An Examination of Socially Destructive Behaviors in Groupwork

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Abstract

With the increasing prevalence of groupwork in marketing courses there is a need to consider the impact of students' social dynamics on both learning and satisfaction outcomes. This paper explores one such dynamic at both an intra and inter group level. Using data generated from multiple sources it was identified that students who are actively contributing to group processes have difficulty distinguishing between students, and indeed groups, that are socially loafing and those that are genuinely struggling with the material. As a consequence the struggling students are subject to incidences of socially destructive behaviors, critically harming their ability to develop. This has the potential to harm not only the individual struggling student and their group but also burden the other members of the class with a class member that will never be able to meaningfully contribute. Using social interdependence theory a framework is proposed to explain how this confusion among contributing students arises. Recommendations are made regarding how to design curriculum so as to minimize the incidence of this phenomenon as well as intervention strategies to mitigate its effect should it present.

Most educators are tacitly aware of the importance of social dynamics in student groups and indeed the whole classroom for engaging and promoting learning. This awareness has resulted in considerable research interest, particularly with regard to common maladaptive student behaviors, such as social loafing in groups. This paper departs from existing research in that it considers the interplay between students, and how the normal social processes students use to manage group experiences can become destructive for some class members. The particular focus of this research is the relationship between contributing students and low contributing struggling students. It is noted that high contributing students have difficulty in distinguishing between low contributing struggling students and a low contributing loafing students. This results in struggling students being the unwitting recipients of social punishments intended for loafing students, thereby limiting their ability to learn such that their ability to reach their true potential, whatever it may be, is undermined. This undermining of learning for students most in need of learning support presents a major issue for educators in the classroom.

Many new problems within education literature, such as the one described here, are being addressed within the context of an increasing demand for university classrooms to prepare undergraduates for the workplace. There is a need for students to be educated about how to cooperate both within their own work-group and across work-groups. Such intra and inter group cooperative work skills are of great interest to employer organizations, which are typically composed of multiple work units that must be able to work together to achieve business outcomes. It is therefore worthwhile to understand the nature of social dynamics in groups and any problems that may be present; in particular, how group members support, or at least not undermine, fellow group members in projects.

Issues of support for fellow group members are even more acute when projects span for a considerable length of time with sustained group membership, as they normally are in business. The focus of this research is on students who were engaged in such a long run project, which in this case was over a full semester.

THE IMPORTANCE OF GROUP PROJECTS AND TEAM WORK

Group and team based projects are increasingly being seen as an essential component to higher education for both pedagogical and future employment reasons (Garvin et al., 1995; Johnson & Johnson, 1985; Johnson, Johnson & Smith, 2007; Lejk, Wyvill & Farrow, 1999). MacGregor, Cooper, Smith and Robinson (2000) consider group work as beneficial to undergraduates in terms of their social development, appreciation of diversity, critical thinking, and problem solving. Another pedagogical benefit ascribed to student participation in group projects is a dramatic increase in experiential learning, resulting in improved learning outcomes (Cheng, Lam & Chan, 2008; Dewey, 1938; Johnson, Johnson & Smith, 1991). Karns (2006) identifies more specifically that marketing students are "predominantly active-oriented learners" and therefore experiential learning activities are desirable. This presents benefits both in the classroom and in the workplace.

One benefit of group work in the classroom is that it caters to a much more diverse range of learning styles than many other learning and assessment techniques (Boyer, Weiner & Diamond, 1985; Falchikov, 1986: Hendry et al., 2005). In a more typical lecture and seminar based

teaching environment, auditory and visual learners are most often directly catered for, while kinesthetic and other more physical learners are often disadvantaged due to the inherent passivity of these learning environments (Davis & Franklin, 2004). Group projects allow each student to draw on their own unique learning style as project work places fewer limitations on how students implement their learning (Davis & Franklin, 2004; Hendry et al., 2005; O'Sullivan, Rice, Rogerson & Saunders, 1996).

The proliferation of group projects is also reflective of the changing needs of industry. In the workplace, there is an increasing expectation among employers that university graduates should be able to integrate into existing employee groups and cooperate with a diverse range of people (Nunamaker Jr., Reinig & Briggs, 2009, Parsons & Drew, 1996). This arises from the increasing complexity of problems that employees now face in the market (Bourner, Hughes & Bourner, 2001; Jaques, 1984). The ability to cooperate is therefore an essential graduate attribute. It suggests a need for training at the university level to develop both intra and inter group skills (Dolnicar & Stern, 2003; Rundle-Thiele, Bennett & Dann, 2005).

Due to the obvious benefits of group and team-based work, considerable effort has been made within the literature to provide insight into how groups function. Present literature often addresses group dynamics with reference to collaborative and cooperative learning. There has been much discussion in the literature as to the nature of collaborative learning and how it differs, if at all, from cooperative learning (Bruffee 1995, Panitz 1996, Rockwood 1995, Smith and MacGregor 1992, Smith, Sheppard, Johnson & Johnson, 2005). This research adopts a cooperative learning approach; as Panitz (1996, p. 139) argues, "Cooperation is a structure of

interaction designed to facilitate the accomplishment of a specific end product or goal through people working together in groups." Cooperation, in this context, is consistent with the objectives of the present study, that is, to provide the best support for students in an applied research project.

UNDERSTANDING STUDENT TYPES

The adoption of group work in the classroom has led theorists to consider how both individuals and groups interact with each other (Goldfinch & Raiside, 1990; Bourner et al., 2001; Deutsch, 1962, Garvin et al., 1995; Johnson & Johnson 1985, 2005). One of the challenges with discussing social dynamics is the relative dearth of language describing the types of individuals that comprise groups. Although all of us, as social beings, are aware of such useful taxonomies they have yet to fully enter into the academic vernacular. In order to facilitate the discussion of social dynamics, we propose here a simple mechanism to characterize group membership.

Social interdependence theory has been the foundation for much of the research in this area (Deutsch, 1949, 1962; Johnson, 1970; Johnson et al., 1985). Within this theory, learning outcomes are seen as being dependent upon how individuals act, which in itself is determined by the degree of social interdependence and engagement present, and not just the academic growth of the individual student (Slavin, 1983; Johnson & Johnson, 1987; Smith et al., 2005).

Consequently, social interdependence presents a mechanism to characterize different student types based on individual ability and desire to contribute to group processes. It is particularly

useful in describing individuals in groups as it accommodates a more holistic focus where individuals, in order to maximize their own outcomes, must recognize their dependence on, and obligation to others (Cuseo, 2000). Indeed, positive interdependence has been described as "the quintessential quality that defines collaboration and transforms group work into teamwork" (Cuseo, 2000, page 7). As students become aware of the role of social interdependence, they have a tendency to classify their fellow group members and indeed other groups in terms of not just their abilities, but also their desire to contribute.

