adaptation adjustment changeover alteration evolution change conversion development transfiguration flux jump gradation leap metamorphosis transformation passage progress progression switch shift move student transitions

Transition Skills and Strategies

Introduction

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Transition can be thought of as any period of change and specifically in the context of a student's life, numerous transitions in learning, working and personal circumstances are likely to be experienced. Transition skills are those abilities which allow individuals to positively navigate myriad, complex changes including those in higher education and beyond. They can be regarded as skills which empower individuals such as students to effectively manage change.

In Phase 1 of this project, as a result of a review of the literature, it was confirmed that the development of a range of skills was essential for successful student transitions. The first phase reported eight key transition skills and highlighted relevant strategies from a number of studies which were considered important in enhancing and developing these skills.

The main transition skills identified were: self-efficacy (re-named as 'self-belief' following feedback from student focus groups); critical self-reflection; independent learning; self-management of expectations; social skills; dealing with stress; critical thinking; academic; and information literacy.

Following on from Phase 1 of the project, QAA Scotland identified a number of additional evidence-based skills which may support student transitions and, in discussion with the Theme Leaders' Group, the following five skills were considered useful to explore further in Phase 2 of the project:

- resilience/academic buoyancy
- social skills for embracing diversity including social belonging
- self-management of expectations
- academic and digital literacy
- mindset.

Having identified these evidence-based skills, the first objective of Phase 2 was to conduct desk-based research to further explore these transition skills. The extended literature review is the basis of this report. It should be noted that the overall approach to Phase 2 was to be positive and pragmatic with the intention of providing outcomes that would assist students to develop their personal strengths in relation to transition skills.

A key output of Phase 2, in addition to providing the extended literature review, was to identify how to 'translate' information coming from Phase 1 into practically useful materials intended for staff and student use. The second objective of Phase 2 was to develop staff resources that would enable staff from a variety of areas to work with students to assist them in developing transition skills.

Key transition skills

It can be argued that students who do not have or manage to develop the key transition skills are less likely to successfully transition into, thrive in and transition with qualifications, out of higher education. Thus poor transition leads to non-continuation and non-completion of degrees. Yorke and Longden found that 'the major influences on non-continuation continued to be: poor choice of programme; lack of personal commitment to study; teaching quality; lack of contact with academic staff; inadequate academic progress; and finance' (Yorke 2008 p.2).

Jones (2008) listed some overlapping factors as contributing to early withdrawal:

- preparation for higher education
- institutional and course match
- academic experience
- social integration
- financial issues
- personal circumstances.

Although many of the influences and factors identified in the literature are the responsibility of the student and their ability to manage their transition, Tinto recognised that institutions also had to accept some responsibility. He proposed that there should be reflection on the design of the 'educational conditions in which we place students' (Tinto 2009 p 2). He concluded that five educational conditions that could be designed into the student experience by institutions stood out, namely commitment, expectations, support, feedback, and involvement.

One study proposed that student engagement was a critical factor in successful transition and that this lies on a continuum from disengaged to engaged. This research also revealed shared responsibility between the student and the institution, and concluded that 'students are more likely to engage if they in turn are supported by teaching staff who engage with: students, with the subject, and with the teaching process' (Bryson & Hand 2007 p 349).

Gale found that a significant amount of early transition support promoted the idea of students adapting to fit in to higher education. He observed that central support in higher education existed not primarily to develop the skills of the learner but to help students to adapt to the institution (Gale 2009). This model is insufficient where the principle is about engaging with difference. Ideally when considering different models of transition Gale suggests considering 'the creation of space in higher education not just for new kinds of student bodies but also for their embodied knowledges and ways of knowing' (Gale 2009 p 14).

Academic buoyancy and academic resilience

Academic buoyancy can be thought of as how students respond to specific and routine academic factors like coursework and exams. It has been defined as 'a capacity to overcome setbacks, challenges, and difficulties'. (Martin 2013 p 488). The minor setbacks that can happen in the daily life of a student in higher education can often be overcome with a small amount of academic buoyancy. The five motivational predictors of academic buoyancy were identified by Martin et al (2010) in their study as:

- confidence (self-efficacy)
- coordination (planning)
- commitment (persistence)
- composure (low anxiety)
- control (low uncertain control).

Academic resilience is more to do with long-term struggles with achievement and it has been defined as 'a capacity to overcome acute and/or chronic adversity that is seen as a major threat to a student's educational development' (Martin 2013 p 488).

