Peer Evaluations in Team Projects: What a Major Disconnect Between Students and Business Instructors

Colleen McClure
Saginaw Valley State University

Alyssa Webber
Saginaw Valley State University

Gary L. Clark
Saginaw Valley State University

This study explores the perceptions of instructors and students toward peer evaluations. Because little is known about differences between instructors' and students' perceptions of peer evaluations, a questionnaire was sent to randomly selected instructors at AACSB accredited colleges in the United States and to 417 students who had experience with a specific peer evaluation process. Students thought peer evaluations improved their critical thinking and evaluation skills. Instructors believe that students do not have the skills to evaluate one another. From respondents' statements, it appears students have a higher opinion of the value of peer evaluations than instructors.

INTRODUCTION

Numerous studies have investigated students’ perceptions of peer evaluations (P.E.’s) in team projects, however, no studies were found that examined the differences between the perceptions of instructors versus students about peer evaluations. This study was designed to fill that gap in marketing education by collecting data to determine the difference between instructors’ and students’ perceptions of P.E.’s. Understanding instructors’ attitudes toward peer evaluations and how students’ and instructors’ perceptions may differ, could encourage instructors to systematically consider the value of using P.E.’s when team projects are assigned by the instructor. The results of the present research may convince instructors to modify their own beliefs and increase the use of peer evaluations when team projects constitute a significant portion of a student’s course grade.

LITERATURE REVIEW

Practitioners believe that business majors need to possess good teamwork skills to succeed in the business world. Employers expect university graduates to integrate into existing employee teams and work well with a diverse range of people (Freeman & Greenacre, 2011). Business’ use of teams to cope with a fast-changing global economy is a well-documented trend (Gueldenzoph & May, 2002). Lejk and Wyvill (1996) note that “teamwork skills are the second most important attribute looked for in
prospective employees” (p. 268). The widespread use of teams in business reflects the reality that an employee working alone cannot have complete knowledge because of the vast amount of information available in today’s business environment (Barr et al., 2005). Anecdotal evidence suggests that managers spend approximately 60% to 90% of their workday in team activities (Chapman & Van Auken, 2001).

Business professors have recognized the importance of teaching students how to work effectively in a team. In our College of Business, the team projects are referred to as “Client-Financed Projects” (CFP). A CFP is a project that involves a real business that wants to solve real problems, provides money to pay for expenses, meets in the classroom with the students, and shares company information with the students. The CFP’s are semester-long projects and require teams to frequently meet outside of class.

Nearly 35 years ago, Cook (1981) noted that “The value of team projects as a learning tool has long been recognized as a means for enabling students to learn from each other. Students acquire not only the knowledge that other team members have to offer, but in addition acquire skills in team dynamics and leadership which should prove valuable in their business careers” (p. 50). Improving a student’s ability to work effectively in a team should be an important goal for academicians (Barr et al., 2005). Team projects enhance the development skills and knowledge specifically relevant to the real world and provide a very good forum for experiential learning. Team projects are increasingly used as a teaching and learning method in higher education to promote knowledge building through social interaction (Fellenz, 2006). The Association to Advance Collegiate Schools of Business (AACSB, 2013) accreditation standards require business instructors to “encourage collaboration and cooperation among participants” (Standard 13), want students to “contribute to the learning of others” (Standard 14), and include learning experiences in such skill areas as “group and individual dynamics in organizations” (Standard 15). The AACSB stresses that students need to acknowledge their responsibilities to their fellow students by actively participating in group-learning experiences. “The use of student teams for class projects is now a common pedagogical practice in many business schools” (Chen and Lou, 2004, p. 275).

**Problems with Team Projects**

A frequently mentioned problem with a team project is how to deal with slackers, free-riders, or social-loafers (Bacon, 1999; Joyce, 1999). A “slacker” is a teammate who does not participate fully, does less than his or her fair share and contributes little or no work to complete the team project (Beatty, Haas, & Sciglimpaglia, 1996). Students are concerned about team work because of mistrust in the other team members because they are worried about the fairness of an assessment that does not account for differential individual inputs (Fellenz, 2006). Free riding by individual members is frequently cited as a problem associated with team projects (Fellenz, 2006; Aggarwal & O’Brien, 2008). A common challenge for instructors is the assessment of individual contributions to teamwork (Brutus & Donia, 2010; Strong & Anderson, 1990). Dommeyer (2006) suggests that “because instructors cannot see first-hand how each team member is contributing to the team’s goals, peer evaluations have become a popular way to assess each team member’s contribution” (p.21). Giving the same grade to all team members makes hardworking students unhappy and resentful and sends the wrong message to slackers (Paswan & Gollokota, 2004).

