Surviving teamwork: Engaging in the process to develop and sustain a key employability skill

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Abstract

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Introduction

Teamwork is incorporated within higher education curriculum for a number of reasons including: assisting students to construct knowledge with alternate viewpoints, improving communication and to providing students with the opportunity to practice the generic skills required for the workforce (Staggers, Garcia, & Nagelhout, 2008). However, experiences involving the implementation and subsequent assessment of teamwork are often met with a number of difficulties. Taking a collaborative approach to learning in the multi-cultural higher education environment in which learning takes place is often challenging for both students and assessors. In essence, the higher education environment often seeks to norm-reference students competing for grades, such that some students may perceive poor teamwork results will impact their future career or higher degree aspirations. This perception may also then work to disrupt the collaborative process (Kriflik & Mullan, 2007).

Volkov & Volkov (2007) suggest that free riding or unfair assessment is a common complaint amongst students. Working toward a team assessment has shown to be an issue in UTEI feedback. For example:

> *"Careful consideration needs to be taken into account when forming groups... this is my final semester at ECU and I have a huge workload. Having to carry another two students doesn't help, not to mention that I don't get any credit for it and these students get to cruise through their degree on other students' work!"*

(Semester One, 2009 UTEI comment).

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Another pertinent issue for assessing teamwork lies in determining exactly what, or in fact how, teamwork is to be assessed. As a team, students may successfully demonstrate a set of objectives related to a specialty area, but is the final assessment score that is attributed to teamwork predominantly a measure of the end product, or will assessment also value the process by which the product was achieved? In short, the assignment may not adequately cater to the necessity for forming a team to complete it. If, for example, a group of students were to work relatively independently then pool their ideas together for a final product of a relatively high standard, is this final product necessarily an appropriate tool for assessing the skill of teamwork?

Burton (2004, p. 2) states that, "in order for assessment to be valid, it must be directly aligned to the unit objectives". Constructive alignment (Biggs, 2006) ensures that the assessment supports the students' understanding and development of process skills in order to more fully engage them in the task and further embed process knowledge as a sustainable skill in the longer term. Quite often however, assessment criteria for teamwork are geared towards meeting "course-specific outcomes that do not always correlate with learning the skills and intricacies of teamwork" (Volkov & Volkov, 2007, p. 61). Facilitators should begin by "critically questioning whether their assignments really value the process of teamwork" (Frederick, 2008, p. 446), as assessing only content may lead to conflict over grade aspirations by individuals within teams. (See Table 2)
Teamwork is not a skill that can be taught on its own; rather, it is a "compendium of many generic skills" (Watson, 2002, p. 2). Taking this into account, the difficulty in determining exactly what and how teamwork is to be assessed can then be addressed. If teamwork encompasses a broad range of generic skills, it can be concluded that in addition to the final product, the generic teamwork skills should also be embedded within the unit objectives, deeply explored, experienced and subsequently assessed within classrooms.

The Generic Skills Behind an Effective Team

There are a number of characteristics, generic skills and processes which form the foundations of an effective team. Oakley, Felder, Brent, and Elhajj (2004) suggest that members of an effective team often: work together by assisting one another to the greatest possible extent; are effective at managing conflict; and, ensure that each team member is responsible and accountable. Watson (2002) suggests that skills such as time management and organisation, record keeping, planning and goal setting as well as the ability to lead, communicate and the ability to make decisions are all required for a truly effective team. In addition to these skills, Watson (2002) also suggests that reflective practices such as an awareness of interpersonal strengths and weaknesses, as well as the ability to analyse and evaluate the team's performance can also greatly contribute to the overall effectiveness of a team. An understanding of group norms is also essential for members of an effective team. Group norms include attendance at meetings, constructing and sticking to timelines as well as having an expectation of group members' performance (Houldsworth & Mathews, 2000).

Watson explains that in order to be an effective team member, students should "show an aptitude for many or at least some of these generic skills" (2002, p. 2). Therefore, in order to ensure that assessment of teamwork is valid, it is these generic skills that should make up the assessment criteria. It is important to note that these skills should not be simply assessed; they also need to be taught and made explicit. This is supported by Palinscar, Anderson and David (1993) when it is suggested that students will need significant support with the above skills, particularly with reflective practices such as evaluating a group's progress or overall performance.

