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Best Practice in Designing Group work for First Year Students

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Introduction and Rationale

The ability to work effectively as part of a group is an expected skill of any graduate, and is regarded as highly desirable criteria for employability (Mellor, 2012; Rutherford, 2015). Through collaborative work, students learn from each other while also developing their interpersonal skills. Many students who enter higher education (HE) do not realise the demands of their programmes, and their first year experience usually has a strong influence on their entire college life (Ginty, 2001). It is estimated that 20-30% of first year students do not progress to the second year of their programmes (NSCRC, 2014); this finding requires further investigation in order to identify and address some of the challenges that first year students encounter. Along with academic challenges, first year is also regarded as being socially challenging. Group work has been recognised as having both academic and social benefits (Chiriac, 2014). Although it can be daunting for students and facilitators alike, group work allows specific skills to develop, encourages students to become engaged with their programmes and can enhance student retention levels. There are both benefits and drawbacks to group work, and such systems should be well planned out and implemented appropriately (Bourner, Hughes & Bourner, 2001, Hodges, 2017).

Project Objective

The objective of this project is to establish best practices, in the form of a specific set of criteria for implementing group work for first year students, so that the experience is beneficial for all involved. In addition, an infographic will be developed which clearly sets out the best practices for devising group work, specifically for first year students in a HE setting.

Group Work

Group work is generally described as “an assignment of two or more people interacting with each other and interdependently working together to achieve a specific objective” (Bormann & Henquinet, 2000; Beccaria, Kek, Huijser, Rose & Kimmins, 2014, p. 1095). Learners are required to take responsibility for their own learning and of those in the group. Therefore, the success of one member is the success of all members (Taqi & Al-Nouah, 2014). Small-group work is often used in HE to encourage engagement within the classroom (Davidson, Major & Michaelson, 2014), and the main objective of group work within an educational setting is to serve as “an incentive for learning” (Chiriac, 2014, p. 1). When group work is conducted, students are required to negotiate meaning with their peers, share ideas, collaborate and reflect and report on their learning experiences. Collaborative learning has been shown to help students to develop both their group working skills and critical skills, while helping to build their self-confidence, and increasing their productivity and overall satisfaction

(Rutherford, 2015). Group work has been shown to help students learn and remember knowledge better than individualistic learning, and is also a way of helping students to socialise, as more effective relationships develop among students (Taqi & Al-Nouah, 2014). While working within a group, students learn to respect each other, accept criticism from the group members and also learn to listen to each other. Further to this, students learn to work cooperatively without competing with each other. It has been shown that shy students work more comfortably in groups than as individuals, and they become more confident in their ability to learn (Taqi & Al-Nouah, 2014).

Group composition should be well thought out, in terms of both the size of the group and the mixture of students the group will consist of (Chiriac, 2014). It has been proposed that if groups are formed with students of mixed abilities, weaker students can learn from the high achievers within the group (Nihalani, Wilson, Thomas & Robinson, 2010). Organisation of groups will have a major influence on how the students perform. For example, in 2010 Nihalani and co-workers conducted a study whereby groups were organised by assigning students with similar individual performance scores, and predicted that these groups would achieve higher group scores than groups which had one member who scored significantly higher scores than the other group members- this phenomenon was referred to as “the superstar effect” (Nihalani et al., 2010, p. 508). The outcome of this study showed that having a “superstar” in a group was only beneficial in situations where the group is comprised of several high achievers. If not, then the “superstar” does not help the group as much. Therefore, the abilities of students should be considered prior to arranging them into groups (Nihalani et al., 2010). Very often, group work will be dependent on the attitudes of the students involved (Taqi & Al-Nouah, 2014).

Along with the benefits of group work, there are several disadvantages associated with this activity. For example, there may be one dominating group member present, some students may get praise for doing very little work; the “free-riders” (Chiriac, 2014, p. 3) while others do most of the work, and some teachers have reported that group work can be quite time consuming (Taqi & Al-Nouah, 2014). The occurrence of “free riders” can have a considerable negative impact on students’ experiences of engaging in group work, as antipathy towards group work is often associated with previous bad experiences of working with such individuals (Peterson & Miller, 2004). Another disadvantage of collaborative work is if certain members of the group are established friends, the friends may work together and leave others out. Furthermore, some group members may simply refuse to work with others. All of these factors may make teachers reluctant to use group work in their classrooms (Taqi & Al-Nouah, 2014).