**Using Peer Evaluations in Team Projects**

Cook (1981) defines peer evaluations as “a system which allows the professor to assign individual grades for a team project which in turn would encourage full participation by all team members” (p.50). “In peer evaluations, team members judge their fellow members on specific traits, behavior, and achievements” (Chen and Lou, 2004, p. 276).

P.E.’s provide the instructor with information on the team’s project activities (Brandyberry & Bakke, 2006), and teammates have a unique perspective to evaluate the relative contributions of team members (Malone, 2011). Also, P.E.’s can help the instructor provide more equitable grading of students based on their individual contributions to the overall team effort (Beatty et al., 1996). Peer evaluations provide students the chance to reward superior individual contributions, the opportunity to deal with slackers, and to receive performance feedback from their peers (Fellenz, 2006). “Peer evaluations can sensitize students
to the potential for reduced benefits and therefore encourage them to contribute fully to the team effort” (Bacon, Stewart & Silver, 1999, p. 471). Students have reported that completing P.E.’s is an effective learning activity in itself especially when the student conducts both peer and self-evaluations (Gueldenzoph & May, 2002). Peer evaluations are both valid and reliable and can have a positive impact on student achievement and attitudes (Hannay, 2012; Brandyberry & Bakke, 2006). Additionally, students are a better source of evaluating team members than the instructor (Gueldenzoph & May, 2002). Finally, doing P.E.’s helps students relate to and practice for real-life experience (Hannay, 2012).

Previous Studies of Students’ Attitudes towards Peer Evaluations

P.E.’s used for evaluative purposes tended to contain greater halo effects and be more lenient, less differentiating, less reliable and less valid than P.E.’s used for developmental purposes (Farh, Cannella Jr. & Bedeian, 1991). Concerns about factors such as friendships or reciprocity on P.E.’s appear ill founded as research has indicated the negligible impact that friendship has on actual peer assessments (Fellenz, 2006). Friendships among teammates will not guarantee that there will be collusion or any other bias of that kind and relational effects such as friendship were negligible which provides evidence that it is possible for peer assessments to be relatively free of friendship bias (Magin, 2001). May (2008) studied the similar-to-me effect on P.E.’s and concluded that making students aware of this similar-to-me effect will reduce the tendency to rate a teammate higher based on one’s shared characteristics with them. The similar-to-me effect is defined by May (2008) as the unconscious tendency to favor people who are physically and/or professionally similar to them.

METHODOLOGY

Sample Size and Composition

Two populations of interest were surveyed. Sample #1 consisted of 417 different students who had participated in at least one client-financed project during Fall 2009 through Fall 2012 at the authors’ university which is accredited by the AACSB and is located in a tri-county area with a population of nearly 350,000 residents. The students were enrolled in 28 classes that contained 106 consulting teams and 94% of the teams contained 5 to 7 members. All students were a junior or senior and 77% were a business major. The students were enrolled in the following courses: Marketing Research, Marketing Principles, Advertising Strategy, and Management Principles. All the students participated in at least one significant semester-long client-financed consulting project. Each project involved the collection and analysis of primary and secondary data. The deliverables to the client consisted of a 10-page executive summary, a 102-157 page written report and an oral presentation to the students’ client. In every class, the students completed a peer evaluation at the midterm and at the end of the semester. The students were familiar with peer evaluation practices, so they were considered appropriate subjects for our study. Sample #2 consisted of 1,429 business instructors who were located in all 50 states and were employed at 491 different United States universities accredited by the AACSB (2013).