Teamwork within Business Edge

It is important to note that the process of working within a team itself provides an effective vehicle to both experience and develop many of the generic skills that form the foundations of teamwork (Watson, 2002). With this in mind, teamwork skill development is seen as critical pedagogy in the Business Edge program offered at Edith Cowan University.
The Business Edge program is a set of four integrated units, developed specifically to provide students with the opportunity to develop key employability skills. Students are exposed to many teamwork

activities and as a result, they are provided with the opportunity to experience, develop and refine a wide range of the generic skills associated with working in a team. This process is assisted by constructively aligning the unit outcomes with activities and assessments. Table 1 lists the facets of teamwork skills that employers have identified as important, as well as how scaffolded learning of these skills build sequentially across the three years of the Business Edge course.

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Teamwork Generic Skill (from the Employability Skills Framework, 2002)	BES1100 Foundations of Business Knowledge	BES1200 Business Knowledge Development	BES2100 Foundations of Business Leadership	BES3100 Business Career Development
Working across different ages and irrespective of gender, race, religion or political persuasion	• Introduce equity and diversity ethical dilemmas through the use of *The Manager's Hotseat,* an electronic resource set of video clips used to promote discussion and resolutions in multicultural teams.	• Students stratified by country of origin, thus a rich cultural mix of students is ensured in every team formed across the unit.	• Working in transnational teams and developing an understanding of cultural issues involved in approaches to conflict management. • Awareness and appreciation of diversity is generated through peer interaction and a cultural diversity quiz which sensitises students to multicultural issues.	• Lecturer allocated transnational teams which are required to complete a complex industry based assignment. Additional cultural training undertaken by the newly formed teams.
Working as an individual and as a member of a team	• Dyads in first year. Teams build sequentially over the four Business Edge units. • Active listening and rapport building training.	• Teams of three to five formed in week 1 and maintained for the semester. • Team contracts to ensure even work load distribution.	• Teams of four formed in week 7 • Tuckman's stages of team development model explicitly taught. • Team wikis for project development • Individual communication assessments	• Teams of five. • Teams allocated for work place integrated learning situations. • Individual communication self-assessment quizzes
Knowing how to define a role as part of a team	• Focus on interpersonal skill development and effective collaborative strategies. • Team building exercises.	• A roles and responsibilities form is completed and posted to team wiki. • Team members are encouraged to renegotiate their roles to ensure fair workload.	• Influence Dimensions Communication profile undertaken to determine roles and strengths of team members. • Minutes of team meetings – specific roles allocated and rotated over the course of the project.	• Belbin team roles undertaken to identify strengths and manage weaknesses of team members
Applying teamwork to a range of situations e.g. crisis problem solving, planning	• Collaborative development of a timeline for project management	• Teams are required to complete a range of varied tasks together. These include informally assisting each other with case studies, statistics, swot analysis	• Problem solving case study utilising creative and analytic problem solving skills across a team • Develop a team report on Work Life Balance.	• The industry assignment is of sufficient complexity to require the application of the combined skills of the team for successful completion.
Identifying the strengths of the team members	• Interaction Styles training • Hemispheric Dominance training • Learning styles and preferences.	• Fluidity of roles based on awareness of team members' strengths and weaknesses.	• Temperament training • Influence Dimensions Profiling • Peer evaluation process	• Personality type indicators training (MBTI) • Belbin team roles
Coaching and mentoring skills and giving feedback	• Formative feedback given by the facilitator on all reflective journal entries and by peers on a selected journal entry.	• Team members with strong statistical analysis skills are asked to coach their peers. • Peer reviews of another teams' survey instrument. Feedback by peers is given orally and in writing.	• Training in peer coaching is undertaken in order to learn how to listen, respond and ask open-ended question to promote critical thinking and give thoughtful considered responses to others • Reflective blogs	• Teamwork skills are demonstrated by identifying and resolving team issues. • Reflection and report on team processes, issues and problem solving.

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When determining exactly how to assess the skill of teamwork, it is important to remember to also assess the generic skills behind the final product, thus constructively aligning the intended learning outcome with the activity and the assessment. The table below shows how criteria in one Business Edge assignment has been developed to assess the final product as well as the generic skills used in the teamwork process.

