Making Teamwork Work

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Abstract

This paper explores team assignments as an increasingly common component of many university courses. It argues that a need exists for all instructors, particularly those involved in the teaching of business communication, to develop a multi-faceted teamwork perspective which encompasses every dimension of team assignments. Such a perspective should permeate assignment design, student training, assessment of team process as well as product, self and peer assessment and the individualisation of student scores. Each of these facets is discussed with reference to research literature with a number of practical suggestions provided as exemplars for how to make teamwork work.

Introduction

The use of collaborative team assignments in tertiary education has become an increasingly common practice within university courses and business schools (Bolton 1999), Timberlake 2005). Team assignments appear to be here to stay, despite naïve but remarkably common expectations that students know how to work well in teams, are able to function co-operatively and collectively and will somehow develop a suite of interpersonal and teamwork skills either automatically or by osmosis.

What is quite clear is that students are frequently expected to work with each other on team assignments with little theoretical understanding of team dynamics, little training in collaborative processes, little ongoing instructor support and little individual feedback. Assessment practices too often focus on the concrete product of the team assignment without also affording any real recognition to the very process which created it. Uniform grades are generally allocated to each member of the team, regardless of the scale or quality of their individual contributions. Although the key to successful team assignments has been identified as being appropriate instructor guidance (Monk-Turner & Payne 2005), the irony is that even in some Business Communication courses, many students continue to be set team assignments and are left to develop their own approaches and either 'sink or swim' (Pritchard et al. 2006;Vik 2001).

Rationale for Team Assignments

There are varying interpretations as to why university students are being set more team assignments. The first is that there is great pedagogical value in students working together in terms of breadth and depth of learning (Jacques 1991; Johnson & Johnson 1975). If it is our aim to produce graduates who are capable of independent or 'deep' learning, then it can be argued that it is beneficial for adult students to work together co-operatively or collaboratively (Barnett 1994a; Jacques 1991; Marton & Saljo 1984). Whilst co-operative learning can be instructor dominated, collaborative learning can enable students to work together to explore ideas, gain knowledge and most importantly learn how to learn (Boud 2001). It would be idealistic to try and

argue that team assignments involve purely collaborative work. In reality, most team members would work independently and co-operatively and also collaboratively, on different components of the assignment task and at different times. Nonetheless, team assignments do allow for the possibility of students learning from each other, immune from the threat of collusion or plagiarism. Being exposed to the ideas of their peers and the valuable experience of working as a member of a team allows for great interpersonal development and 'deep learning' (Gibbs 1992; Ramsden 1992).

Not unrelated to the above is that universities are now more closely attuned to the expressed needs of employers and business organisations for young graduates with stronger communication and interpersonal skills (Australian Chamber of Commerce and Industry and the Business Council of Australia 2002; BHERT 2002; Eunson 2002; Hunt, Kershaw & Bana 2003, Kirby 2000; Worley & Dyrud 2001). Teamwork skills constitute one of the most commonly required skills within the workplace with many businesses utilising teams and collaborative approaches (Chaney & Lyden 2000). Governments too are manipulating legislation and tertiary funding to force universities to implement changes in response to the pressures of increasing globalisation, flatter organisational hierarchies and the changing nature of work.

In the face of these business and political pressures, many, if not most, universities have over the past decade developed strategic plans which include specific and generic skills and attributes (Deakin University 2004; Hart & Stone 2002). Graduates are expected not only to have academic knowledge, but also to be able to communicate effectively, learn independently, solve problems and be able to work in teams (DETYA 2000). There are differences of opinion as to whether transferable skills should receive equitable levels of attention within universities to disciplinary knowledge (Candy, Crebert & O'Leary 1994; Halpern 1998), or whether these skills should be embedded within the disciplines (Barnett 1994B, McPeck 1981). However, only the bravest or most foolhardy university would deliberately exclude graduate skills and attributes from their official strategic policy, let alone from their teaching program.

At the same time universities are required to cope in an environment of increased student enrolments and increased workloads but decreased government funding (Fullerton 2005). These compounding tensions have forced universities to do more with less, typically resulting in larger class sizes, higher staff-student ratios and higher rates of casual teaching staff (AVCC 2005; Ballantyne, Hughes & Mylonas 2002; Freeman 1995; James, McInnis & Devlin 2002; Morris & Hayes 1997; Nelson 2002). As team assignments generally result in reduced grading loads and lower costs (Vik 2001; Timberlake 2005), it is not difficult to interpret this as a third pragmatic reason for their increased popularity with instructors and administrators.

If we accept that teamwork skills are important and that team assignments are here to stay, then it is incumbent upon us as business communication instructors to help make teamwork work. Research indicates that students feel poorly prepared for their team work (Hart & Stone 2002) but it is the belief of this writer that there is a great deal that can be done to make team assignments more successful and more effective and the purpose of this paper to make a number of suggestions for appropriate practical strategies.

A Theoretical Framework for Successful Teams

Interpersonal communication is a topic which appears to be an integral component of many if not introductory business communication courses. Therefore instructors are confronted by an ideal opportunity to use this topic to highlight to their students some fundamental principles of effective and successful teamwork, before students start working together on any team assignment. Whilst all aspects of interpersonal communication are important, it is possible to highlight three areas for students about to embark on teamwork.