A SOURCE OF CONFUSION: SOCIAL LOAFERS vs STRUGGLERS

Much of the existing education literature addresses group problems from the perspective of intra-group dynamics. This research expands the scope of the literature to also consider both intra and inter group dynamics. . Inter-group dynamic refers to how groups themselves interact with each other to achieve a collective goal. Both intra and inter-group dynamics are particularly important to consider in many settings, none more so than when a class must work cooperatively on a single project over a sustained period of time. It is such a setting that forms the context for this research.

Intra-Group Dynamics

As previously mentioned, education literature has examined a range of phenomena concerning intra-group dynamics. Two phenomena that have attracted varying levels of attention are the problems of social loafers, or so called 'free riders' in economics and psychology literature,

(Bourner et al., 2001; Williams, Harkins & Latane, 1981; Payne & Monk-Turner, 2006), and underachieving or 'struggling' students in groups. Both of these student types can be classified as individuals who minimally contribute with regard to group work. The basis for this non-contribution, however, is fundamentally different.

Social loafing typically refers a situation in which a non-contributing student, who may or may not have the ability to fully participate in a group activity, chooses not to, and instead relies on fellow group members to complete assigned tasks (Aggarwal & O'Brien, 2008; Dommeyer, 2007; Strong & Anderson, 1990). Colbeck, Campbell and Bjorkland (2000) found that over 40% of students reported having "slackers" in their groups. The presence of a social loafer is typically highly resented by fellow group members as they are not oriented with the group. There is some evidence to support the contention that the greater the length of the project, the bigger the issue of social loafing (Bourner et al., 2001). A number of teaching strategies have been suggested that may be effective in countering social loafing. They include peer assessment (Aggarwal & O'Brien, 2008, Falchikov, 1986; Goldfinch & Raeside, 1990), minute books and individual diary keeping (Dommeyer, 2007; Kane & Lawler, 1978), and retaining of logs of online cooperation (Brandyberry & Bakke, 2006), among others. Such strategies empower contributing students who have the individual ability to succeed in an assignment with the opportunity to do so without being 'dragged down' by problematic group members (Johnson et al., 2007).

As opposed to social loafers, the problem of struggling students is comparatively complex and less well defined in the literature. A struggling student is characterized as a student who does not contribute to group work due to their own perceived or actual below average ability (DuFour

2004). These students often have difficulty contributing in class as when compared to the rest of the cohort they are marginally behind in their understanding of the material. While this student is qualified to participate in the class, his or her marginally lower skill levels require more time to be spent on studying and thus delays the student's initial ability to contribute. In many respects a student can be considered to be 'marginal' in that he or she has the potential to do both well or poorly in the class, depending on the learning environment. Strategies for intervening with these students are as varied as the types of course content available (Johnson, Johnson & Smith, 1998; Panitz 1996; Colbeck et al., 2000). Anecdotally, it can be seen that many, if not most, teachers provide supplementary materials to support the learning of these students.

In contrast to struggling students, the strategies for addressing loafing are quite diverse, as noted previously. Inherent in many of the strategies for dealing with social loafing is the use of corrective processes to build a sense of regret in the social loafer for not participating. The strategies noted give feedback to the loafer about the undesirability of their behavior and the need to correcting this behavior. These corrective processes are typically implemented by fellow contributing group members, who are most able to recognize a student not contributing and who have an interest in prompting participation. As a recipient of such corrective processes, the socially loafing student may then feel prompted to participate more fully in the project. Already contributing students are also empowered to confront a social loafer using constructive behaviors, such as setting mutually agreed deadlines and standards, setting progress deadlines, establishing progress reporting procedures, among others. They may also be able to exclude the loafing student from participating in the project to minimize any harm to the group as a whole if loafing persists (Aggarwal & O'Brien, 2008; O'Sullivan et al., 1996).

While behaviors targeted at social loafers by contributing students are generally constructive in nature, a range of destructive behaviors may also be seen to be directed towards students perceived to be loafing (Payne & Monk-Turner, 2006). Common destructive behaviors that can be observed in the classroom include assigning the loafing student tasks to which they may not be well suited, omitting loafing students from group email communications, scheduling meetings at times when a loafing student cannot attend, setting deadlines for work that are impractical, withdrawing necessary peer-learning support for the student, among others. These are likely to arise as both the unintended consequences of an educator empowering contributing students to take action and a natural characteristic of group dynamics. The objective of such destructive behaviors among contributing students is the manifestation of the public failure of the non-contributing loafing student. In such circumstances the public of interest is the educator. This has the effect of allowing the contributing student to blame the non-contributing student for poor work in an effort to ensure they still receiver good grades from the educator.

It is easy to understand why a performing student would wish to seemingly retaliate when confronted with a loafing student within their group. This loafing student is not likely to do his or her fair share of the work and even if work is done, it is likely to be to a lower standard than that desired by the group (Strong & Anderson, 1990). With the public failure of the loafing student, the performing students would also feel at least partially indemnified against any blame for sub-standard submissions.

The cessation of the use of destructive behaviors against loafing students is typically resolved without the need for intervention by teaching staff. Once the loafing student is participating more fully as a result of the constructive corrective behaviors exhibited by contributing students, the motivation for exhibiting destructive behaviors among performing students ceases to exist. Only on rare occasions would an educator need to intervene with additional social training if loafing continued or destructive behavior continued unchecked.

The heart of the problem arises from this occurrence of destructive behaviors on the part of contributing students. Since contributing students exhibit destructive behaviors against any student perceived to be loafing, there is a risk that these behaviors may be misdirected at students that are mistakenly identified as loafing. One such category of students that may be inadvertently perceived to be a loafer is the non-contributing struggling student.

A struggling student exhibits many of the same characteristics as a loafing student. A struggling student minimally contributes to the group due to delayed understanding, and often produces work of a lower standard as a result of lower skill level at that stage in the course. This contrasts to the loafer's deliberate act of non-contribution (McLean, Reid & Scharf, 1999). The co-occurrence of non-contribution may lead other students, particularly high contributors, to confuse struggling students with social loafers. Research has suggested that students are not skilled at evaluating their peers, often using inappropriate measures or drawing incorrect conclusions regarding levels of contribution (Falchikov & Magin, 1997; Falchikov, 1986). As a result it is expected that contributing students will be unable to differentiate between non-

contributing loafing students and non-contributing struggling students, leading them to exhibit destructive behaviors towards both. This problem forms the basis for Proposition 1.

Proposition 1: Contributing students tend to exhibit destructive behaviors against non-contributing struggling students in the same manner as they would against social loafers.