It has long been established that adults learn better when they work in groups (Hull, 1985); this is particularly important when considering group work in the HE context. The first year in HE is acknowledged as being challenging, both academically and socially. Interestingly, group work has been recognised as having both academic and social benefits (Beccaria et al., 2014), and has potential to greatly influence the first-year experience of students who have entered HE.

The First Year Experience

First year students must encompass all elements of the educational/learning experience, to gradually progress towards their second year. There is a wealth of literature on students' first year at university, demonstrating that the first year of HE is a pivotal time in a student's life; the first year experience is of critical significance to a student's success (Tinto, 1997; Bourner, Hughes & Bourner, 2001; Ginty, 2001; Bowman 2010; Hunt, 2011; Ang, Lee & Dipolog-Ubanan, 2019). Entering HE requires considerable adjustment. Some students make the adjustment well, while others do not- possibly due to insufficient preparation for the transition (Yorke, 2000). Several variables influence the transition to HE, including academic and social involvement, family background, peer group, socioeconomic status and academic preparation (Pascarella, Pierson, Wolniak & Terenzini, 2004; Vinson, Nixon, Walsh, Walker, Mitchell & Zaitseva, 2010; O'Dell, Smith & Born, 2017; Connolly, Flynn, Jemmott & Oestreicher, 2017).

Studies have shown that first year students' experience of college happens on academic, social and emotional levels (Ginty, 2001; Bowman, 2010; Connolly at al., 2017; Ang, Lee & Dipolog-Ubanan, 2019). Chickering's 'Seven Vectors of Developmental Theory' illustrate how a student's development in the college setting can affect him/her emotionally, socially, physically, and intellectually, particularly in the formation of identity (Chickering & Reisser, 1993). The Seven Vectors include: developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity. This theory is well known and often cited in the literature (Yorke & Longden, 2008; Taylor, McGrath-Champ & Clarkeburn, 2012; Permzadian & Credé, 2016) mainly because of the fact that these vectors apply to the development of college students. Educators that are familiar with student developmental theories can align what they have learned from Chickering's theory to their involvement with students attending their universities. Involvement has been frequently described as academic, and social integration is regarded as a condition for student success (Tinto, 1997; O'Dell, Smith & Born, 2017; Krulatz, 2017). The more students are academically and socially involved, the more likely they are to persist and graduate. This is especially true during the first year of study (Tinto, 2001). Getting first year students involved in classroom learning, especially with other students, leads to greater quality of effort, enhanced learning, and, in turn, heightened student success (Tinto, 1997). Small-group studying in first year considerably enhances student engagement and knowledge retention (Michaelsen, Watson, Cragin & Fink, 1982). To effectively address challenges related to the first year experience, some research has focused on first year student retention levels- a study in Irish HE (HEA, 2018) from 2014 to 2016 showed that 86% of first year students progressed to second year. A similar study conducted in the United States by the National Student Clearinghouse Research Centre (NSCRC, 2014) showed that 30% of students who completed their first year, did not return to second year.

Learning and teaching strategies enhance student retention (Bourner, Hughes & Bourner, 2001) against a range of new challenges that first year students are facing in HE (Hunt, 2011; Permzadian & Credé, 2016; Wood, 2016). Specifically, promoting higher levels of engagement can greatly influence student achievement (Tinto, 2012). The success of our new university (Technological University Dublin; TU Dublin) will be determined by how well we use

educational methods and implement best practice. Group work provides opportunities to promote collaboration amongst students, thus improving student engagement and retention (Gibbs, 2009). Some academics argue that the first year of full-time study would be better spent in developing the knowledge and skills needed for success in the later years of the programme (Yorke, 2000; Vinson et al., 2010). To enhance group work for first year students and lecturers, and to make it a positive experience of learning and social interaction, it is important to provide first-year students with academic support at the beginning of their studies (Yorke, 2000; Bourner, Hughes & Bourner, 2001; Tinto, 2012). Thus, it is suggested that universities should support incoming students in developing academic competencies and especially learning skills, as early as possible (Durkin & Main, 2002; Soetanto & MacDonald, 2017).