Teams are More than Groups

Students need to recognise that teams are not synonymous with groups. People may work together in a group but this need not necessarily involve aiming at any common goal (De Janasz et al. 2006 p.228). Some regard a 'group' as temporary but a 'team' as ongoing (Berge 1998, Freeman 1995), but the critical difference between a 'group' and a 'team' relates to shared commitment and common objective. A group becomes a team when members demonstrate a commitment to each other and to the shared end goals towards which they are collectively working. In an effective team, there is a typically higher degree of cohesiveness and accomplishment than in a group' (De Janasz et al. 2006, McManus 2000).

Within the globalised business sector, operating within a context of high competition and disappearing resources, self-directed teams are becoming an increasingly common response to the corporate need to achieve more with less (Wageman 1997). Teams are vested with more authority and responsibility than are groups and so make more decisions, are more independent, alter their own performance strategies as needed, monitor their own performance and communicate more frequently and work towards articulated and measurable goals (DiSanza & Legge 2005; Wageman 1997).

Without wishing to equate university teams to business teams, there are clearly strong parallels, particularly for students of business communication. Team assignments require team members to commit to their common goal and to work together to achieve it.

Phases of Team Development

While varying terms and labels are used within the interpersonal communication literature, there is general agreement that teams typically evolve through four development phases or stages, regardless of the task or decisions involved.

The first phase is **forming** or **orientation**. Students cautiously but optimistically start to get to know each other, establish roles and begin to define their roles and task. This is followed by **storming** or **conflict**. This stage is characterised by disagreements as students begin to learn more about each others' abilities and team members become more assertive. The third stage is **norming, brainstorming** or **emergence**, as team members begin to make decisions, settle on solutions, achieve consensus and start working together. If teams reach the fourth stage of **performing**, they are really working productively, solving problems, operating with mutual trust and

understanding and enjoying each other as people (Daft 2003; Dufrene & Lehman 2000; Tuckman 1965; Robbins & DeCenzo 1998; Vik 2001).

If students understand that these stages are quite normal, that some conflict is inevitable and may even be highly beneficial, and that if they persevere their team will progress through the phases they are better equipped to cope with the difficulties of stages two and three. In a following section there are several suggestions about how an instructor can assist teams to navigate the process more speedily and constructively.

Team Roles

Within the assignment, allow students opportunities to experience a range of different roles. These could include **team-maintenance** roles such as encouraging, harmonising and compromising as well as **task-facilitation** including initiating, information giving or seeking, coordinating or procedure setting (Bovee & Thill 2005, Dwyer 2005). Students therefore have opportunities to display or develop **leadership** within any of these roles, as leadership is much more than one member taking control over the whole process. Once again some practical strategies for instructors have been included later in this paper, which can assist students to identify different roles they might adopt, to take advantage of existing strengths and to build up areas of weakness.

Design Assignments for Teamwork

Designing an assignment appropriate for team and for collaborative learning requires skill. It is more than just putting together a set of different questions. Team assignments provide students with a real chance to experience and understand the dynamics of working in a team, to participate in constructing their own team experience and to improve their own repertoire of team skills whilst they are working together. To ignore the potentialities of the process is to waste of the experience, so instructors need to build in opportunities to create a rich and powerful learning environment.

Individual, Co-operative and Collaborative Learning

At varying phases of the team's development process and the construction of the final assignment product, students are required to engage in different types of work and therefore different types of learning. Members co-operate to explore ideas and knowledge, work by themselves in order to complete a greater body of research and also collaborate with each other to 'learn how to learn' within the framework of the assigned project task. For example, early in the assignment period they need to make innumerable decisions about what to include, what to include and how to allocate sub-tasks. Team members might then need to work individually, each researching particular aspects. However, the team then needs to collaborate once again together to combine the outcomes of their individual work. This might require all members to work in pairs or to even cluster together around one computer, collectively synthesising their individual components. This might also require the team to make co-operative decisions about which member works on which editing or compilation aspects of the one document.

The instructor therefore needs to make sure that the assignment task cannot be completed by the team simply allocating separate questions to separate members. The assignment should be constructed in a manner, which requires co-operation and collaboration as well as individual efforts are all required in order for the task to be completed. These combined efforts can then produce a final piece of work which is superior to what could be produced by the combined separate efforts of the individual team members.

Critical Self Reflection

Once students have been exposed to some of the fundamental concepts of effective team work, then it is important for their learning that they regularly reflect on their own team experiences. One useful way to do this is to maintain a reflective journal throughout the life of the team project (Monk-Turner & Payne 2005). Reflective writing involves a recursive pattern of learning as students reflect on their experiences, reflect further as they write them down and then reflect again later when they read over their journal entries. A wise strategy is to write things down as soon as possible after they have occurred and then to make a more critical follow up entry at some later time (Holly 1997).

Another useful piece of advice for instructors is to train students in the difference between describing their experiences and analysing them from an interpersonal perspective. Models of sample journal entries can be more illuminating for students than mere explanations, especially if a range of models is provided. Another tip is to encourage the use of bold for the terms and concepts of interpersonal communication. Students can immediately see for themselves if their writing is focusing too heavily on story telling rather than on critical self reflections.