One of the dangers of such destructive behavior towards struggling students is that it prevents these non-contributing students from developing their individual ability and becoming contributing students. Unlike a student who is not contributing due to loafing that can choose to involve himself or herself and thus make a contribution, a struggling student cannot simply choose to be more advanced in their understanding and contribute towards the project. Therefore, any destructive behavior arising from contributing students aimed against him or her continues indefinitely. This leads to sub-optimal outcomes not just for the struggling student, but for the group as a whole, as the student is not afforded the opportunity to develop into a constructive group member capable of contributing. Such a scenario is clearly a disastrous outcome for any educator.

Inter-Group Dynamics

Building on these insights from intra-group behavior it is also possible to consider similar phenomenon at the inter-group level. Competition and cooperation among groups in a class setting can have just as much, if not more, influence on the performance of the cohort. How groups interact with other groups is an area of literature that has received limited attention.

The potential for confusion in contributing students applies equally to contributing groups. Educators have recognized the presence of groups not contributing fully to a class objective, be it loafing or struggling, although such recognition is predominantly anecdotal (Bettenhausen, 1991). In this context, loafing groups would attract similar behaviors, both constructive and destructive, from contributing groups. The destructive behaviors are remarkably similar to those at the individual level, for example, the withholding of information and other resources, improper deadlines set, and the mismatching of group tasks. Similar to the intra group level, these behaviors aim to ensure the non-contributing loafing group publicly fails in the subject, thereby indemnifying fellow groups from blame for poor outcomes.

It is also reasonable to assert, then, that a similar confusion between loafing and struggling students at the intra-group level may also occur at the inter-group level. Contributing groups may perceive a group that is not contributing due to the fact it is struggling as a loafing group. In that confusion they may attract the same destructive behaviors as those directed at loafing groups. This results in Proposition 2.

Proposition 2: Contributing groups tend to exhibit destructive behaviors against non-contributing struggling groups in the same manner as they would against loafing groups.

Like the dangers at the intra-group level, destructive behaviors at the inter-group level would result in sub-optimal outcomes for the class as a whole. The struggling group is not afforded the opportunity to advance their skills, making them less able to develop into a constructive group

capable of contributing to the class. Indeed, by producing lower quality work as a result of the destructive behavior aimed against them, there is a risk that this group's work would slow the progress of the class as a whole. This is the epitome of poor cooperation. Such a phenomenon has received little attention in the literature.

THE PEDAGOGICAL CHALLENGE

With the recognition of the potential problem of misapplied destructive behaviors within inter and intra-group dynamics, it becomes necessary to consider whether these behaviors can be prevented or modified. Destructive behaviors can be considered a natural phenomenon among students and also the by-product of our well-intentioned empowerment of contributing students to take corrective action. In either case, additional planning and/or intervention by teaching staff can prevent the misdirection of such destructive behaviors against struggling students and/or groups.

Nearly all literature on interdependent group dynamics assert that when the individuals comprising a group are oriented towards the same objective, there is a general attempt to work together to best achieve it, ceteris paribus (Johnson et al., 2007; Bourner et al., 2001; Graham, Graham & Whiting, 1997). Thus, a struggling student would be expected to receive understanding from their fellow group members as they are oriented with the group and willing to contribute. Along with this understanding would come a reduction in destructive behaviors aimed against the student. A socially loafing student, on the other hand, is less sympathetic, and

brings the collective ire of fellow group members and subsequent destructive behavior. This contrast gives rise to the development of Proposition 3.

Proposition 3: When the difference between non-contributing struggling students/groups and socially loafing students/groups is highlighted, contributing students reduce their destructive behaviors against those who are struggling.

Any source of conflict in a group can become a 'poison pill' which reduces group cooperation and effectiveness. This usually results in considerable dissatisfaction from those participating in the group task (Hunsaker, 2004; Kleef, Dijk, Steinel, Harinck & Beest, 2008). Reduction in perceived social loafing allows contributing students to feel more justly treated within the group. Likewise struggling students have the opportunity to develop their knowledge and ability in the subject and contribute more to the success of the group. Student would thus be expected to feel improved satisfaction with the group learning experience. This leads to Proposition 4.

Proposition 4: With reductions in destructive behaviors, students have a more satisfying learning experience.

Drawing on these propositions it is possible to examine the misapplication of destructive behavior against struggling students at both the intra and inter-group level.

METHOD

An applied market research subject was used as the context for this research. In this subject, offered within an Australian university, students work on real market research projects spanning the entire semester with real clients from university, government and industry. The subject serves as a capstone for business students majoring in marketing. Each class consisting of approximately 40 students was broken into formal groups of five or six members who work cooperatively to achieve research goals (Rosser, 1998). Two classes across sequential semesters were examined, resulting in a total sample size of 80 students. Both classes were working on the same applied project for the same client.

Three classes of instrument were used to address the research propositions. These were 1) subject entry and exit surveys, 2) student self-monitoring tools, and 3) teaching staff observations and interventions. A multiple case study approach was applied, with each semester's cohort being treated as a single case within the study (Creswell, 2007, p. 73, Yin, 2003, 2008). The debate as to "how many cases?" has occupied many researchers: too many and you lose depth and dilute the overall analysis; too few and the picture may be incomplete. (Creswell, 2007, Flyvberg 2004, Yin 2003). Perry (1998), amongst others, posits that there is not one ideal number; rather the researcher must be guided by the study's purpose within a range of two to twelve cases (Tellis, 1997, Yin 2003). Since the objective of this research aims to compare and contrast the outcomes of our interventions across the student cohorts a two case design was sufficient. In addition, the numerous sources of information available for each case allowed for a full picture to emerge (Creswell 2007, Yin 2003, 2008, Perry 1998), and the opportunity to triangulate analytic conclusions (Belk, Wallendorf & Sherry, 1989; Tobin &

Begley, 2003). Yin (2003) states, “analytic conclusions independently arising from two case studies will be more powerful than those coming from a single case” (p. 5).

The first class of instrument employed in the research involved subject entry and exit surveys. These were used to evaluate changes in perceptions among students regarding what research entails and how group work should be managed. The entry survey evaluated these perceptions prior to participation in the group project and the exit survey permitted the identification of any changes in those perceptions based on experiences gained from the project. Questions in the entry survey asked students to discuss any problems they foresaw with the amount of group work in the subject, the most important skills they thought would be needed, the skills they would bring to the group, and the skills they may need to develop. The exit survey covered similar material and also prompted for discussion of any group problems that occurred, and any advice they felt would be important for the next student cohort. Samples of the refined versions of these instruments are available from the authors upon request; note that these surveys address a number of potential group problems beyond the scope of this paper.