Overview of assignment:
For this assignment, students are to work in teams to investigate the concept of work/life balance (WLB). In teams, students must research literature on WLB and then implement a vision within a workplace scenario of their choice. Students are expected to construct a WLB plan that is directly related to their workplace scenario and to then strategise, implement and evaluate their WLB plan.

Intended Learning Outcomes:
1) Effectively demonstrate the ability to work in teams
2) Demonstrate higher order communication skills including the effective research and presentation of data in oral and written forms
3) Understand the importance of intrapreneurship behaviour in business organisations.
4) Develop problem-solving skills by using brainstorming and reframing techniques to solve more complex business problems,

Final Product			Process	
Academic standard	Content	Communication	Team Work Skills	Peer Evaluation
• The correct conventions of English are adhered to. • Sources are correctly referenced.	• The theories of WLB were current and relevant. • The WLB vision relates to the context of the organisation. • The scope of the WLB plan covers a range of employees.	• Presentation skills (eye contact, tone of voice etc) • Typography of slides used in presentation • Overall persuasion.	• A copy of the minutes that were generated is collected as part of the final assessment. These are used to measure the group's ability to assign tasks, display time management and be held accountable. • Communication between groups is measured via participation in group wikis • Students assign tasks to team members according to their strengths and weaknesses.	• At the completion of the activity, students are required to complete a self assessment on their contributions to the project • Students are required to complete a whole group assessment on the final product. • Students peer assess a colleagues presentation.

Table 2: Assessing product and process in a team assignment.

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Explicitly teaching teamwork: a practical model

There is some recent literature that forecasts the success of teamwork when grounded in critical pedagogy and preliminary explicit generic skills teaching (Ding & Ding, 2008; Frederick, 2008; Kolb, Jin & Song 2008; Kriflik & Mullan, 2007; Scott-Ladd & Chan, 2008; Staggers et al., 2008; Siebold & Kang, 2008). Although, Scott-Ladd & Chan maintain that there is still a gap in research in the area of "giving students practical skills for building team cohesion and managing team processes" (2008, p. 234).

Tuckman (1965) hypothesised that small group development progressed through a number of stages for which he proposed a four stage model. Tuckman posits that "the value of the proposed model is that it represents a framework of generic temporal change" (1965, p. 398). He completed an extensive review of the relevant literature in order to propose the four stages of development which he labelled forming, storming, norming and performing. Each stage was characterised by an attempt to distinguish between group structure (the interpersonal relationships and behaviours of group members) and group orientation to the task (the specific content of the task); however, he noted that these could both develop simultaneously. Working in teams within a higher education environment often requires students to complete problem-based tasks where they will move through all of these stages rapidly. Reaching the performing stage is imperative to the achievement of completion of the task. Tuckman further reviewed the 'new' literature on small group development in 1977. He concluded that a final 'termination' stage had been overlooked in his initial research and so amended the Tuckman model "to include a fifth stage: adjourning" (Tuckman, B. & Jensen, M.A., 1977, p.426).

What follows is one explanation of how teamwork skills may be implemented within a university course. The teaching of explicit skills is not a linear process; however, it can be aligned with the stages of team development in order for the teacher to facilitate timely delivery of theory and skills. It is important to note that due to the limited scope of the literature review, and the fact that this study is in the initial stages of trialling, further research is required into students' perceptions on the value of establishing and managing teamwork processes.

The Forming Stage:

Tuckman (cited in Staggers et al., 2008, p. 478) believes that individual behaviour is driven by a desire to be accepted by others. The forming stage is a time to get to know and develop opinions about each other. It is considered to be the polite stage where a premium is placed on avoiding conflict.

Clarity of purpose should be offered by facilitators:
• According to Kriflik & Mullan, "clarifying the group work activity assisted students to perceive the benefits of the activity" (2007, p. 21).
• The most important first step in engaging students in developing sustainable teamwork skills is to allow time in class for discussion of effective teamwork skills and theory. The second year Business Edge unit teaches Tuckman's (1965) teamwork model of forming, storming, conforming, performing and adjourning, as new teams

need to understand the stages of team development. The first three stages lay foundations for performing and adjourning (Kriflik & Mullan, 2007).
• The facilitator needs to be an enabler of learning through scaffolded introduction of knowledge of team processes and "must work consciously to help teams work productively by offering skills and reflection at strategic points in the semester" (Staggers et al., 2008 p. 476). This is done by scheduling checkpoints in assignments. Debriefing at certain points along the way is considered to be imperative to optimal functioning of teams.