More major issues require academic resilience if the student affected by any setback is to recover and continue with their studies. Lack of academic resilience is therefore associated with underachievement and students who are not resilient can face anxiety and/or chronic academic failure (Smith 2015).

It would be fair to say that the definitions of academic resilience are wide-ranging (as they are of resilience). A commonality might be that they include aspects of adaptive behaviour by the student and resourcefulness in the face of adversity. Constantine et al (1999) developed an early model that separated out factors affecting academic resilience into what was referred to as external and internal protective factors. External protective factors are largely about the student's environment and internal protective factors are considered to be the individual qualities (skills, attitudes, beliefs and values) of the student.

Internal protective factors for academic resilience include:

- co-operation and communication
- strong problem solving skills
- well defined goals and aspirations
- high self-efficacy and self-awareness.

Many of these protective factors have long been accepted in the literature as important contributors to student success and degree completion. For example, some research has taken place to confirm that there is a positive correlation between achievement goal orientation and academic resilience (Jowkar et al 2014). Another example of a positive correlation between goal setting and success came from the study by Splan et al (2011) who concluded that resiliency and mastery approach goal orientation were positively and moderately correlated.

Self-efficacy is a student characteristic that is also known to have an impact on academic performance (Sander & Sanders 2003). Here the academic resilience is evident when students implement a strategy for dealing with academic setbacks (Martin & Marsh 2008). This contrasts with learned helplessness which is a barrier to academic achievement (Margolis & McCabe 2006).

As reported in Phase 1 of the project, academic buoyancy and academic resilience will be demonstrated by students who can successfully navigate change, self-regulate their approach to learning at university and manage transitional stress. This is facilitated by a deep learning approach (Entwistle 2000) and the mastery of self-directed learning (QAA & HEA Reports 2008, 2015). With these characteristics students can control their effort and persistence (Margolis & McCabe 2003; Schunk 2003). This will demonstrate academic self-efficacy resulting in change being seen as a challenge faced with tranquillity (van Dinther et al 2010).

Academics who support and/or teach students have long observed the difference between the attitude and approach of students to their studies. There is wide variation in the coping mechanisms and recovery of students when they are faced with setbacks. Clearly it is not possible to completely transform the values and beliefs of students or to completely undo or protect them from negative personal life experiences that may have influenced the student's character. There are, however, practical ways and interventions that can help students to become more resilient which may in turn help them to improve their academic success.

Successful student strategies for academic buoyancy and academic resilience already exist to encourage and strengthen the skill of becoming an independent learner. These include good time management and developing confidence in the students' ability to prioritise (Christie et al 2013). Appropriate resources for staff and students to help students to become successful independent learners, avoid and overcome setbacks, develop their self-belief and set their academic and career goals may make a contribution to students becoming more academically resilient.

Social skills for embracing diversity

The social skills of students may include their social self-efficacy (Bandura et al 2001 and Muris 2001). Avoiding feelings of isolation and stress in early transition experiences can be helped by well-designed induction and ongoing facilitation of support networks (Tinto 1975).

Wilcox et al (2005) showed that for successful retention, equal emphasis should be placed on academic matters and integrating students into the social world of university. Thomas (2012) also highlighted the need for social integration and developing students' sense of belonging in higher education. She suggested that this was best achieved through mainstream activities which made high quality student centred learning a priority.

Successful student strategies that develop social skills for embracing diversity involve any form of peer mentoring or support, icebreakers, group projects and team building activities. Learning communities give students structured opportunities for social adaptation (Bean 2001). These are contributors to the development of graduate attributes. Identifying and supporting underachieving and at-risk students is also critical for inclusive student transition (Nelson 2006).

In a study of the interrelationship of the social and cultural with the learning experience in different institutions Crozier (2010) showed that the structural and organisational circumstances of institutions could help students who were less prepared for higher education on arrival to better navigate the transition.

Self-management of expectations

Self-management of expectations requires students to examine and challenge any incorrect perceptions (James 2001) and, after becoming familiar with any new requirements, setting themselves realistic and achievable goals (Nicholson 2013). Morisano et al (2010) also reported a positive correlation between self-reflection and setting realistic goals.

Students with a lack of knowledge about the university they are going to attend or the course they are studying, for example, those entering degree courses through clearing having not achieved the results that would allow them to enrol on their first choice in the application process, may be at more risk of leaving their studies. On the other hand, a student who starts a programme of study in higher education having well researched what they intend to do may therefore have more realistic expectations which are not at variance with their reality during their studies (Yorke & Longden 2008).