The information from gained these surveys was enriched when considered together with the information obtained from the second class of instrument, the student self- monitoring tools. These tools included weekly individual student reflective journals, minute books recording the proceedings of each group’s meetings, and email records of exchanges between groups and with staff. The submission of these self- monitoring tools formed a part of the assessment for the management practices that students employed. Students were instructed to detail in their reflective journals not just the tasks that they undertook, but also how well they performed in

these tasks, what they learned, and the impact of fellow groups and group members on their experiences. The minute books for group meetings served two primary purposes in the subject. The first was the documentation of the participation of each group member in the research process and any problems that may have arisen. The second was a teaching mechanism to encourage students to set continuous goals for both the group and the class. One student in each group was assigned the role of keeping the minutes with the minutes then submitted as part of the group's assessment.

The analysis of the subject entry and exit survey, along with the self-monitoring tools were undertaken in a holistic manner. Our approach to analysis was a hybrid of the "editing" and "immersion" stances described by Spiggle (1994). Thematic analysis, in line with the six- phase process described in Braun and Clarke (2006, p.87), was used to identify the main issues students experienced and the behavior that emerged as a consequence (Boyatzis, 1998). This "editing" approach permitted codification of the data. The data within each type of instrument was then reviewed, and the records of each student were read together several times (Agar, 1980). At each stage students were informally classified onto a continuum of contribution with special attention paid to identifying group leaders (in all cases the highest contributors), perceived loafing students and known struggling students. This "immersive" approach allowed the researchers to reflect on the meaning and interpretation of the texts as a whole (Spiggle, 1994).

The third class of instrument consisted of observations and interventions. These were used to examine Proposition 3 and were based upon the principles of practice-oriented research (Fox, 2003). The interventions focused on identifying students who were struggling with the course

material and thus at risk of being subjected to destructive behaviors. The intervention process did not focus on singling out 'struggling' students, but identifying the potential for destructive behaviors towards these students. In situations where destructive behaviors were manifesting, or most likely to manifest, the potential contributions of the student or student group who were the target of these behaviors was highlighted. In addition, the negative impact on the project outcomes of such destructive behaviors was discussed with students in leadership or similar dominant type roles in closest social proximity to the source of the destructive behaviors. It is important to note that such interventions only served to remove social barriers to the 'struggling' student's performance, leaving them to pass or fail on their own ability. The development of these interventions is highlighted throughout the results due to their evolution from one semester to the next.

In both cases the students have had previous experience of cooperative learning from earlier courses. Most would have been involved in at least eight projects, but unlike the present project, which was a semester long, previous group work would have been in the range of two to four weeks (Bourner et al. 2001). The subject was organized such that there were a number of distinctive components. Within groups, the students' learning experiences were based on cooperative processes, however at the inter-group level there were alternating competitive-cooperative processes. Throughout the semester the student groups had to cooperate with each other in project management, and information-sharing. Groups competed to write the best research proposal, research design and instrumentation package (as assessed by the lecturer/project supervisor). The best package was then submitted to the client and became the foundation for all of the groups to build upon. The groups also cooperated in data collection and

analysis, but then competed to prepare the best final report for the client. Students were expected to manage all aspects of the project, from the initial client briefing to the submission of the final report, utilizing the instructors as resources rather than project managers (Wood, 2003). Success was dependent upon individual students interacting with group members from their own and other groups, groups interacting well with other groups in the class and classes interacting well with the project client (Young and Freeman. 2008).

RESULTS

Prior to evaluating each of the propositions, a general review of the subject entry survey was undertaken to identify any initial perceptions that students held. Social loafing emerged as a dominant theme when students were asked about potential problems in a group project. Students expressed concern with group work generally and were only satisfied if “everyone pulls their weight” (Student A) and would be “contributing their fair share” (Student B). The risks of social loafing were foremost in students’ minds when entering a subject with a large group work component. Indeed, a greater proportion of students expressed a preference for individual tasks over group tasks in the entry survey, likely as a result of these specific concerns. This concern about social loafing amongst students suggests that it is a key driver of their group interaction behavior. Its central role as a driver provides the necessary starting point for the confusion among contributing students in distinguishing between loafing and struggling students.

Proposition 1: Contributing students tend to exhibit destructive behaviors against non-contributing struggling students in the same manner as they would against social loafers.

For destructive behaviors to be aimed at struggling students in the same manner as they would against social loafers there would need to be confusion among contributing students about the difference between the two. Such confusion is evident in the entry survey. Some students elaborated on this with their concerns applied equally to students who don't exert enough effort (social loafers) and those who don't have what they see as requisite skills (struggling students). Students foresaw a problem if they "…get a [sic] unreliable group member who doesn't participate enough in group work. There are also communication barriers…" (Student C). Contributing students tended to imply that the students who struggle with language are also those that put in "minimum effort" (Student D) and likely to be social loafers, or at least should be categorized in the same manner. The implication of this is that contributing students are more likely to behave in the same manner towards loafing and struggling students, and as a consequence misdirect destructive behaviors towards those who are actually struggling.

Students typically only discussed the perceived problem of under-contributing group members deliberately not doing their 'fair share' and appeared to have no recognition of the problem that some students may in fact be struggling with their work. This was never mentioned directly, and student skill deficiency was mentioned only in terms of how it would increase one's own workload and the resulting need to compensate for this deficiency. "There are always people who do not work and others are forced to carry" (Student E). The language students used to describe this problem in the entry survey almost always implied that a group member's inability to do work is a deliberate act and not a function of educational circumstance; for example: "The *only* problem I have experienced with group work is particular members not contributing their

fair share" (Student EA) and "There are always people who do not work and others are forced to carry them" (Student EB). This highlights that students perceive little difference between the deliberate act of social loafing and the educational circumstance of being a struggling student.

Beyond the attitudinal component of examining Proposition 1, destructive behaviors were documented by teaching staff. A number of situations were observed where struggling students were subjected to destructive behaviors by contributing students. The most revealing of these documented occurrences included assigning a student with little mathematical inclination the role of lead analyst for a data set, assigning a student with poorer spoken communication skills the role of running complex focus groups in the research project and assigning a particularly shy student the role of liaising with an industry contact. These were the same behaviors staff documented during the semester when contributing students were faced with loafing peers. When the responsible (and contributing) students in class were asked about this allocation of tasks, the struggling students were described as not having put in enough time or effort, in much the same manner as socially loafing students. The fact that the struggling students were clearly not the best choice for their assigned task and were indeed offered no support to achieve the tasks set was typically omitted or obfuscated by the contributing students during these exchanges with staff. This clearly shows that contributing students were unaware of the difference between struggling students and social loafers, and as a result tended to exhibit destructive behaviors against both student types in the same manner. This confirms the result from the entry survey in which not one student highlighted the potential problems due to the presence of struggling students, only the problems of loafing students. Such a result offers strong support for proposition 1.

Proposition 2: Contributing groups tend to exhibit destructive behaviors against non-contributing struggling groups in the same manner as they would to loafing groups.

