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transitions



enhancement
themes

Transition Skills and Strategies

Critical Self-reflection

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Introduction

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This report explores the concept of critical self-reflection as one important transition skill that students would benefit from developing during their university studies. It begins with a discussion of the different terms that have been used interchangeably with critical self-reflection, thereafter offers a definition of what is meant by critical self-reflection, and then presents an overview of why critical self-reflection is important in the context of student transitions. The importance of critical self-reflection at key transition points is also discussed. As in the in-depth exploration of self-efficacy (Report 4), transition points are viewed as: pre-transition, shock and adjustment and progression. Finally, the report recommends a number of practical strategies which can help students develop their reflective skills. Also identified are the potential, challenges in developing critical self-reflection.

Understanding critical self-reflection

Critical self-reflection is thought to play an important role in facilitating student transitions (Brockbank and McGill 2007) and is closely linked with the development of higher-order thinking skills (Fisher, 2003). Different terms have been used to interpret the concept, including 'self-monitoring', 'self-regulation', 'reflection-in-action' and many others which are used interchangeably (Rogers, 2001). Critical self-reflection refers to becoming aware of our presuppositions and challenging our established patterns of thinking (Jarvis et al 2003; Mezirow, 1990). In order to provide a clearer understanding of this concept, the report will first define the term 'reflection' as well as 'critical self-reflection' to illustrate the differences between the two.

Reflection

The literature suggests that the roots of the term reflection can be traced back to John Dewey (1933-93) and Donald Schön (1983, 1987 and 1991). Dewey (1933-93, page 9) defines reflection as action based on 'the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it'. Similarly, Schön (1983) interprets reflection as a process in which a person tries to deal with and make sense of 'some puzzling or troubling or interesting phenomenon' while simultaneously reflecting on 'The understandings which have been implicit in his action, understandings which he surfaces, criticises, restructures, and embodies in further action' (page 50). According to this definition, a reflective student is one who examines his/her practices, comes up with some ideas as how to improve his/her performance and puts these ideas into practice. Schön (1983) refers to this cycle as appreciation, action, and re-appreciation.

Moreover, there are two types of reflection: 'reflection *in* action' and 'reflection *on* action'. Reflection in action takes place while we are involved in a situation, during which we become aware of what we are thinking, feeling and doing. In contrast, reflection on action involves a stepping back from the situation, meaning that it takes place some time after the situation has occurred. Thus, the latter of the two can be the more challenging and time consuming type of

reflection (Schön, 1983). Whatever the type of reflection, the outcomes of the reflection process can be a new understanding of the situation at hand, an awareness of how emotions are involved in the situation, some form of action, and the recognition that further exploration and learning are needed (Mann et al 2009; Moon 2005).

Critical self-reflection

Critical self-reflection refers to the process of questioning one's own assumption, presuppositions, and meaning perspectives (Mezirow, 2006). Since transitions involves navigating changes where a person moves from one stage to another, critical self-reflection may be an important skills for facilitating transitions by allowing individuals to reassess or alter existing life structures (Bee 2000, page 434). According to Stein (2000), critical self-reflection is different from other types of reflection since this involves individuals having not only an understanding of the assumptions that govern their actions, but questioning their meaning and developing alternative ways of acting.

In the context of student transitions, critical self-reflection represents a way in which learners step back from their learning experience and engage in deeper and more meaningful learning (Moon 1999). Reflecting critically on the impact and origin of one's own assumptions, positioning, feelings, and behaviour all represent the first steps in this process (Finlay 2008).

The role of critical self-reflection in student transitions

The literature suggests that critical self-reflection can help facilitate student transitions in three main ways. Firstly, when entering university, one of the most important challenges that students face is the fact that they have moved away from instructor-based learning to a more self-directed, independent learning style (QAA 2015). In addition, students need to be able to demonstrate deep learning in order to attain high levels of academic achievement (Entwistle 2000). If students are encouraged from the early stages to become more critically reflective on what they learn and, in particular, how their learning habits need to be altered to fit the new academic environment, they may be able to move more easily from one learning style to another (Brookfield 2009; Leijen et al 2011).

There is considerable agreement that the level of reflection attained by a learner is a function of how much the learner's existing schemas or cognitive structures are changed (Xie et al 2008). For instance, Moon (1999) identifies learning as a continuum ranging from the stages of 'noticing; ' 'making sense; ' 'making meaning; ' 'working-with-meaning' to 'transformative learning' (page 139). The first two phases represent surface learning, where the student simply memorises new concepts. However, from stage three ('making meaning') onwards, students are engaged in deep learning by actively integrating new ideas into their cognitive structures. Students who are reflective will be able to relate new understandings to previous knowledge, take a critical overview of the self and broaden their thinking into a larger (such as sociopolitical) context, thus moving to a higher-order learning stage (Moon 1999).