Journals allow for deep learning (Martin & Saljo 1984) and can be extremely empowering and supportive for students working in a team. They are also useful if the student is required to respond to later questions about their team experiences, either in examinations or even during employment interviews. Interviewers are impressed by an applicant who has reflected upon and is able to articulate their teamwork experiences, positive and negative, and who has developed stronger teamwork skills as a result. All too often interviewer questions about teamwork elicit little more than complaints about the 'team from hell'.

Journals also have great potential to assist an instructor in assessing the team assignment process. First, a journal can provide evidence for assessment about a student's growth in teamwork skills. Second, student journals are a potential source of behind-the-scenes information about what happened in the team. Reading the journal entries of all team members can help the instructor to create a total picture of the team: how well the team progressed through the stages of team development; which students performed different roles; when they performed which roles; and even provide evidence of underperforming members variously identified as 'free riders' (Morris & Hayes 1997), 'social loafers' (Vik 2001), students aiming for a 'free lunch' (Johnson & Johnson 1975) or students who 'ride coattails' (Dyrud 2001)

However, to maintain integrity of the assessment process and ensure the authenticity of the journal entries, it may be necessary to retain total confidentiality regarding the entries of any particular student.

Assisting Students with Team Formation

By setting up random teams, an instructor can reduce the risk of isolating certain individuals (Monk-Turner & Payne 2005). The consequences may be unpredictable, but if she knows her students well, she can set up the team on the basis of student experience, English skills, gender or even geographic location (Vik 2001). In other situations students are required to form their own teams. They know how important it is to get into a good team (Gordon & Connor 2001), but they also feel unprepared for how to select team members (Hart & Stone 2002). There is evidence that students tend to choose others similar to themselves when forming a team and that local students tend to avoid international students in culturally diverse classrooms (Gordon & Connor 2001). In contrast, students from some cultures, especially Asian cultures, find the collaborative nature of team leaning to be very beneficial (Melles 2003).

There has been relatively empirical research on the preparation of students for collaborative work, or into the impact of training students on their team learning outcomes Nonetheless, there are strong intuitive links between team work and collaborative learning, and a solid tradition of skills training in order to enhance the effectiveness of teams (Pritchard et al. 2006). For example, there are many different strategies to train students make effective choices when they are required to form their teams. The following are examples found by this writer to be helpful.

Pair and Small Team Tutorial Tasks

For each lesson before assignment teams have to be formed, make sure that you include at least one task which requires students to work in pairs or small groups of here or four. At the beginning of the lesson utilise some technique to mix students up so that they are sitting next to another student they do not already know. Whilst working together to answer questions or complete small tasks they will soon get to know each other.

Brainstorm Features of a Desirable Team Member

Run a brainstorming session in which students identify desirable features of team-mates. Early points will probably include features such as friends and similar backgrounds. Try to elicit less obvious features such as the following:
- Lives in a similar neighbourhood
- Has free time at the times I am free
- Has some different skills and strengths to me
- Is interested in the same topic as me (if there is a choice)
- Will not be a free rider/social loafer
- Has similar work practices and ethics to me
- Will not try to boss me around
- Is interested in earning a similar grade to me

The two final points are crucial to an enjoyable team experience but it is one frequently overlooked by students when forming teams. For a team to have members with mismatching expectations of performance and grades expectations is a recipe for disaster. It is frustrating for an A student to be in a team with other members who are simply aiming for a passing grade. It can be just as annoying for an average student to be in a team of high achievers who are constantly berating him for unsatisfactory work. Therefore it is wise for students to form teams with uniform expectations, unless the instructor has constructed the task to allow for the individualisation of student grades, as discussed in more detail below.

Allow for Speed Meeting

Speed dating has become an efficient way for time-poor professionals to meet future partners. Try a different version to help students who don't know each other but who have to form a team.

Tell the class that they are going to spend say half an hour meeting as many other members of the class as possible, with the aim of identifying who they might like to have in their team. Pre-brief them about the sorts of things they should try to find out about each other but say you are going to limit each meeting to two minutes only. Get all the students out of their seats and start them off. After two minutes, use a signal (for example, clap your hands, or ring a bell) to make them change partners. Continue to do this for the stipulated time period before instructing the students to form their teams.

Introduce Early Easy Team Decisions

Once teams have been formed, there is much that the instructor can do during the forming stage to assist members to get to know each other. After exchanging contact details, one idea is to encourage the team to choose a team name. This can be fun. If there is a choice of options for the assignment topic or task, require the team to collaborate together to produce a list of preferences. For example, if the team is to work on a report, arrange for members to choose between a listing of perhaps six different topics. If they need to deliver an oral report, they can refer to their own diaries and negotiate preferred in class delivery dates. The instructor can structure these small decisions further by specifying that the teams need to respond in a particular manner by a particular date, and allow the team to decide which member is in the best position to take responsibility for sending that email or contacting the relevant person.

Small decisions and tasks force the team to start functioning collaboratively immediately, allow some students to adopt contributory roles, and create some positive team history from the very outset.

