvement and engagement.

Conclusion

Helping students to understand the value of learning opportunities is likely to increase uptake of co-curricular opportunities. Ensuring that opportunities are clearly relevant, and explaining what skills and competencies may be gained from engaging with the opportunity may help with this. Working with an engaged student and encouraging autonomy and active learning resulted in good quality data collection such that publication of the work in a peer-reviewed journal was achieved. Motivation to undertake this project was highly intrinsic in nature. However elements of extrinsic motivation were also present. Important elements of the project included active involvement of the student throughout, particularly in development of the methodology and data collection and analysis, and staff-student partnership working.

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