As for the relationship between critical self-reflection and self-directedness, both Brookfield (1993) and Evensen et al (2001) argue that having learners exercise control over their educational decisions is crucial for the development of their independent learning. In turn, this appears to be correlated with higher academic performance and motivation (Zimmerman and Martinez-Pons 1986; Zimmerman 2008).

Another change during the transition to university is related to the complex environment that students encounter, that is the vast, dynamic university establishment (Lairio et al 2011). In emotional terms, the transition to university may even be compared to a culture shock, since students often fail to recognise and meet the new expectations. The transition to university is rarely a simple, straightforward process. As Lairio et al (2011) suggest, students encounter difficulties in committing to university culture, experience a loss of a previously familiar student identity and have to cope with motivation problems related to competing academic and non-academic demands. Numerous studies have shown that critical self-reflection can help students manage anxiety and stress, and develop realistic expectations concerning their new academic demands or changes in their social life (Brouillette et al 1999; Morisano et al 2010; Murray-Harvey 1999). For instance, Murray-Harvey (1999) investigated the coping strategies of low-stress and high-stress students and showed that the low-stress group employed self-reflection strategies much more than the high-stress group. Similarly, Morisano et al (2010) reported a positive correlation between self-reflection and setting realistic goals, and that in turn, goal setting is related to improvements in both academic performance and subjective well-being.

Finally, on the transition from university study to the working environment, students need to be able to reflect on their professionalism and professional identity (Lairio et al 2011). Professional identity can be defined as how an individual sees their own place and part in society's activity and division of labour (Lairio et al 2011). In line with this definition, reflection on professional identity includes a broad look at one's own strengths and actions in relation to work (Archer 2008; Christie et al 2008). Engaging in this type of reflection can increase awareness of one's priorities, and can provide insight into selecting a profession (O'Regan 2010). In addition, the development of transferable skills during employment (for example communication skills, problem solving, analysis and teamwork skills) could be enhanced if critical self-reflection received greater emphasis during undergraduate and postgraduate studies (Marginson 1994; Crebert et al 2004).

Importance of critical self-reflection at key transition points

The literature reveals that critical self-reflection is needed at all transition points (Lairio et al 2011; Booth 2001), from the last few weeks before entering the university environment to graduation and progression into employment. The initial stages of the transition process are marked by feelings of excitement and fear of the unknown, where students envision a life with opportunities for personal, social and intellectual growth, but do not yet have direct contact with the university (Burnett 2007). Then, the student enters a stage of 'Culture Shock' (according to the U-Curve Theory of Adjustment, see Report 1), where he/she experiences changes in their academic environment and social life, usually associated with higher levels of anxiety and stress (Denovan and Macaskill 2013; Thurber and Walton 2012). The third phase of the process according to this model is known as the 'Adjustment' stage, where the student acquires new learning routines, develops a sense of community with peers, and starts to function effectively in the new environment (Risque et al 2008). Finally, during stages of 'Progression', the student experiences another transition such as to further education or employment (Burnett 2007) when they will need to think about their professional identity and career development.

The following examines the role of critical self-reflection at each transition stage.

The pre-transition stage

At the initial stages (pre-transition), self-reflection can help the student's self-management of expectations, as students who are able to assess their skills and motivation are more likely to understand and cope with the demands of the new academic environment. It is especially at this initial stage of studies that negative learning experiences can be the result of difficulties in committing to university culture as well as to the large amount of independent work, incorrect subject choices, and new teaching methods (Lairio et al 2011).

The shock and adjustment stages

At the culture shock and adjustment stages, critical self-reflection becomes even more important, as students will need to be able to transcend past habits and understandings, to develop a more independent and critical evaluation learning style as well as adapt to a new social life (Booth 2001). It is argued that through engaging in critical self-reflection, students become more sophisticated learners of their subject areas as well as more self-aware and confident learners in general. This is because critical self-reflection encourages students not only to recognise the capabilities they already possess, but also increases their capacity to become more receptive to theoretical perspectives and new ideas, as well as enhances their ability to critique evidence. Overall, critical self-reflection may well improve academic performance (Booth 2001).

The progression stage

Just as in the adjustment stage, towards the end of the transition process (the progression stage), students who engage in critical self-reflection will be able to identify and articulate the skills developed during their study. This can lead to students engaging in strategies such as setting goals for continuing personal, professional and career development.