Questionnaire Development

Using a similar method used by Koojaroenprasit et al., (1998), the questionnaire was designed specifically for this study because no previous studies were found that compared business instructors’ attitudes versus students’ attitudes toward the use of peer evaluations. Section 1 of the survey collected demographic characteristics about the student sample and demographic characteristics collected in other surveys of college instructors (Polonsky, Juric & Mankelow, 2003; Simpson & Siguaw, 2000). Section 2 measured instructors’ and students’ perceptions of peer evaluations by using a Likert Scale ranging from (1) “Very Strongly Disagree” to (6) “Very Strongly Agree” (Pelton, Strutton, & Raurwas, 1994). We used a 6-point Likert scale to increase response variability (Trocchia & Andrus, 2003) and to get a precise measure of agreement (Hannaford, Erffmeyer, & Tomkovic, 2005).
Questionnaire Administration
Survey Monkey was used to survey the two populations of interest. The survey of students was conducted in Fall 2013 and the survey of instructors was conducted in the Winter 2014 semester. The questionnaire to instructors consisted of Likert-Scale statements that paralleled the statements used on the student survey. Students were asked about their attitudes toward peer evaluations after the students had participated in one or more client-financed projects. The survey for instructors used statements framed in terms of the instructors’ perceptions of the use of peer evaluations when team projects are assigned. Although there were subtle differences between the statements presented to the students and the instructors, the Likert-Scale for each statement was identical. For the majority of the statements, only a very minor change in the statement needed to be made and eight statements were identical on both surveys.

### TABLE 1
DIFFERENCES BETWEEN INSTRUCTORS’ AND STUDENTS’ PERCEPTIONS OF PEER EVALUATIONS

<table>
<thead>
<tr>
<th>Qn. #</th>
<th>Question</th>
<th>Faculty</th>
<th>Student</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Students will give themselves the P.E. they deserve</td>
<td>10%</td>
<td>77%</td>
<td>67%</td>
</tr>
<tr>
<td>2)</td>
<td>Truthful when evaluating teammates</td>
<td>18%</td>
<td>78%</td>
<td>60%</td>
</tr>
<tr>
<td>3)</td>
<td>Students deserved final P.E. received</td>
<td>22%</td>
<td>78%</td>
<td>56%</td>
</tr>
<tr>
<td>4)</td>
<td>P.E.’s encourage students to work harder</td>
<td>16%</td>
<td>57%</td>
<td>41%</td>
</tr>
<tr>
<td>5)</td>
<td>P.E.’s reward hard work</td>
<td>24%</td>
<td>59%</td>
<td>35%</td>
</tr>
<tr>
<td>6)</td>
<td>Will evaluate their friends differently</td>
<td>41%</td>
<td>9%</td>
<td>32%</td>
</tr>
<tr>
<td>7)</td>
<td>Team President’s P.E. should hold more weight</td>
<td>4%</td>
<td>35%</td>
<td>31%</td>
</tr>
<tr>
<td>8)</td>
<td>P.E.’s show how much effort member contributed</td>
<td>24%</td>
<td>53%</td>
<td>29%</td>
</tr>
<tr>
<td>9)</td>
<td>P.E.’s are good way to identify slackers</td>
<td>41%</td>
<td>64%</td>
<td>23%</td>
</tr>
<tr>
<td>10)</td>
<td>Instructor’s should use P.E.’s</td>
<td>43%</td>
<td>65%</td>
<td>22%</td>
</tr>
<tr>
<td>11)</td>
<td>Will be lenient when evaluating teammates</td>
<td>30%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td>12)</td>
<td>Reluctant to give teammates low P.E.</td>
<td>31%</td>
<td>9%</td>
<td>22%</td>
</tr>
<tr>
<td>13)</td>
<td>P.E.’s motivate slackers</td>
<td>10%</td>
<td>27%</td>
<td>17%</td>
</tr>
<tr>
<td>14)</td>
<td>Afraid to give poor P.E.</td>
<td>19%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>15)</td>
<td>Gave teammates they dislike a low P.E. score</td>
<td>15%</td>
<td>&lt;2%</td>
<td>14%</td>
</tr>
<tr>
<td>16)</td>
<td>Students will conspire with teammates</td>
<td>6%</td>
<td>20%</td>
<td>14%</td>
</tr>
<tr>
<td>17)</td>
<td>Students will feel uncomfortable evaluating teammates</td>
<td>18%</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>18)</td>
<td>Considered teammates feelings when giving P.E.</td>
<td>20%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>19)</td>
<td>Will give friends a high P.E.</td>
<td>16%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>20)</td>
<td>Afraid teammates would fail because of P.E. given</td>
<td>16%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>21)</td>
<td>Students need training to do P.E.’s</td>
<td>43%</td>
<td>41%</td>
<td>2%</td>
</tr>
<tr>
<td>22)</td>
<td>Students will give all teammates similar P.E’s</td>
<td>12%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>23)</td>
<td>P.E.’s create group conflict</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>
RESULTS