At the group level the application of destructive behaviors by contributing groups against non-contributing groups was considerably more subtle. Although subtle, instances where such destructive behaviors were misdirected against non-contributing struggling groups were identified. Rather than the previous misallocation of tasks that occurred with individuals, groups tended to be 'punished' by contributing groups for perceived loafing by having necessary task information withheld from them. The struggling groups were thus further disadvantaged when this behavior was misdirected at them: "..this time since one of the analysis coordinators did not want to share his analysis with the other analysis coordinators due to the fact that the other analysis coordinators don't know much about the program" (Student EC). Regularly throughout the first half of both semesters, instances arose where a group had this occur: "I have figured out the reason why I personally feel lost in regards to the progress of our assignment. This is because our group were [sic] not communicating with the rest of the class…so we've missed the instrumental group meeting" (Student F). Such comments by students in struggling groups were common in group minute books and individual journals. Interestingly, the struggling group was rarely aware that their fellow groups were deliberately withholding information, a common inter-group destructive behavior. It was generally attributed to an unintended communication breakdown or technical failure. Furthermore, this was the same behavior that contributing groups exhibited towards loafing groups. The following response to an instance of loafing illustrates this behavior: "Group 3 and Group 5 did nothing with the data entry and cleaning. This is not good

enough as a group project. We are all here to assist beyond our call of duty and at a minimum to meet our call of duty. The unreliability caused more stress to the groups that did show up… I feel we can't trust these groups in the future" (Student K). Within one week of this occurrence the other groups had removed Groups 3 and 5 from the class information exchange mailing list.

On one occasion, where information was being withheld by all other groups, the struggling group began to see the action as deliberate. Student G stated, "We were supposed to communicate with other groups …. however, due to the info sharing coordinator…not forwarding the emails from other groups, we were totally lost and confused. I tried to communicate with ….(group 2) regarding the attributes but never received any response." It was only in this particular instance that the withholding of information was discovered. Ironically it was the fact that it was being done in an uncoordinated naturalistic manner by the contributing groups that a period of 'too much' withholding was able to arise giving the game away. When this and less conspicuous break-downs or failures were objectively observed and recorded by the teaching staff it was clear that the contributing groups were either consciously withholding or unconsciously exhibiting a seemingly instinctive defense mechanism. This lends considerable support to Proposition 2.

An additional insight that should be noted here, which arose from these observations was a phenomenon similar to groupthink among contributing students. Unlike at the individual level, at the inter-group level there was considerable de-individuation regarding who was instigating and continuing the destructive behavior. The students had little individual insight into their collective application of destructive behavior. In fact, the most damaging behavior seemed to occur when

no individual was acting too destructively, but instead the minimally destructive and *un*coordinated actions of the individuals were brought together to manifest collectively highly destructive behavior.

Proposition 3: When the difference between a social loafing student/group and a struggling student/group is highlighted, students reduce their destructive behaviors.

When socially destructive behavior was recognized in the classroom, teaching staff immediately intervened to counter it before it severely impacted student experiences. Although minor interventions were undertaken during the first semester of this study, it wasn't until the second semester that a full understanding of the most effective method to intervene was developed. A brief overview of the intervention procedure is available upon request.

One of the major tests of whether an intervention could result in a reduction in destructive behaviors occurred with a specific group of struggling students. Early in the semester this group of students had become quite marginalized due to early difficulties in fully understanding the complexity of the research process. Other contributing groups picked up on the hesitation of this group to participate and began exhibiting destructive behaviors towards them. Two behaviors of particular concern were the withholding of project information from the struggling group, and the allocation of the group to writing difficult sections of the research proposal, with the intention of the group being publicly shown to be loafers through lack of success. Staff became aware of this intent when the performing students were asked to provide an explanation as to why inter-group information sharing seemed to be breaking down, and for the reasoning behind

the allocation of group tasks. These impartial questions did not draw attention to specific groups but rather to the behavior of the contributing groups. The performing students through honest assessment of their own behavior began to discuss how they were deliberately setting the students they perceived to be loafing up to fail. They offered justification for these actions through both direct enunciations of the desire to see them fail in some way, and through more subtle explanations of how they were setting a challenge to see if the students could confound expectations.

Upon recognizing this situation, the teaching staff spoke with key student leaders and the broader class, explaining the benefits of fully utilizing the capacity of all groups. The targeted group was eventually supported by the rest of the class in undertaking one of the most complex sections of the analysis. After several weeks of additional effort on the part of this struggling group, they became the class leaders for this part of the project, assisting those groups who formerly exhibited destructive behaviors against them. “[They] don’t seem to fully understand what to do with the data as I keep getting calls from them [and] helping them over the phone. But I’m happy that they [the calls] helped” (Student F from the previously struggling group). This highlights how a social dynamic can restrict a struggling group from reaching their potential. It was not that the students were unable to contribute, it was just that they had delayed understanding limiting their initial ability to contribute. In this case the overall contribution of the members of this group exceeded that of most class members.

A separate intervention was also undertaken during the first semester. This intervention employed a different mechanism with some success, but not as much. The mechanism employed

focused on prompting the struggling students to actively differentiate themselves from loafing students. “[It was] reflected to us that our group had a bad reputation. I was concerned and thought I need to do something to gain a better reputation. Follow with that [sic], I sent an email to group 3 and 5, to share the feedback... To make their work easier, I’ve highlighted those sub-instructions before sending them the word document and also offered them my help if their [sic] need” (Student F from struggling group). While this, and similar smaller interventions were generally successful in reducing destructive behaviors against struggling groups, the reduction was achieved in a considerably slower manner. This was because it took time for the struggling students to build a new perception of their group among the other class members.

On an individual level, the interventions allowed students to recognize the difference between a struggling student and a loafing student by the end of semester. This was noticeable in individual students’ reflections on the contributions of fellow group members. “I was very disappointed in his performance and [he has] let the whole group suffer” in contrast to another group member who was struggling to participate but trying where “she tried to help out in all areas of the final report” (Student F). On the whole these individual reflections in journals and minute books indicated an increased ability to coordinate across individuals and groups to use the strengths of even struggling groups. “I have found that during data analysis all… have been working really well together sharing information and combining skills to get past challenges” (Student H).

The most powerful piece of evidence indicating the effectiveness of interventions in assisting students to behave constructively with struggling students comes from a comparison of the subject entry and exit surveys. The subject entry survey made almost no mention of the need for

students to accommodate to the different skill levels of their fellow group members. Instead it emphasized the risks of social loafing. In contrast, the subject exit survey had a second strong theme emerge on top of the typical social loafing risks: that of ensuring matches in task assignment and skill levels. When asked for advice to pass on to future students there were comments like "…remain encouraging and supportive as well as positive. Let each person play to their strengths" (Student I); and "select a variety of people with different strengths" (Student J). Students emphasized a strong sense of collegiality, even with struggling group members, with advice like "don't point fingers when things go wrong" (Student K).