A recent report by the University of Bolton (2014) highlighted that students have many opportunities to enhance their employability skills during their studies. Examples include tasks such as writing assignments, reports and dissertations, taking part in presentations and debating, as well as critically reviewing information. Reflecting on what they have learned from these activities and recording their skills and achievements can help students develop their self-knowledge. This also provides a bank of evidence for students to draw upon to communicate to an employer at the application and interview stages of seeking employment (University of Bolton 2014).

Practical strategies to support the development of critical self-reflection

Considerable research (Arter and Spandel 1992; Fisher 2003; Jones 2004; Moore 2004; Rodgers 2002; Spalding and Wilson 2002; Yinger and Clark, 1981) indicates that there are a number of learning and teaching practices which can help to develop and enhance students' critical self-reflection skills. For example the use of learning journals, debates, reflective writing, peer review exercises, peer coaching/mentoring, personal development planning, student portfolios) have all been recommended. The following section in this report focuses on the

practices of learning journals, peer review exercises and student portfolios, since these are the most widely-cited in the literature.

Learning journals

Learning journals are written records, which students create as they think about the concepts they have learned, the critical incidents involved in their learning and the interactions they have had with other students or tutors (Thorpe 2004). According to Luidens (1997, page 141), 'writing is a manifestation of thinking', and because students need to manipulate and transform their knowledge before they can present it in a written form, learning journals are suggested to have the ability to facilitate new understandings (Yinger et al 1981). In addition, reflective journal writing can also enable students to critically review the processes of their own learning and behaviours, and to change their learning strategies as and when needed (Gleaves et al 2008). The literature reports a positive association between journal keeping and learners' cognitive skills (McCrinkle and Cristensen 1995; Stephien et al 1998). For example, in a study by McCrinkle and Christensen (1995), forty undergraduates in a first-year biology course were randomly assigned to a learning journal (experimental) group or a control group. The results showed that students in the experimental group used more cognitive strategies during a learning task compared to those in the control group. In addition, students who kept learning journals showed more sophisticated conceptions of learning and greater awareness of cognitive strategies. They also performed significantly better on the final examination for the course compared to students who had not used learning journals.

Learning journals are widely adopted in practice in many institutions, albeit mostly on a non-compulsory basis. For instance, the University of Portsmouth provides a reflective journal template on their website, as well as links to reflective writing guides. Furthermore, many other universities provide useful information to support students to develop reflective writing skills (University of Bradford 2015; University of Manchester 2015; University of Reading 2015). It is useful to note that many degree courses with The Open University have requirements where student learning journals are mandatory as part of assessment submission. Entries are not marked only non-submission leads to loss of marks.

In spite of the advantages of journal writing as presented above, some studies have also shown that students can experience a number of challenges in keeping a reflective journal. Some examples include a loss of enthusiasm for the task over time, frustration and uncertainty about what to write, and the solitary nature of writing (Bain et al 1999 and Kerka 1996). Moreover, in some cases students might simply document concrete observations of their experiences, without demonstrating any critical reflection (Kerka 1996). These studies suggest that academics will sometimes need to provide additional support to students while they are writing learning journals. They could, for instance, provide guidelines regarding content and format, suggest a theme for reflection, and give clear explanations of the purpose for the reflective exercise (Woodward 1998). In addition, academic staff could also provide students with feedback and encouragement throughout the process in order to facilitate further reflection (Dye 2005).

Peer review

Peer review is considered to be another important tool for developing critical self-reflection skills in students (Dochy et al 1999). Encouraging students to give each other regular feedback in group meetings helps students become familiar with reflective practices (Moon 1999 and Boud 1999). In peer review, students reflect on their own and others' performance of group

tasks. Reviewing the performance of their peers (strengths, weaknesses and areas for improvement) builds the students understanding of the principles of effective group processes and allows them to think about their own performance or approaches (Moon 1999).

Research has shown that students who engage in such self-monitoring exercises where they evaluate each other's performance (rather than rely solely on teachers for feedback) become better at self-regulated learning (Butler 2002; Alvi and Gillies 2015). As Moon (1999) explains, 'working with others can facilitate learners to reflect and can deepen and broaden the quality of the reflection so long as all the learners are engaged in the process' (page 172).

Although peer assessment can be used as one tool to facilitate critical reflection, we need to be aware that students in the transition stage might lack experience in such methods, so peer assessment is probably best introduced as a formative, rather than summative device (Booth 2001, page 501). As too many new types of assessment may lead to resistance, peer assessment might be more likely to gain acceptance once students have become more comfortable with the notion of reflective learning (Booth 2001). The role of academic staff is also important here, as they would need to offer students significant support as they adjust to peer assessment.