Prepare Teams for Bigger Decisions and Problems

There is consistent evidence in the literature that students feel poorly equipped for the challenges of group learning, that they feel unprepared for the problems associated with team assignments (Hart & Stone 2002) and that they lack authority and ability to deal with team problems (Morris & Hayes 1997). Instructors can do a great deal to

prepare individuals and teams for the larger decisions and greater challenges they will inevitably face.

Once the reams have formed, spend some class time working with them to identify the **characteristics of effective teams**. This could start with the teams brainstorming their own list of tips, with the lists from all teams then being synthesised together by the instructor. The student tips could be incorporated into handouts containing specific effective strategies from the literature (De Janasz et al.2006) and then distributed to students to reinforce and extend those points.

Conduct a similarly brief exercise in **conflict management** in the student teams. SA good example is a role play where one student thinks another student is loafing or procrastinating and not making a roughly equal contribution to the other team members. After the scenario has been acted out, analyse and discuss the strategies used, the attitudes depicted, what worked (or did not work) and why (not).

Teams can be given an **agenda** for their first team meeting which could include points such as the following:

- Schedule agreed meeting dates and locations for the duration of the team assignment. When to meet outside of class is a potential problem for students (Morris & Hayes 1997). Team members need to share their diary commitments so that meetings are either the same day and time each week, or at varying times so that no one member is unfairly disadvantaged.

- Create a team code of ethics comprising norms such as:
    - how decisions are to be made
    - how often and how members should keep in communication with each other
    - punctuality and attendance at meetings
    - the principle of workload equity
    - procedures to follow if a member cannot attend a scheduled meeting
    - how the secretarial role is to be managed to keep track of decisions
    - what the deadlines are for the different stages of the assignment task

It is helpful for instructors to allow some time for **in-class meetings** in addition to out of class meetings (Garbett 2004). This not only enables members to meet up with each other more regularly, but also allows the instructor an opportunity to monitor when she there is a need for her to referee a fight or guide members towards their goal (Vik 2001). If students are maintaining a reflective journal, this type of occurrence is a great opportunity to remind students of the value of recording and analysing what has happened (Timberlake 2005). By working through and learning from a negative experience, they will be even better placed to deal with a similar situation in the future.

If the instructor has been monitoring team progress it is usually possible to avert most crises and to minimise the likelihood of only discovering the problem once it has already reached crisis point (Vik 2001). Despite this, she may still need to occasionally mediate for a **'team at war'**, intervene to make a change in team membership or to provide advice when a member has been fired or has divorced

themself from the team. It is always a pleasant surprise to this writer how seldom these actually occur. Nonetheless when they do these situations are more helpfully mediated outside the classroom.

Assessment Issues

There is overwhelming evidence that what students dislike most about team assignments is their perception of unfairness and inequity of assessment, when there have been uneven contributions made by different members (Timberlake 2005). Therefore it is crucial that instructors both design and assess team assignments with this in mind.

Process and Product

Assessment in higher education traditionally focuses on the product (Toohey 1996), with little or no recognition of the learning process which resulted in that product. However, if learning in higher education is adjusted to allow for team learning processes (Timberlake 2005), and the objectives of the assignment task include teamwork, 'deep learning' and learning about learning as discussed earlier in this paper, then it is quite inappropriate to ignore the team process when it comes to assessment.

One way for instructors to assess the team process is to elicit qualitative student reflections. This could be in the form of an individual report, team report or even a series of team planning and progress reports. By requiring team members to plan, execute and then report, an instructor is able to monitor and assess the whole team process as well as the varying team contributions and achievements of individual team members.

If students have been required to record self-reflections as an separate or parallel assignment task as discussed above, these reflections could be assessed as either an integral part of the assignment product or as a separate exercise. Reflective journal entries are useful for assessing the development of team skills of both the student author and of their team mates. By reading a series of student reflections, especially by collectively considering the reflections of all team members, it is possible to form a picture of what that student has experienced and what they have learned about interpersonal communication and teamwork skills throughout the team process. Reflective entries are best made regularly, but it is also useful for the instructor to pose a final, overview question to which each student can respond after completion of the team assignment task. A typical summary question might be 'What teamwork skills do you feel you have developed as a consequence of participating in this team assignment?' Such a question would force the student to re-reflect on their earlier entries, and from there facilitate development of a critical overview of what they had learned.

Self and Peer Assessment

In a team assignment, it is the students themselves who are in the best position to assess team processes and the development of their own and of other members' team skills, as one component of team learning. Peer review has been found to prevent

bickering and improve member productivity (Monk-Turner & Payne 2005). Students and instructors view self and peer assessment as a legitimate means of addressing student perceptions of unfairness associated with team learning and the assessment of team assignments (Cheng & Warren 2000; Johnson & Miles 2004; Monk-Turner & Payne 2005; Rafiq & Fullerton 1996, Timberlake 2005; Dyrud 2001). By promoting reflection and independent thought, peer assessment has the potential to facilitate in students a greater capacity to learn and to take personal control of their own learning (Johnson & Miles 2004, McConnell 1999).