The fact that contributing students distinguished between a socially loafing student and a student with delayed understanding (a struggling student) is important. It highlights that students understand the distinction. The advice that the students gave future cohorts about being oriented towards constructive behaviors and away from destructive behaviors when dealing with struggling students provides strong evidence to support Proposition 3.

Proposition 4: With reductions in destructive behaviors, students have a more satisfying learning experience.

During the semester the amount of conflict among the students noticeably reduced, thereby improving the students' experiences within the subject. In addition there were small but significant moments of collective burden sharing that were not seen to the same extent prior to implementing interventions to reduce destructive behaviors.

One moment of burden sharing that was particularly noteworthy occurred during a data entry session during the second semester: a small group of students assigned to data entry had planned to undertake a single data entry session that was expected to take more than ten hours to complete. Due to the technical requirements, some struggling students had been allocated to non-data entry tasks that were to occur later in the project. This afforded them the opportunity to advance their understanding of the material ready for that stage of the project. As a result of their desire to participate and support their fellow students, these struggling students independently chose to organize shifts to visit the data entry students and bring them food. “There was not much I can [sic] help with…so I [and others] went shopping for food and drinks for the data entry students” (Student I). These moments of support greatly improved the students’ experiences within the subject. They marked noticeable contrasts to the more combative behavior with the previous semester’s cohort.

Although students reported in their individual journals a considerable degree of frustration and exhaustion throughout the project they largely reported an overall positive and satisfying learning experience. This positive theme largely revolved around the sense of achievement and the development of their interpersonal skills. “While this has been a very long process I have really enjoyed my experience with the subject…and think it has been very worthwhile. I think I have gained valuable skills, insights and experience not only with market research but also in management, team work and professionalism” (Student L). This offers strong support for Proposition 4, in that reducing destructive behaviors in class considerably improves student satisfaction.

As demonstrated above, contributing students have difficulty distinguishing between struggling students and social loafers. If not addressed this phenomenon can seriously impact upon the educational development of struggling students. This undermines the attempts of those marginal students that could achieve the required standard if given the opportunity.

PEDAGOGICAL IMPLICATIONS

The pedagogical approach for dealing with contributing students' confusion regarding the difference between struggling and loafing student has two components. The first is in the design of the curriculum so that students are educated about this issue. The second is in the application of intervention plans by the educator so that if destructive behaviors manifest they can be addressed before any major harm is done.

The development and testing of curriculum design was not the express focus of this research. Even so, the present study provided a number of important insights that assist with designing a curriculum that prevents socially destructive behaviors. The key aspects to such curriculum design include: a counseling plan for group formation; the designation of group member roles for students, and student self monitoring tools aimed at experiences as well as tasks.

A counseling plan for group formation provides a mechanism for the educator to inform students about how to optimally design their groups. Prior to the establishment of student groups students should receive counseling regarding having not just similar expectations, time commitments and goals with their group members (Payne & Monk-Turner, 2006), but different skills sets. This

needs to be supported within subject documentation such at course outlines and lectures. It should be noted to students that these different skill sets may be found beyond their normal social or cultural groups (Karns, 2006; La Hay & Mendoza, 1995; Payne et al., 2006; Pfaff & Huddleston, 2003). This helps students not only to build a group that is more likely to be functionally successful, but also instills an understanding that skills among group members should be diverse, and that some people may be more useful later in a project. This is critical to students understanding that a group member who may struggle initially can be a highly meaningful contributor when their particular skill set develops and/or becomes more critical later in the project.

The establishment of explicitly defined group member roles is also a critical part of curriculum development. In this definition it is important not to only list tasks that each group member role is responsible for but also the skills necessary, and desirable, for success. This helps students to match skills to group roles so that each group member has a basis to meaningfully contribute to the project, even if that is in a later stage of the project. It also allows students to highlight any skill deficiencies they may have and then actively work towards addressing them. This research found the inclusion of an 'information sharing' role was a critical success factor when addressing destructive social dynamics. The information-sharing students were responsible for managing the flow of information between groups within the class. By making a student in each group responsible, and thereby accountable, for this it makes it more difficult for the destructive behavior of information withholding to be undertaken.

Another aspect of curriculum development is the need to establish relevant student self-monitoring tools for the project. For our study, student reflective journals, minute books and weekly email updates to staff proved to be successful, but literature also suggests other possible tools (see Payne et al. 2006 for example). The nature of the tool itself is less critical than the instructions for this tool. The instructions for these tools should highlight the fact that they not only serve the purpose of documenting tasks, but also of documenting learning experiences and experiences of group dynamics. Assessment of these tools should reflect this focus. Such tools allow students to become more aware of how the social dynamics of the group may impact the pursuit of outcomes. With this awareness they are more able to meaningfully manage social dynamics, rather than relying on what are sometimes destructive instincts about how to operate in a group setting. While the documentation of group dynamics has a clear purpose, the inclusion of students learning experiences has a more subtle use. It was found that reports of learning allow for easy differentiation between struggling and loafing students. While both groups of students initially reported a low number of tasks completed, struggling students reported considerable learning experiences, in contrast to loafers who reported little learning experience. These tools thereby also provide evidence to support interventions by teaching staff when cooperation is not forthcoming within or between groups.

Despite best efforts by educators to design a curriculum that minimizes the occurrence of destructive behaviors it seems inevitable that it will continue to occur to some extent. Consequently, educators need to understand when and how to intervene when it occurs. It is important to note that for any successful intervention to occur the educator must be able to identify when a poor social dynamic is arising and destructive behaviors are being directed to

students. This is why the inclusion of student self-monitoring tools into the curriculum is so important. We would recommend these at both the individual and group level. Without these the application of interventions is considerably more difficult. In cases where interventions were needed in the present research, several rules were discovered that made the intervention much more likely to succeed. These rules were: 1) interventions should be aimed at the student exhibiting the destructive behavior; 2) discussion should focus on the behavior not people; and 3) discussions need to focus on benefits to the group as a whole.

The first rule of aiming interventions at students exhibiting the destructive behavior arose from comparing intervention methods in this research. Earlier interventions attempted to assist struggling students to differentiate themselves from loafing students. These proved to have limited success due to the time needed for struggling students to alter the perceptions of their fellow class members. Instead, by focusing on the source of the destructive behaviors a quicker cessation of behaviors can be achieved, allowing the struggling students greater opportunity to develop their ability. In most cases the source of the destructive behavior is a high contributing student in some form of leadership position in the class. Thus, when an intervention takes place with this student the ‘lesson learned’ from the intervention also tends to be disseminated to the rest of the class. The leader also starts to identify these behaviors in fellow class members and in many cases directly prevent them. This decreases the overall amount of destructive behaviors misdirected at struggling students.