Best Practices for Group Work

Mellor (2012) with consideration to Hiley and Carter (2003), identifies that employers greatly value the ability of a graduate to work in teams both in single- and multi-disciplinary situations. As discussed earlier, group work can have both positive and negative aspect for students and facilitators. Despite the challenges that may arise, by embracing, developing and mastering basic group work skills such as communication, conflict management, problem solving, reflection and time management, students learn life skills that are directly related to the TU Dublin graduate attributes (GAs), commonly referred to as the 'Five E's'. The attributes identified by the current project that first year students can gain from participating in group work are; collaboration (Enterprising), effective communication (Engaged), decision making (Enquiry-based), disciplinary knowledge (Expert) and how to be an active team player (Effective) ('DIT - Graduate Attributes', 2018). For facilitators, positive group work adheres to the National Plan for Education 2030, and provides an early opportunity in a student's college education to develop the factors mentioned earlier (i.e. the Five E's), which are valuable life skills (HEA, 2011, Section 3, p56).

Many first-year students will not have encountered group work before entering a HE setting. Effective planning and activity design can help a facilitator to offset many of these difficulties (Roberson & Franchini, 2014). When planning a group work activity, it should (i) be deserving of a group effort, (ii) have a reasonable workload for the group size, (iii) have clear goals and (iv) be able to be divided into smaller approachable parts (Brame & Biel, 2015; Hodges, 2017). Facilitators can encourage a successful group work experience by teaching the essential skills required for group work, encouraging members to fully participate in the activity and by initially addressing the main questions that students encounter, the 'when', 'where', 'why' and 'the stakes' of the project (Nipp & Palenque, 2017). The practice of having students work together should be scaffolded by including smaller informal group work activities in the module (Aggarwal & O'Brien, 2008; Hodges, 2017). Online resources, handouts and discussions that promote good communication, active listening, responsibility, time-management and how to handle conflict appropriately should be used for these activities. This gives the students the skills required to extinguish interpersonal difficulties as they arise (Hodges, 2017; Weimer, 2014). Important details such as the learning outcomes, why group work was chosen over other assessment methods, the members of the group and how the tasks will be assessed should be clearly explained to the students before the commencement of the task (Brame & Biel, 2015).

Groups should be formed in ways that fit the goals of the project, under-represented individuals should not be isolated in groups and the groups should be heterogeneous in relation to students' skill sets (Brame & Biel, 2015; Hodges, 2017). Programs such as CATME can help with this process. However, it should be noted that there are advantages and disadvantages for both facilitator or student selection of groups, and these should be taken into consideration (Learning & Teaching Sub-Committee, 2016). By selecting the optimal group size and assigning roles to group members that can be rotated if required, interpersonal issues can be reduced (Heller & Hollabaugh, 1992; Brame & Biel, 2015). Furthermore, the completion of team-building exercises where these roles are assigned to certain students before the commencement of the project can create a setting which encourages the development of a cohesive group (Weimer, 2014). It is imperative for the facilitator to lay out ground rules for the group in the form of a signed agreement that includes the commitment of all group members to the process, and that highlights the importance of respect, coming prepared to meetings, listening to all members' opinions and equal participation of every member of the group.

In regards to assessment for the project, a method should be chosen that promotes positive group interdependence, individual accountability and highlights the GAs achieved by completion of the task (Brame & Biel, 2015). The principles of assessment for and as learning can work well for group work assessments (Dowell et al., 2007). Assessment for learning spreads the risk across a number of lower stake tasks (Mellor, 2012). In group work, tasks can be linked so that the assessment has a formative and summative role. Assessments can include: (i) a group submission; which assesses the ability of the students to collaborate, show disciplinary knowledge and make decisions, (ii) a group presentation; showing clear communication and the ability to be an active team player, and (iii) self- and peer-evaluation.

Conclusion

In conclusion, group work activities help first year students with interpersonal and social skills which have been shown to promote progression from year one to year two. When planned and facilitated in accordance to best practice, group work can be a very positive experience for both students and facilitator(s). By using the infographic developed as part of this project (refer to Figure 1), facilitators will be able to quickly see what is required and plan an effective group task for first year students. On completion of the project the students should have developed some of the TU Dublin GAs and the skills and resilience to progress into second year and to develop these further.