Students perceive self and peer assessment as being a valid and helpful means of facilitating greater reflection on their learning and the development of skills such as critical thinking and evaluation (Falchikov 1986; Orsmond 1997; Williams 1992). However, once again there is a need for the instructor to quite deliberately and specifically train students for the process. Without guidance and the establishment of firm criteria and a fair system of checks and, the potential remains for peer assessment to be misused and ratings distorted and. The process can become tokenistic, encourage conformity in return for grades (Boud et al. 1999) or a means of rewarding friends and punishing enemies (Brown and Knight 1994). Therefore there is a need for the instructor to provide coaching for students and use of an incorruptible, valid, reliable and equitable method of including self and peer assessment as a grading mechanism for the teamwork process (Tucker 2006; Tucker & Reynolds 2006). Peer assessment of process can then exist either in parallel with, or integrated into, assessment of the teamwork product.

One strategy is for the instructor to brainstorm with students the features and behaviours which make for a good team member as discussed above. This could be done at any stage during the life of the assignment, but should be revisited before any self and peer assessment device are implemented. For a list of some of the features likely to be nominated by students, refer to Appendix 1.

Students need to be reminded of the ethical considerations and responsibilities associated with assessing students' contributions throughout the assignment process. In order to take the various factors into account as they assessed themselves and each other, it is be possible to design a protocol with a list of features which the students then rate separately. However, in the experiences of the writer, students are well equipped to take them into account and allocate holistic ratings, in response to their own perceptions of their own and the separate contributions of others during the team process.

A holistic ranking enables them to factor in and balance off differential team member workloads and strengths such as a member who contributed well to the process but less well to the product, or the team member who produced great written work but who was somewhat less diligent with the process.

Instructor Assessment of the Team Process

Assuming that the instructor has allowed some class time for students to meet regarding their team assignment, she will be in a good position to draw upon her own observations of the team process. This would include her experiences inside the classroom, ongoing feedback from students, evidence of team disharmony,

personality conflicts or disputes with which she had been required to mediate, or even requests for a team to divorce a member or vice versa.

A final strategy is to look closely at the team assignment document itself. If students include a detailed list of their allocated tasks and responsibilities within the final document, it is possible to identify uneven contributions in roles, time, or the quality or quantity of written work. Signs of poor collaboration would include contradictory, duplicated or missing information. Poor editing could also suggest poor time management by either the whole team or individual members.

Individualisation of Student Grades

As mentioned above, there is persistent evidence within the literature that students see great potential value in team assignments and team learning but that they feel uncomfortable with the unfairness associated with shared assessment (Garbett 2004; Hart & Stone 2001; Morris & Hayes 1997). Their concern with shared assessment is that underperforming or undercontributing team members will be unfairly rewarded for the efforts of their more conscientious team mate. High grade point average students are particularly concerned (Monk-Turner & Payne 2005). Although students regard teamwork as a positive experience, there is consistent evidence that they hold strongly negative feelings towards the fairness of their own grades being dependent on other members of the team (Garbett 2004). The solution to this problem is for student grades to be individualised.

Research studies have found that student grades and team performance can both improve when students are aware from the beginning that peer assessment is to be utilised as part of their assessment (Monk-Turner & Payne 2005). One study also found that, given a choice of assessment methods, 69% of students preferred ongoing, anonymous peer assessment (Tucker 2006; Tucker & Reynolds 2006). There is considerable empirical support for the argument that peer assessment is a legitimate means of addressing the perceived unfairness associated with group learning and team assignments (Cheng & Warren 2000; Johnston & Miles 2004; Rafiq & Fullerton 1996; Timberlake 2005).

Instructors need first be mindful to include within their Unit Outlines from the beginning of the teaching semester, information explaining how peer assessment is to be incorporated into the calculation of grades There are severe ethical and legal implications if students are not aware of this from the outset, even for a student who has contributed nothing to the team project (Morris & Hayes 1997). The instructor then has to make decisions regarding how best to obtain quantitative and/or qualitative peer assessment data. She then has to decide how to apply this information to the determination of student grades.

There are many different individualisation models from which to choose. One method is to use ask students to complete a confidential self and peer assessment form such as that included as 'Appendix A and for the instructor to average the rating for each student. Those whose average is similar to the team average receive the team score. Any students who average significantly above or below the team average have their score increased or decreased by redistributing up to ten per cent of the assignment score for each student involved. Another method is to permit an individual student to

elect to elect to receive a grade comprising 50 per cent the team score and fifty per cent of the score given to their section of the assignment document. They need to make this request before submitting the assignment and to nominate which section(s) of the document they had completed

A brief, annotated listing of some of other individualisation models is included as Appendix B and this author is about to become involved with a trial of a software program which could make peer assessment a simpler and easier process. Students are able to make regular, confidential, quantitative and qualitative peer assessment on-line. The software automatically makes the quantitative calculations for the instructor, with qualitative information also provided to the instructor as a checking mechanism.

A detailed investigation and comparison of different models is beyond the scope of this paper. However, the major and overwhelmingly popular advantage of peer assessment and individualisation models they respond to the problem of undercontributing and underperforming students in a manner which is perceived as fair and equitable by students and by instructors (Timberlake 2005). The major disadvantage is that most current models are extremely time-consuming to implement and thus any instructor time saved during team grading might easily be lost in the individualisation process.