Student portfolios

Student portfolios represents a powerful reflective tool, as they can help students keep track of their development (Zubizarreta 2008). A student portfolio is defined as a collection of student work that illustrates the student's efforts, progress, or achievement in given areas (Arter and Spandel 1992).

A number of universities that have adopted the use of learning portfolios. The University of New South Wales (2015), for example, have developed the UNSW Student Portfolios Site, where students can record their experiences and achievements relevant to a number of graduate attributes, such as communication, teamwork and problem solving. An exercise on reflection on what has already been achieved can enable students to plan how they will go about developing further desired attributes.

Similarly, the University of Glasgow (2015) have developed the Graduate Skills Programme (GSP), where students build an electronic portfolio illustrating the skills they have developed in their university years. Students are encouraged to write about four different aspects of their university experience: (1) academic skills related to aspects such as writing a dissertation or attending academic skills workshops; (2) extra-curricular activities related to aspects such as studying abroad or being part of a student society or club; (3) jobs and careers, where networking activities with employers at career fairs can be discussed and/or the creation of a professional LinkedIn profile; and (4) work-related learning, where students can discuss their summer internships and placements. Students can choose to complete either element of their e-portfolio (or all), articulate the skills they have developed and reflect on their future career objectives. As an incentive, the University offers an employability award to students who successfully build this portfolio.

The intrinsic merit of learning portfolios is that they involve students in the process of reflection, encouraging them to think about their achievements and communicate a sense of the learning experience as a coherent, unified process (Zubizarreta 2008). In other words, the value of portfolios lies not only in engaging students to collect representative samples of their work for assessment or career preparation, but also in addressing vital reflective questions such as

'what have I learned?', 'why did I learn?', 'how did I learn?'. In addition, most student portfolios involve an element of personal development planning (that is creating an action plan for personal development), which has also been shown to enhance critical self-reflection (Whittaker 2008).

Challenges in promoting critical self-reflection

Despite the strong arguments for developing skills in critical self-reflection, there is a concern that critical reflection might not always be a desirable activity (Gardner et al 2006). Some people react to the term 'critical', as it evokes a focus on the negative aspects of an interaction or experience (White et al 2006). For others, reflective practice is an activity that is Western-oriented and cannot be applied to other cultures (Gardner et al 2006) or is not further encouraged or supported in the workplace. While most research about critical reflection is of a qualitative, self-reflective nature, there is a relative lack of research on the effectiveness of reflection, the outcomes of reflection, as well as the different methods and processes of reflection (White et al 2006). In addition, Yip (2006) points to several case studies where critical supervisors forced students to reveal their weaknesses in a way that was destructive, harmful and unprofessional.

Moreover, being a critical reflector can be a challenging task as it involves 'de-centring' oneself (Bolam et al 2003) and stepping back from one's own practices and 'visualising oneself over time and place' (Stronach et al 2007, page 180). Undertaking such activities requires a student to invest time in contemplation and exploration of alternative perspectives. This could detract from their learning of technical skills or subject knowledge, which are likely to be the student's priorities during their study. Previous research has also indicated that reflection is an effortful action and students find it difficult to engage in reflection over extended periods of time without external support (Harri-Augstein and Thomas 1991). It has been found that most university students are involved in 'quasi-reflective' thinking as their reflections usually stop at the lower level (King and Kitchener 1994).

Brockbank and McGill (2007) therefore argue that self-reflection on its own is not sufficient to promote critical reflective learning, as a radical shift in both teaching methods and teaching and learning relationships has to take place. Such learning needs to be promoted through a process of reflective dialogue between teachers and learners as well as between students themselves (Fisher 2003). This is because the process of critical self-reflection is closely linked with an individual's active engagement. In other words, if students treat reflective activities as extra work, it may be because they do not see its relevance to their learning or because they are not motivated. Academic staff, therefore, need to encourage and motivate students to get engaged with critical self-reflection. Otherwise, students will tend to comply with the minimum requirements without learning from the process itself (Mann et al 2009; Rogers 2001; Moon 2005).

Conclusion

This report has conducted a detailed review of the research evidence for the role of critical self-reflection in facilitating student transitions. The evidence reviewed in this report suggests that critical self-reflection is a key skill, which students would benefit from developing. Numerous research studies suggest that the act of critical self-reflecting can help students make sense of not only what they have learned but also why they learned it, and how that particular increment of learning took place. Moreover, there is strong support from a number of studies

indicating that critical self-reflection can help deepen learning, especially in terms of helping students adapt to a new learning style and to a new environment as well as thinking about the new stages in their academic or professional development. Finally, the role of critical self-reflection at each transition stage (pre-transition, shock, adjustment and progression) was also discussed. A number of practical strategies for developing students' reflective skills were also recommended.

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