The second rule for interventions is that they should focus on behavior and not people. This refers to the content of the discussions involving the students identified as the source of

destructive behavior. If task misallocation is occurring, students should be asked to explain why they are allocating tasks for the project in that way. If it is an instance of information withholding, students should explain how this could have occurred. By concentrating on the justification of students' behavior the focus is shifted away from the struggling student, whom may not be identifiable to students due to policy reasons, to the contributing student's *behavior*. Students are typically reasonably forthcoming about their own behavior when approached in the manner described, as there is no 'blame', just a discussion about what is occurring. By prompting self-reflection these contributing students are able to consider if this is the optimal behavior. With the educator's suggestion of more optimal constructive behavior the student is usually quite quick on the uptake of this behavior.

The third rule identified for interventions is to focus on the benefits to the group as a whole during interventions. Throughout all interventions, emphasis should be placed on the fact that with constructive behavior, for example matching work assignments to skill sets, the situation will improve for all students. That is, with such constructive behavior the outputs from struggling students will improve and a fairer distribution of workload will result. This offers a benefit to contributing students for behaving in a constructive way. Educators would also benefit from the subsequent uptake of constructive behaviors with happier students who obtain a lot more from their learning experiences.

LIMITATIONS AND FUTURE RESEARCH

One of the challenges of the analysis in this research is the presence of a relationship between whether the student is an international student, who faces unique learning challenges, and the subsequent group dynamics. Many international students in the classroom are struggling students as they are faced with not only learning the subject material, but learning it in a language and culture that is not their own (Rosser, 1998). A phenomenon emerging from this situation is that students predominantly prefer working with other students of the same ethnicity. Although students were counseled against this type of group selection, it appears to still occur to some extent. Such group member preference is observed equally across all ethnic groups and seems to arise from a desire among the students to be in a homogenous group and to manage risk with regard to working with a student that is limited in their ability to contribute (Payne et al., 2006). More research is needed in this area regarding how to address this desire for homogeneity so that group dynamics can be better managed.

One of the particularly daunting challenges of considering this research opportunity is the need to navigate the ethics clearance required before discussing such issues with students. Many ethics committees are hesitant to consider this issue for fear of a lack of sensitivity by the researcher. We as researchers need to feel empowered to deal with these issues. This will allow us to negotiate these challenges openly and in an understanding manner, rather than skirting the issue. Through this type of analysis we can better understand the drivers of group dynamics. This will allow educators to manage group dynamics through educating and supporting students' appreciation of the importance of embracing differences among group members in a more informed way. Ignoring this issue is a major shortcoming of all the literature in this area and it is something that requires immediate attention.

REFERENCES

Agar, M (1980). Hermeneutics in anthropology: A review essay. *Ethos*, 8, 253-272

Aggarwal, P., & O'Brien, C. L. (2008). Social loafing on group projects: Structural antecedents and effects on student satisfaction. *Journal of Marketing Education*, *30*(3), 255.

Belk, R., Wallendorf, M., & Sherry, J. (1989). The sacred and the profane in consumer behavior: Theodicy on the odyssey. *Journal of Consumer Research*, *16*(1), 1-39.

Bettenhausen, K. L. (1991). Five years of group research: What we have learned and what needs to be addressed. *Journal of Management*, *17*(2), 345-381.

Bourner, J. Hughes, M., & Bourner, T. (2001). First-year undergraduate experiences of group project work. *Assessment & Evaluation in Higher Education*, *26*(1), 19-39.

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.

Boyer, E. G., Weiner, J. L., & Diamond, M. P. (1985). Why groups? *The Organizational Behavior Teaching Review*, 9(4), 3-7.

Brandyberry, A., & Bakke, S. (2006). Mitigating negative behaviors in student project teams: An information technology solution. *Journal of Information Systems Education*, 17(2), 195-209.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Bruffee, K. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change*, *27*(1), 12-18.

Cheng, R., Lam, S., & Chan, J. (2008). When high achievers and low achievers work in the same group: The roles of group heterogeneity and processes in project-based learning. *British Journal of Educational Psychology*, 78(2), 205-221.

Colbeck, C. L., Campbell, S., & Bjorkland, S. (2000). Grouping in the dark: What college students learn from group projects? *Journal of Higher Education*, 71(1), 60-83.

Creswell, J. (2007). Qualitative inquiry & research design: Choosing amongst five approaches (2nd ed.). Sage London.

Cuseo, J. (2000). Collaborative and cooperative learning: Pedagogy for promoting new-student retention and achievement. Preconference workshop delivered at the 19th Annual Conference on The First-Year Experience. Columbia: SC.

Davis, S., & Franklin, S. (2004). Assessing the impact of student learning style preferences. Paper presented at the Physics Education Research Conference. Part of the PER Conference series. Madison, WI. 720, 53-56

Deutsch, M. (1949). A theory of cooperation and competition. Human Relations, 2, 129-152.

Deutsch, M. (1962). Cooperation and trust: Some theoretical notes. In M. R. Jones (Ed.), Nebraska symposium on motivation (pp. 275-319). Lincoln, NB: Nebraska Press.

Dewey, J. (1938). Experience and Education. New York, NY: Macmillan.

Dolnicar, S., & Stern, D. (2003). What do Australian practitioners expect from marketing graduates? Paper presented at the ANZMAC Conference, Adelaide. CD proceedings

Dommeyer, C. (2007). Using the diary method to deal with social loafers on the group project: Its effects on peer evaluations, group behavior, and attitudes. *Journal of Marketing Education*, *29*(2), 175-188.

DuFour, R., (2004) What is a Professional Learning Community? Educational Leadership 61 (8) (2004), pp. 6–11.

Falchikov, N. (1986). Product comparisons and process benefits of collaborative peer group and self-assessments. *Assessment and Evaluation in Higher Education*, 11(2), 146-165.

Falchikov, N., & Magin, D. (1997). Detecting gender bias in peer marking of students' group process work. *Assessment & Evaluation in Higher Education*, 22(4), 385-396.

Flyvberg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J. Gubrium, and D. Silverman (Eds.). *Qualitative Research Practice D*, London and Thousand Oaks CA: Sage.

Fox, N. J. (2003). Practice-based evidence. *Sociology*, *37*(1), 81-102.

Garvin, J., Butcher, A., Stephani, A., Tariq, V., Lewis, N., Blumson, R., Govier, R., & Hill, J. (1995). Group projects for first-year university students: an evaluation, *Assessment & Evaluation in Higher Education*, 20(3), 273-288-.

Goldfinch, J., & Raeside, R. (1990). Development of a peer assessment technique for obtaining individual marks on a group project. *Assessment and Evaluation in Higher Education*, *15*(3), 210-225.