Respondents’ Characteristics
A total of 122 former students returned a completed questionnaire. Out of 1,429 questionnaires sent to instructors, responses from 129 instructors were received and analyzed.

Females made up 55% of the 122 student respondents and 57% had participated in two or more client-financed projects. Approximately 78% were employed full time and nearly 32% of the students have worked at a company that used peer evaluations. Approximately 71% of the students were 23 to 27 years old, nearly 77% were a business major, and 48% were marketing majors.

Two-thirds of the instructors were males and nearly 64% were 58 years old or older. Nearly 70% of the instructors were an Associate or Full Professor and 62% have taught 13 years or more. Nearly 72% of the instructors have supervised a client-based project. Approximately 75% of the instructors use peer evaluations and 60% think P.E.’s should be worth less than 11% of a students’ total course grade.

Large Differences Between the Perceptions of Instructors and Students Regarding Peer Evaluations
Table 1 shows the differences between the perceptions of instructors and students regarding peer evaluations. The largest difference involved the students being honest when assigning a P.E. score. On a Likert scale, 77% of the students chose “Very Strongly Agree” (VSA) or “Strongly Agree” (SA) in response to the statement “I gave myself the peer evaluation I deserved” while only 10% of the instructors chose to mark “VSA” or “SA”, a difference of 67%. For the students, 78% ”VSA” or ”SA” they were truthful when evaluating teammates, but for the instructors, only 17% ”VSA” or ”SA” that students would be truthful when evaluating teammates. Nearly 72% of the students ”VSA” or ”SA” they deserved the final peer evaluation they received. In contrast, only 22% of the instructors ”VSA” or ”SA” that students deserved the final peer evaluation they received. Approximately 57% of students, but only 16% of instructors “VSA” or “SA” that “Peer evaluations encourage students to work hard.”

Small Differences Between the Perceptions of Instructors and Students Regarding Peer Evaluations
There were four areas where the students’ perceptions were quite similar to the instructors’ perceptions of peer evaluations. Only 5% of students and only 5% of instructors “VSA” or “SA” that peer evaluations created team conflict. Only 11% of students and 12% of instructors “VSA” or “SA” with the statement: “Students tend to give all teammates similar peer evaluations.” Training students to accurately evaluate teammates is an area where there was little difference between the opinions of instructors and students. Approximately 41% of students and 44% of instructors ”VSA” or ”SA” that students need training to evaluate others. Another small difference between students and instructors involves the subject of students worrying about failing their teammates. Only 9% of students ”VSA” or ”SA” that they were afraid a teammate would fail because of the final peer evaluation they gave a teammate. For the instructors, 16% ”VSA” or ”SA” that students would be afraid that a teammate would fail because of the final peer evaluation they gave their teammate.

DISCUSSION

Implications for Marketing Education
Business students will benefit from participating in the peer evaluation process because doing peer evaluations teaches students to think critically about themselves and their peers and also prepares students for the workplace. Instructors may not use peer evaluations because they require extra work and effort on their part and they believe students are not qualified to evaluate one another. The following quotes from instructors suggest that instructors are too lazy to use peer evaluations when team projects are assigned: “Do not want to go through the effort,” “It is more work to use them than not to,” “Too much of a hassle,” “It can be a lot of extra work,” and finally two instructors wrote: “lazy” and “laziness.”

One peer evaluation system will not work for all instructors, but a benefit of peer evaluations is that they can be created and modified to fit any type of course. Students will be more prepared for the business
world if they are exposed to multiple types of peer evaluation systems. In the workplace, students will be more comfortable evaluating themselves and others if they have prior experience and training while in college.