Team introductions and team building activities

• These should be completed in class time. These activities can allow students to interact informally prior to commencement of the team project.
Goal setting
• Brainstorming in new teams should be undertaken in class time to establish goals for the team and for explicitly clarifying each individual's grade aspiration.
• A mission statement is written using SMART objectives in BES2100 teams in order for team members to agree a clear purpose for the team's existence.

The Storming Stage:

This stage may bring conflict to the fore and obstacles encountered must be overcome for teams to prosper in the long term. It is the stage where team members may question the goals, the task and interpersonal relationships.
Establishing ground rules
• Decide on norms for the team
• o Work norms: e.g. How will work be distributed? Who will set deadlines? What happens if a team member does not follow through on their commitment? How will work be reviewed? What is the guideline for quality of work? How will individual work habits impact the team?
• o Meeting norms: e.g. what is everyone's schedule? (work/class commitments). Is there a preference for when meetings are held outside of class? Who is responsible for organising team meetings? Where will they be held? What are the consequences of missing meetings?
• o Communication norms: e.g. What is the preferred medium of communication, email, phone, wiki? Importantly, how will conflict management be handled? (Examples adapted from Breslow, 2000).
Conflict management responses are explicitly taught to students in the second year Business Edge unit prior to undertaking teamwork. Students develop awareness of the five main approaches to conflict management (forcing; accommodating; avoiding; compromising; collaborative), through theory and role-play.

Roles and responsibilities
- • Individuals may seek to wield power or take leadership rather than earn it. It is in the realm of the facilitator to provide constructive feedback and negotiate fluidity of roles across the life of the project.

The Norming Stage:

In this stage relationships are established and team competencies are developed. The team begins to "function as a unit and team members become comfortable in their setting, they experience pressure to conform to emerging norms...they begin to value team goals more than their own personal goals" (Carlopio & Andrewartha, 2008, p. 460).
Team competencies explicitly developed through in class activities in Business Edge include:
- • Active listening skills
- • Clarifying and summarising skills
- • Time management skills
- • Flexibility with team rules
- • Conflict management skills
- • Awareness of intrapersonal and interpersonal skills
- • Accountability aspects of teamwork.

The Performing Stage:

By the time a team reaches the performing stage, they are generally highly effective and have established mutual trust between team members. Individuals demonstrate loyalty and commitment to the team.
Attributes that can be seen in high performing teams include:
- • Production of performance outcomes – satisfactory achievement of the goal/task
- • Specific shared purpose and vision
- • Mutual internal accountability
- • Blurring of formal distinctions –team members do whatever is necessary, regardless of former roles/responsibilities/outside positions
- • Co-ordinated, shared work roles – one product, not a set of individual products
- • Efficiency – members can anticipate each other's moves and the team becomes more efficient than single people working alone. (Carlopia & Andrewartha, 2008, p. 466)

The Adjourning Stage:

This is a debriefing phase that occurs when the project has reached its conclusion. Teams should be given a chance to recognise and discuss their achievements, "disengage and consciously move on" (Staggers et al, 2008, p. 485).
Reflection and Peer evaluation
- • Facilitators explicitly debrief the skills and attributes associated with teamwork development in a whole class forum to ensure every individual is aware of their ability to transfer and sustain these skills and strategies to new teams, either at university or in the work place.
- • Peer evaluation as part of the team assessment process. This is seen as being a significant part of the process to students in the current literature (Frederick, 2008; Kriflik & Mullan, 2007; Ding & Ding, 2008).

Conclusion

This paper has explored how one employability skill, linked to a graduate attribute, can be taught within a university business course to positively engage students in the teamwork process. By using the Business Edge course as an example, a process-oriented approach continues to be investigated and is considered useful in making generic teamwork skills both explicit and valued. Our research is a simple overview of a complex set of issues, attributes and challenges which underlie the processes involved in implementing, facilitating and assessing teamwork. Future research, through engaging past Business Edge students in focus groups and the feedback loop, may assist in identifying the processes considered most beneficial by the students themselves in the learning of cohesive, transferable and sustainable teamwork skills.

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