Analysis of student performance data has proven a correlation between the amount of time that students study and their grade point average (Kuh 2007). In another study there was evidence of a correlation between online behaviour i.e. engagement with a virtual learning environment and student performance (Maltby & Mackie 2009). Four categories of students in terms of their interface with online learning were identified resulting in a conclusion, in one study, that early intervention for students who were not engaging with online learning could assist with successful transition (Lee 2001).

Students coming from school or college into higher education who did not successfully transition found that the increased workload and greater freedom resulted in them falling behind with their studies (Quinn et al 2005).

Successful student strategies for self-management of expectations include personal development planning to enhance learner awareness of self (Whittaker 2008). Institutions can address any misconceptions by communicating timely and accurate information to students in terms of expected knowledge and performance standards. They can also facilitate positive behaviour support systems in the classroom (Knoff 2012). Integrated and holistic approaches by universities to pro-actively encourage students to enhance their transition skills have been shown to be effective (Clafferty & Beggs 2014).

Academic and information literacy

Academic and digital literacy involves the evolution of appropriate levels of skill in critical thinking, reading, writing and the use of technology. It also means the ability to evaluate and effectively use information and the development of higher order thinking. JISC has a definition of digital literacy on their website as meaning 'those capabilities which fit an individual for living, learning and working in a digital society'. They have some resources from their developing digital literacies programme including their scoping study on students' expectations and experiences of the digital environment (JISC 2015). Some institutions have used these resources as the basis of developing their own material and resources to use with students. An example of this can be seen on the University of Dundee's website. Last accessed 30 June 2016. Available at: www.dundee.ac.uk/library/help/digitalliteracies/digitalliteraciesforstudents.

Academic writing is part of the essential development of English for academic purposes required by students whose first language is not English. Online and face-to-face resources to support academic writing have been developed by many higher education institutions. Examples include resources that are available at the University of Edinburgh

(2016). *English Language Teaching.* Last accessed 30 June 2016. Available at: www.ed.ac.uk/english-language-teaching. Stirling University has Personal Development Modules for learning strategies, information technology and data skills. Last accessed 30 June 2016. Available at www.stir.ac.uk/campus-life/learning-support/personal-development-modules. The University of the Highlands and Islands has a number of resources on the 'how to' area of their library website page. These include an Online Dissertation Skills Guide developed by Perth College. Last accessed 30 June 2016. Available at www.uhi.ac.uk/en/libraries/how-to/introductory-dissertation-skills-guide.

In the literature, there is some recognition that academic English is no one's first language and every student could benefit from some development of their academic writing skills. Research has taken place to determine how to conduct diagnostics of academic literacy (Palmer et al 2014). This research suggested that an academic literacy diagnostic assessment could be embedded into a programme of study to allow staff to provide early feedback and targeted support for students. In another study links were investigated between academic literacy and academic performance (Donohue & Erling 2012). Some research shows the usefulness of providing support for academic literacy within the context of subject disciplines (Skinner & Mort 2009).

Successful student strategies for academic and information literacy were identified from the literature and include the use of learning journals, self-assessment and peer assessment (Booth 2001). Reflective dialogue can be encouraged between students and teachers (Fisher 2003). Appropriate learning and teaching practices (Arter & Spandel 1992; Fisher 2003; Jones 2004; Moore 2004; Rodgers 2002; Spalding & Wilson 2002; Yinger & Clark, 1981) can also be adopted by universities. It has also been shown that the design of the curriculum can help to enact a transition pedagogy (Kift 2009).

In addition to the resources available to institutions and their staff there are many resources available to help students with cognition, memory, time management, note-taking, test preparation and general study, and critical thinking skills (James 1991; McMurray 2011; Northedge 2005; Hills 2011). Beetham and Sharpe (2010) suggested a framework for motivating students to try new technologies and acquire new skills. Their model has been widely used in institutional digital literacy projects.

In other relevant research inconsistences in conceptions of digital literacy are pointed out. Digital literacy involves a large variety of complex, cognitive, motor, sociological and emotional skills which students require if they are to function in the increasingly digital academic environment (Eshet-Alkalai 2004).

Lankshear and Knobel (2008) bring together a range of authors in their book believing that there is a need to emphasise the plurality of digital literacies. Social practices in relation to digital literacies is also covered in this work.