BEST PRACTICE IN DESIGNING GROUP WORK FOR FIRST YEAR STUDENTS

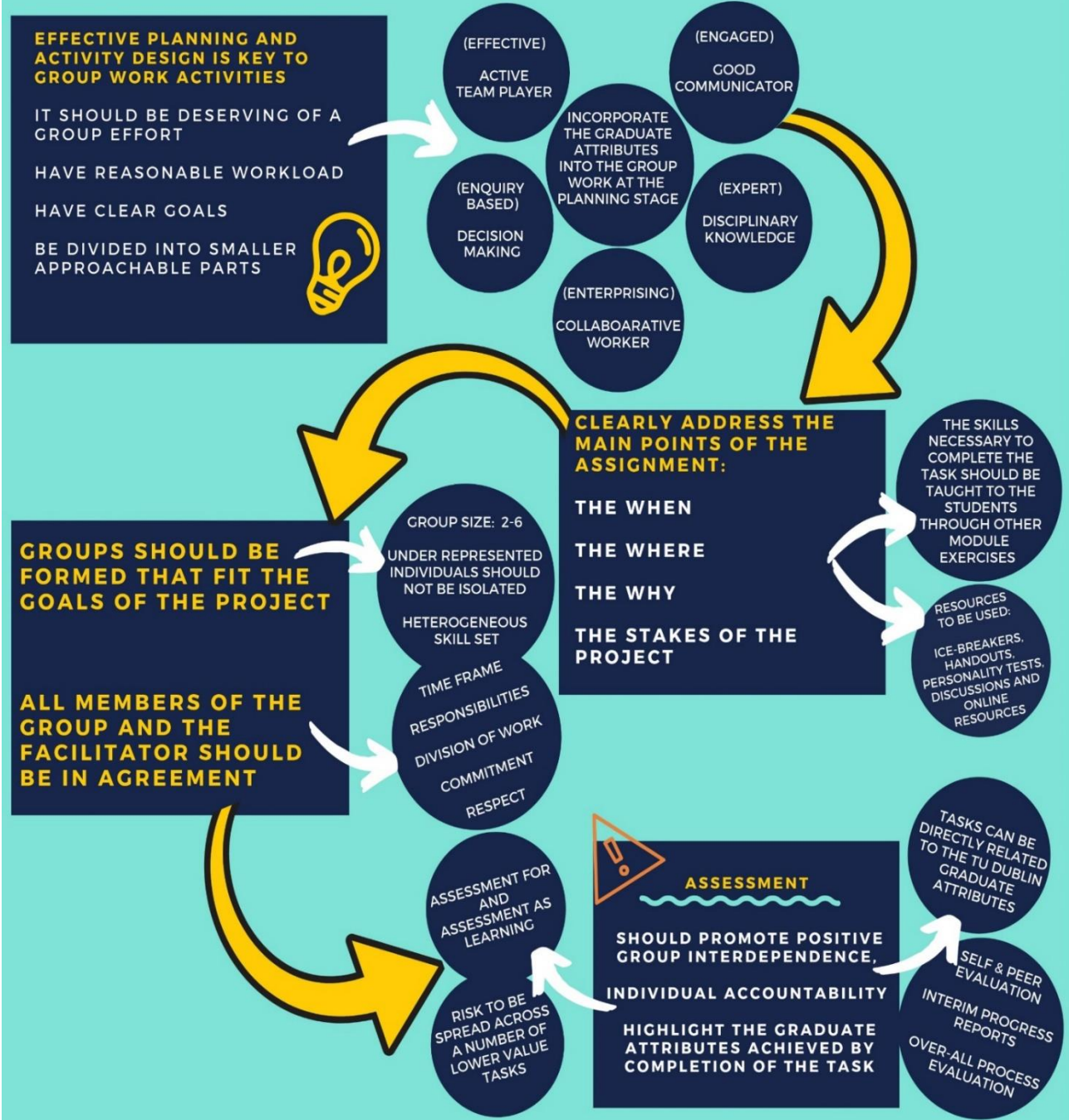


Figure 1: Infographic produced over the course of this project, outlining the best practices for implementing group work for first year students in higher education.

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