Graham, R., Graham, B., & Whiting, V. (1997). Cooperative learning: The benefits of participatory examinations in principles of marketing classes. *Journal of Education for Business*, *72*(3), 149-152.

Hendry, G., Heinrich, P., Lyon, P., Barratt, A., Simpson, J., Hyde, S., Gonsalkorale, S., Hyde, M. & Mgaieth, S. (2005). Helping students understand their learning styles: Effects on study self-efficacy, preference for group work, and group climate. *Educational Psychology*, *25*(4), 395–407.

Hunsaker, P. L. (2004). Learning to manage intergroup dynamics in changing task environments: An experiential exercise. *Journal of Management Education*, *28*(6), 790-806.

Jacques, D. (1984) *Learning in Groups*. London: Croom Haley.

Johnson, D. (1970). *Social Psychology of Education*. New York, NY: Holt.

Johnson D., & Johnson, R. (1985). The internal dynamics of cooperative learning groups. In R. Slavin, S. Sharan, S. Kagan, R. Herzz-Laazarowitz, C. Webb, & R. Schmuck (Eds.). *Learning to Cooperate, Cooperating to Learn*. New York and London: Plenum press.

Johnson, D., & Johnson, R. (1987). Research shows the benefits of adult cooperation. *Educational Leadership*, *45*(3), 27-30.

Johnson, D., & Johnson R. (2005). New developments in social interdependence theory. *Genetic, Social and General Psychology Monographs*, *131*(4), 285-358.

Johnson, D., Johnson, R., & Smith, K. (1991). *Cooperative learning: Increasing faculty instructional productivity* (HSHC-ERIC Higher Education Report No. 4). Washington, DC: The George Washington University School of Education and Human Development.

Johnson, D., Johnson, R., & Smith, K. (1996). Demographic, density, conflict and work group outcomes: An interviewing process. Organisational science

Johnson, D., Johnson, R., & Smith, K. (1998) Cooperative learning returns to college: What evidence is there that it works? *Change*, *30*(4), 26-35.

Johnson, D., Johnson, R., & Smith (2007). The state of cooperative learning in post secondary and professional settings. *Educational Psychology Review*, *19*(1), 15-29.

Kane, J., & Lawler, E. (1978). Methods of peer assessment. *Psychological Bulletin*. *85*(3), 555-586.

Karns, G. L. (2006). Learning style differences in the perceived effectiveness of learning activities. *Journal of Marketing Education, 28*(1), 56-63.

Kleef, G., Dijk, E., Steinel, W., Harinck, F., & Beest, I. V. (2008). Anger in social conflict: Cross-situational comparisons and suggestions for the future. *Group Decision and Negotiation, 17*(1), 13-30.

La Hay, L., & Mendoza, A. (1995). The multicultural learning group: Shaking up cultural myths. *College Teaching, 43*(1), 36-41.

Lejk, M., Wyvill, M., & Farrow, S. (1999). Group learning in systems analysis and design: A comparison of the performance of streamed and mixed ability groups. *Assessment & Evaluation in Higher Education, 24*(1), 5-14.

MacGregor, J., Cooper, J., Smith, K., & Robinson, P. (Eds.). (2000). Strategies for energizing large classes: From small groups to learning communities: New directions for teaching and learning. Jossey-Bass.

McLean, C., Reid, C., & Scharf, F. (1999). The development of transferable skills in business studies degrees. *Irish Business and Administration Research*, 19/20(1), 47-64.

Nunamaker Jr., J. F., Reinig, B. A., & Briggs, R. O. (2009). Principles for effective virtual teamwork. *Communications of the ACM*, 52(4), 113-117.

O'Sullivan, T., Rice, J., Rogerson, S., & Saunders, C. (1996). *Successful Group Work*. London: Kogan Page in association with De Montfort University.

Panitz, T. (1996). *A definition of collaborative vs. cooperative learning*. Retrieved January 12th, 2010, from http://www.lgu.ac.uk/deliberations/collab.learning/panitz2.html

Parsons, D., & Drew, S. (1996). Designing group project work to enhance learning: Key elements. *Teaching in Higher Education*, 1(1), 65-80.

Payne, B., & Monk-Turner, E, (2006). Students perceptions of group projects: the role of race, age and slacking. *College Student Journal*, 40(1), 132.

Perry, C. (1998). Processes of a case study methodology for post graduate research in marketing. *European Journal of Marketing*, 32(9/10), 785-802.

Pfaff, E., & Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education*, 25(1), 37-45.

Rockwood, R. (1995). *National Teaching and Learning Forum*, 4(6)6, part 1.

Rosser, S. (1998). Group work in science, mathematics and engineering. *College Teaching*, 43(6), 82-91.

Rundle-Thiele, S., Bennett, R., & Dann, S. (2005). The successful preparation and development of future marketing professionals: A recommended methodological framework. *Journal for Advancement of Marketing Education*, 7, 27-35.

Slavin, R. (1983). When does cooperative learning increase student achievement? *Psychological Bulletin*, 93, 429-445.

Smith, B. & MacGregor, J. (1992). What is collaborative learning? In A. Goodsell, M. Maher, V. Tinto, B. Smith & J. MacGregor (Eds.). Collaborative learning: A sourcebook for higher education. National Center on Postsecondary Teaching, Learning, and Assessment at Pennsylvania State University.

Smith, K., Sheppard, S., Johnson, D., & Johnson, R. (2005). Pedagogies of engagement: Classroom based practices. *Journal of Engineering Education*, 1(1), 15.

Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research*, 21(3), 491-504.

Strong, J., & Anderson, R. (1990). Free-riding in group projects: Control mechanisms and preliminary data. *Journal of Marketing Education, 12*(2), 61-67.

Tellis, W. (1997). Introduction to case study. *The Qualitative Report*, 3(2). Retrieved 11th January 2010, from http://www.nova.edu/ssss/QR/QR3-2/tellis1.html

Tobin, G., & Begley, C. (2004). Methodological rigor within a qualitative framework. *Journal of Advanced Nursing*, *48*(4), 388-396.

Williams, K, Harkins, S., & Latane, B. (1981). Identifiability as a deterrent to social loafing: Two cheering experiments. *Journal of Personality and Social Psychology*, 40(2), 303-3.

Wood, C. M. (2003). The effects of creating psychological ownership among students in group projects. *Journal of Marketing Education*, 25(3), 241-249.

Yin, R. (2003). *Applications of Case Study Research* (2nd ed.). London: Sage Publications.

Yin, R. (2008). *Case Study Research: Design and Methods* (4th ed.). London: Sage publications.

Young, L.C. & Freeman, L.M. (2008). A case for contrast as a catalyst for change, *International Journal of Learning*, 15(3) 295-303.