Conclusion

For teamwork to be utilised more effectively within university courses, there is a need to learn more about how to design team assignments, train students and assess their team work more fairly and appropriately. To learn more requires thorough empirical research into each of these dimensions. Business communication instructors would appear to be particularly well placed to spearhead such research, given the strong role of interpersonal and team communication within our existing programs.

References

Australian Chamber of Commerce and Industry and the Business Council of Australia. (2002). *Employability skills for the future.* Canberra: Department of Education, Science and Training.

AVCC (Australian Vice Chancellors' Committee). (2005). Retrieved 15 July 2006, <http://www.avcc.edu.au/documents/publications/stats/Staff.pdf>

Ballantyne, R., Hughes, K. & Mylonas, A., (2002). Developing procedures for implementing peer assessment in large classes using an action research process. *Assessment and Evaluation in Higher Education, 27(5),* 427-442.

Barnett, R., (1994a). Encountering quality learning. In Nightingale, P. & O'Neil, M. (Eds.), *Achieving quality learning in higher education*. London: Kogan Page.

Barnett, R. (1994b). *The limits of competence: Knowledge, higher education and society*. Buckingham: The Society for Open Research into Higher Education and Open University Press.

Berge, Z. (1998). Differences in teamwork between post-secondary classrooms and the workplace. *Education and Training. 40(5),* 194-201.

BHERT 2002. Enhancing the learning and employability of graduates: The role of generic skills. *B-Hert Position Paper No.9, August 2002,* by Hager, P., Holland, S., & Beckett, D. Spring Street, Melbourne Victoria 3000.

Bolton, M.K. (1999). The role of coaching in student teams: A "just-in-time" approach to learning. *Journal of Management Education, 23,* 233-250.

Boud, D. (2001). Making the move to peer learning. In Boud, D., Cohen, R. & Sampson, J. (Eds.), *Peer Learning in Higher Education*. London: Kogan Press.

Boud, D., Cohen, R. & Sampson, J. (1999). *Assessment and evaluation in higher education, 24(4),* 413-426.

Boveé, C.L. & Thill, J.V. (2005). *Business communication today* (8th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Brown, S. & Knight, P. (1994). *Assessing learning in higher education.* London: Kogan Page.

Candy, P., Crebert, G. & O'Leary, J. (1994). *Developing lifelong learners through undergraduate education: Commissioned report no. 28*. National Board of Employment, Education and Training. Canberra: AGPS.

Chaney, L. & Lyden, J. Making US teams work. *Supervision.* January p.6

Cheng, W. & Warren, M. (2000).Making a difference: using peers to assess individual students' contributions to a group project. *Teaching in Higher Education, 5(2),* 243-255.

Conway, R., Kember, D. Sivan, A. & Wu, M. (1993). Peer assessment of an individual's contribution to a group project. *Assessment and Evaluation in Higher Education, 18(1),* 45

Daft R.L., (2003). *Management* (6th ed.). Cincinnati: Thomson South-Western.

Deakin University (2004). *Taking Deakin University forward*. Melbourne: Deakin University.

De Janasz, S., Wood, G., Gottschalk, L., Dowd, K., & Schneider, B., (2006). *Interpersonal skills in organisations*. Boston: McGraw-Hill Irwin.

DETYA (2000). *Employer satisfaction with graduate skills: Research report 99/7*. Evaluations and Investigations Programme, Higher Education Division, Commonwealth of Australia.

DiSanza, J.R. & Legge, N.J., (2005). *Business and professional communication* (3rd ed.). Boston: Pearson and Allyson Bacon.

Dufrene, D.D. & Lehman, M.M., (2000). *Building high performance teams*. Cincinaati, OH: South-Western/Thompson Learning

Dwyer, J., (2005). *Communication in business: Strategies and skills* (3rd ed.). Frenchs Forest NSW: Pearson Prentice Hall.

Dyrud, (2001). Group projects and peer review**.** *Business Communication Quarterly*. 64:4, 106-112..

Eunson, B., (2002). Off to work we go: Lacking basic skills. *The Australian, 11 December,* 26-27.

Falchikov, N. (1986). Product comparison and process benefits of collaborative peer group and self assessment. *Assessment and evaluation in higher education, 11(2),* 146-166.

Freeman, M. (1995). Peer assessment of groups of group work. *Assessment and evaluation in higher education, 20(3),* 289-299.

Fullerton, T. (2005). *The degree factories*. Four Corners. Australian Broadcasting Commission. Retrieved 28 June 2005, from <http://www.abc.net.au/4corners/content/2005/s1401933.htm>.

Garbett, D. (2004). *Researching practice as a teacher educator*. Coldstream, Victoria: Australian Association for Research in Education. Retrieved 29 July 2005, from <http://www.aare.edu.au/04pap/gar04590.pdf.>

Gibbs, G. (1991). *Improving the quality of student learning*. Bristol: Technical and Educational Services Ltd.

Gordon, R. & Connor, R. (2001). Team-based learning in management education. In Boud, D., Cohen, R. & Sampson, J. (Eds.), *Peer Learning in Higher Education*. London: Kogan Press.