Mindset

Mindset is a fixed mental attitude and it is sometimes referred to as the self-theory of intelligence. On the home page of the companion webpage to her book, Dweck defines a fixed mindset as 'one where people believe their basic qualities, like their intelligence or talent, are simply fixed' (Dweck 2006). Research suggests that it is possible to have a growth mindset. In a growth mindset, again defined by Dweck, people 'believe that their most basic abilities can be developed through dedication and hard work - brains and talent are just the starting point'.

A growth mindset can influence students' attainment and when students believe that intellectual ability can develop because it is not fixed, their academic achievement has been shown to improve significantly (Yeager & Dweck 2012; Boaler 2013).

A number of studies have highlighted the positive effect on student achievement of intervening to promote a growth mindset (Aronson et al 2002: Blackwell et al 2007 and Rienzo et al 2015). However, where student groups include international and home students there is a need for cultural awareness. For example, it has been noted that the correlation between a growth mindset and student performance goals may vary between cultures (Chen & Won 2015).

Helping students to grow their mindset is often done during face to face meetings and can be very dependent on the skills of individual academic advisers. One study, of interest for larger scale mindset intervention, made interventions part of their online teaching. Their approach resulted in raised achievement in a large and diverse group of underperforming students over an academic semester (Paunesku 2015).

Using positive feedback with higher education students after task completion may build up a positive approach that a student might use in later challenges or attempts to overcome failure. This could help to develop a growth mindset that could support future academic achievement. One study looked at the effects of person praise and process praise compared to a control group where only objective outcome feedback was given (Skipper & Douglas 2012). They concluded that person feedback seemed particularly detrimental and it was better to praise the process the person had used. Dweck and colleagues give an example of person praise being fed back to students using statements like 'you are clever' and process praise being fed back to students using statements like 'you worked hard'.

An important successful student strategy for mindset could be to convince students that their academic ability *can* improve. This could be done by providing them with evidence from the literature or case studies based on the experience of other students. Khan Academy in collaboration with Stanford University have produced an online toolkit which is a useful resource. Last accessed online 21 July 2016. Available at www.khanacademy.org/educator/reference-for-coaches/how-to/a/growth-mindset-lesson-plan. There is also a mindset kit which was developed for children and teachers but which could be adapted for adult learners. Last accessed online 21 July 2016. Available at www.mindsetkit.org.

Promoting a growth mindset would also be encouraged by developing the transition skill of critical self-reflection (Booth 2001). A self-critical audit of the resources and skills that students already have accompanied by the fostering of a belief that these skills could be developed further at the start of any transition, could make students receptive to new approaches that would enhance and optimise their academic performance.

Universities can adopt motivational approaches to student learning (Crosling 2008; Phan 2014) and can foster positive characteristics of engagement in their students using warmth, trust and empathy (Cornelius-White 2010). Academic self-concept encompasses a student's perception of his or her ability or competence in an academic realm (Marsh & Shavelson 1985).

Conclusions

The five skills that were considered useful have been explored further in Phase 2 of the project with a review of the literature. This shows that it appears that there is potential value that could be gained by the academic community with the development of a range of practical, skill based resources for staff and students to use in the process of striving to enhance the transition skills and strategies used by students. If successful, such resources would contribute to the enhancement of student opportunities to successfully navigate the transitions they meet.

It was confirmed in the literature review and in discussions which took place in the three Phase 2 events, where the beta version of resources were made available to participants, that ample resources were already available in academic and digital literacy. Some examples of good practice can be found in the web resources provided in this report.

Another area where resources are already developed within higher education institutions is social skills for embracing diversity including social belonging. This exists in well-developed induction activities that, in recent years, have become normal for institutions who are seeking to improve student progression and retention. The Enhancement Themes of QAA Scotland and the Higher Education Academy's 'What works? Student retention and success change programme' have produced many resources, case studies and reports that address this area.

In relation to the remaining skills there appears to be fewer resources available. It is proposed that among the most potentially useful skill-based resources to develop in Phase 2 would be those that attempt to deal with the academic buoyancy and academic resilience of students as well as their mindset. Self-management of expectations is another area where skill-based resources could be developed, for example, by taking steps to enhance goal setting abilities and ensuring expectations and reality meet. Furthermore, one area which has been shown to underlie and indeed facilitate a number of key transition skills is being able to effectively manage time. Therefore, we thought it useful to create new resources which can support students' development of time management and managing their self-study and prioritising and planning. Critical self-reflection, for which the evidence-based has already been identified in Phase 1, was another area where resources could be developed. Finally, again to support Phase 1 materials, there is scope to create further student activities in self-belief.

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