Halpern, D. (1998). Teaching critical thinking for transfer across domains. *American Psychologist, 53(4),* 449-455.

Hart, G. & Stone, T. (2002). *Conversations with students: The outcomes of focus groups with QUT students*. Milperra, NSW: The Higher Education Research and Development Society of Australasia Inc. Retrieved 28 July 2006, from <http://www.ecu.edu.au/conferences/herdsa/main/papers/nonref/title.html>.

Holly, M.L., (1997). *Keeping a professional journal* (2nd ed.). Geelong, Victoria: Deakin University Press.

Hounsell, D., McCulloch, M. & Scott, M. (1996). *The ASSHE inventory: Changing assessment practices in Scottish education*. Edinburgh: Centre for Teaching, Learning

and Assessment, The University of Edinburgh and Napier University, Edinburgh in Association with the Universities' Staff Development Agency.

Hunt, L., Kershew, L. & Bana, J. (2003). Understanding teaching and teaching for understanding. In Marton, D., Hounsell, D. & Entwistle, N. (Eds.). *The experience of learning: Implications for teaching and studying in higher education* (2nd ed.). Edinburgh: Scottish Academic Press Ltd.

Jacques, D. (1991). *Learning in groups*. London: Kogan Page.

James, R., McInnis, C. & Devlin, M. (2002). *Assessing learning in Australian universities*. Victoria: Centre for the study of higher education, University of Melbourne.

Johnson, D. & Johnson, R. (1975). *Learning together and alone: Cooperation, competition and individualisation*. Englewood Cliffs, New Jersey: Prentice Hall.

Johnson, L. & Miles, L. (2004). Assessing contributions to group assignments. *Assessment and Evaluation in Higher Education, 29(6)*, 751-768.

Kirby,P. (Chair) (2000). *Ministerial review of post compulsory education and training pathways in Victoria: Final report*. Victoria. Retrieved 28 July 2006, from http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/student/KirbyReport.pdf

Lejk, M., Wyvill, M. & Farrow, S. (1996). A survey of methods deriving individual grades from group assessments. *Assessment and Evaluation in Higher Education, 21(3),* 267-278.

Martin, F. & Saljo, R. (1984). Approaches to learning. In Marton, D., Hounsell, D. & Entwistle, N. (Eds.). *The experience of learning: Implications for teaching and studying in higher education* (2nd ed.). Edinburgh: Scottish Academic Press Ltd.

McConnell, D. (1999). Examining a collaborative assessment process in networked lifelong learning. *Journal of Computer Assisted Learning, 15(3),* 232-243.

McManus, K., (2000). Do you have teams? *IIE Solutions*, April

Mc Peck, J. (1991).*Critical thinking and education.* Oxford: Martin Robertson.

Melles, G. (2003) Using language and culture to construct group work in higher education. In Bond, C. & Bright, P. (Eds.) *Learning for an unknown future: Research and development in higher education vol 26,* Proceedings of the 2003 Annual International Conference of the Higher Education Research and Development Society of Australasia (HERSDA), 6-9 July 2003, Christchurch, New Zealand. Milperra, NSW: Higher Education Research and Development Society of Australasia.

Monk-Turner, E. & Payne, B. (2005). Addressing issues in group work in the classroom. *Journal of Criminal Justice Education 16(1),* 166-179.

Morris, R. & Hayes, C. (1997) Small group work: Are group assignments a legitimate form of assessment?. In Pospisil, R. & Willcoxson, L. (eds) *Learning through teaching,* Proceedings of the 6th Annual Teaching and Learning Forum, Murdoch University, February 1997: Murdoch University. Retrieved 29 July 2006 from <http://lsn.curtin.edu.au/tlf/tlf1997morris.html>.

Nelson, B. (2002). *Education at the crossroads: An overview paper*. Canberra: D.E.S.T., Commonwealth of Australia.

Orsmond, P. (1997).A study in self assessment: Tutor and students' perceptions of performance criteria. *Assessment and Evaluation in Higher Education, 22(4),* 357.

Pritchard, J.S., Bizo, L.A. & Stratford, R.J. (2006). The educational impact of team-skills training: Preparing students to work in groups. *British Journal of Educational Psychology 76,* 119-140.

Rafiq, Y. & Fullerton, H. (1996). Peer assessment of group projects in civil engineering. *Assessment and Evaluation in Higher Education, 21(1),* 69-82.

Ramsden, P. (1992). The context of learning. In Marton, D., Hounsell, D. & Entwistle, N. (Eds.). *The experience of learning: Implications for teaching and studying in higher education* (2nd ed.). Edinburgh: Scottish Academic Press Ltd.

Robbins, S.P. & DeCenzo, D.A. (1998). *Fundamentals of management* (2nd ed.). Upper Saddle River, N.J.: Prentice Hall.

Timberlake, T. (2005). *Does one size fit all? An evaluation of the practice of awarding a group grade to group projects at undergraduate level. Unpublished* Masters research paper, Deakin University.

Toohey, S. (1996). Managing and developing oneself. In Nightingale, P. & O'Neil, M. (Eds.) *Achieving quality learning in higher education*. London: Kogan Page.

Tucker, R., (2006). *The impact of assessment modes on collaborative group design projects*. First International Conference on Enhancing Teaching and Learning Through Assessment.

Tucker, R. & Reynolds, C. (2006 in print). The Impact of Teaching models, group structures and assessment modes on collaborative learning in the student design studio. *Journal for Education in the Built Environment* 1(2).

Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(May).

Vik, G.H., (2001).Doing more to teach teamwork than telling students to sink or swim. *Business Communication Quarterly*. 64:4, 112-119.

Wageman, R. (1997).Critical success factors for creating superb self-managing teams. *Organisational Dynamics*, Summer.

Williams, E. (1992). Student attitudes towards approaches to learning and assessment. *Assessment and Evaluation in Higher Education, 17(1),* 45-58.

Worley, R.B. & Dyrud, M.A. (2001). Managing student groups. *Business Communication Quarterly.* 64:4, 105-106.

Appendix A

WRITTEN REPORT
SELF AND PEER ASSESSMENT

Please rate the contributions to your team's Written Report made by yourself and by each member of your team. The purpose of this is to assist us any identify teams whose members contributed unevenly to the assignment task and to more appropriately individualize student scores.

Take into consideration whether each member:
- attended all meetings
- actively communicated with team-mates and responded to others' messages
- contributed ideas
- provided constructive feedback on the ideas of others
- participated in decision-making
- completed work they offered to do or were designated
- contributed work of the required standard and/or form
- met agreed deadlines
- shared the editing/compilation workload

Then allocate each group member a score between 0 and 4:
- 0 = officially in the team but did not contribute at all
- 1 = made only minimal contributions
- 2 = made some contributions, but did less than what was asked/needed
- 3 = contributed well, at an appropriate level, as required by the team
- 4 = contributed over and above their share of what was expected by the team

Team Name: _____ Class No.: _____

Report Topic: _____

Now fill in the names of the members of your group, and circle a rating for yourself and for the other members of the team

Self   Name:……………………………………….. 0 1 2 3 4

Member 2   Name:……………………………………….. 0 1 2 3 4

Member 3   Name:……………………………………….. 0 1 2 3 4

Member 4   Name:……………………………………….. 0 1 2 3 4

Member 5   Name:……………………………………….. 0 1 2 3 4

The above information will be treated with total confidence.

Thank you

Ten Methods for Individualizing Team Grades

1. Award one grade for the assignment product and another for the process
The instructor grades the product and the students grade the process by awarding a
score for low, moderate or high activity across a range of different factors. The total
score for each student is converted to score which is allocated according to a
designated split of product and process scores (Lejk, Wyvill & Farrow 1996).

2. Add contribution score to (or subtract it from) the team score
Students allocate each other a score for above average, average or below average
contributions, which are then totalled. This score is then added to or subtracted from
the team score (Lejk, Wyvill & Farrow 1996).

3. Distribute individual scores from a pool of scores
One team grade is given which is multiplied by the number of members in a team,
who must then individually decide how to distribute the total pool amongst
themselves. The average of these distributions is then allocated to each student (Lejk,
Wyvill & Farrow 1996).

*4. Award an equal grade to each student, but allow for the possibility of
instructor intervention*
Students share the team score unless a member, members or the group approaches the
instructor regarding a problem. The instructor then alters individual grades
subjectively (Lejk, Wyvill & Farrow 1996).

5. *Split team tasks from individual tasks*
The team is responsible for the total project, but then individual students are
responsible for particular sections. A uniform score is allocated for the total product,
and individual scores for the separate sections (Lejk, Wyvill & Farrow 1996). A
variation of this is for students to self-elect to receive the total team grade, or a
designated split of team and individual scores

6. Issue yellow and red cards
The assignment is designed with divisible, equitable sections. Students work on their
individual sections, and continue to swap and review each other's work until the final
project is ready for assessment. Students receive the same grade, although 'yellow' or
'red cards' are issued for underperformance which result in removal of the miscreant
from the team and the team's loss of its predetermined'Group Performance Mark'.
(Lejk, Wyvill & Farrow 1996 ,Hounsell, McCulloch & Scott 1996)

7. Award grades in response to team-negotiated percentages
Before commencing the project, the team negotiates the percentage contribution of
each team member (Lejk, Wyvill & Farrow 1996).

8.   *Multiply team grade by 'individual weighting factor'*
Grade assignment, and then produce an individual weighting factor by multiplying individual effort ratings by the average team effort rating. Multiply team grade by the individual weighting factor (Conway et al. 1993).

9.   *Multiply team grade by 'peer assessment factor'*
This is a more complex version of the previous model (Lejk, Wyvill & Farrow 1996)

10.   *Anonymous on-line self and peer assessment*
This involves quantitative measures using percentages and a multiple response Likert scale which are then coded and analysed statistically, as well as qualitative comments to elucidate anomalies or unexpected final outcomes (Tucker 2006)

11.   Other *methods of individualisation*
Other methods can be found in Brown & Knight 1994; James, McInnis & Devlin 2002; Hounsell, McCulloch & Scott 1996;