Quotes from the instructors may explain why instructors think students will not be honest when completing peer evaluations. A part-time instructor wrote: “Peer evaluations end up being a popularity contest.” One Assistant Professor wrote: “Naturally, students will be easier on friends than non-friends.” The literature on peer evaluations suggests that factors such as friendships have a negligible impact on actual peer assessments (Fellenz, 2006; Magin, 2001).

Instructors also questioned the students’ truthfulness when doing peer evaluations. One Associate Professor wrote: “Little truth from students.” A Full Professor wrote: “Students I encounter will never assign grades even close to honest, objective assessment. Therefore faculty won’t waste their time deferring to student judgments.” The second quote is especially sad to read because one has to wonder why this instructor has such a low opinion of the honesty, ethics and skills of students enrolled at his university.

Some instructors’ comments appear to question a student’s ability to do peer evaluations. One instructor wrote: “students are in college to learn. They do not have the skills to judge each other’s work.” An Associate Professor wrote: “Don’t believe that students do a credible job evaluating their peers.” Numerous studies have supported the idea that peer evaluations are valid and reliable (Cederblom & Lounsbury, 2008; Fellenz, 2006; Dingel, Wei, & Huq, 2013). Several authors believe that students are in the best position to evaluate a teammate’s level of contribution to completing the team project (Gueldenzoph & May, 2002; Malone, 2011).

The following comments may explain why instructors do not believe students will work hard when peer evaluations are used with a team project. A Full Professor wrote: “Some [students], because of their sense of entitlement, feel they are victims and don’t improve.” Also, this instructor thinks P.E.’s should only count for 5-10% of a student’s course grade.

The instructors may believe the P.E.’s have little effect on a team’s dynamics because nearly 60% of the instructors let P.E.’s count for less than 11% of a student’s course grade and 13% think P.E.’s should count for only 11 to 15% of a student’s course grade. Several “experiments” about students’ perceptions of peer evaluations have noted that the peer evaluations had little or no impact on the “subjects” course grade (Ghorpade & Lackritz, 2001; Koeck & Guthrie, 1975; Parker & Kristol, 1976). If peer evaluations count for only 15% or less of a student’s course grade, neither the student nor the instructor may care what PE score is given. Also, many articles about the use of P.E.’s have noted the P.E.’s are only collected at the end of the semester. If the students do not know how they have been evaluated by their teammates until the class is over, there is no chance P.E.’s can create group conflict during the course of the semester.

Some instructors believed that students will give teammates similar peer evaluations. One instructor wrote: “Students rate everyone the same.” Another Full Professor wrote: “Limited value because students, at the end, tend to give everyone the same percentage.” Data from 31 classes where P.E.’s were used to evaluate the performance of 699 students strongly support the idea that students do not give every teammate the same peer evaluation score.

The present research suggests that students believe they are honest, ethical, and able to evaluate their peers. Students believe they have the skills and ability to provide valid and reliable peer evaluations and that peer evaluations encourage teammates to work harder and reward hard work.

As Table 1 shows, in many areas, the perceptions of instructors and students about peer evaluations are quite different. We are disheartened by some of the comments written by the instructors. At least 30 instructors indicated that instructors did not do peer evaluations because instructors are too lazy or do not want to put any effort into determining the difference between hard workers and slackers.

When asked to respond to the question: “Why do you think professors might not use peer evaluations in business classes?” An Assistant Professor wrote: “Who gives a sh*t what students did what? The client does not care. They only care about the final product and that is all I care about as well.” The four students in a six-person team who worked very hard on the project will not like the fact that their
instructor was too lazy or incompetent to assign each team member a grade based on each students’ level of contribution to completing the project. What kind of instructor thinks it is fair to give slackers the same grade given to hard workers when a team project is part of the students’ course grade?

Other comments made us question some instructors’ qualifications to even be teaching business classes at the college level. The comments below suggest that some academicians have no idea about what happens in the real-world workplace.

1) “As someone who sees myself responsible for preparing young people for the business world, I find it difficult to justify the use of such evaluations since they are for the most part, not a ‘real world’ component of teamwork and team evaluations.”; 2) “In the workforce, peer evaluations are often no part of the process-the team is judged, as a whole, on their outcomes.”; 3) “The instructor may feel like the team project is more ‘real world’ without peer assessment.”

Other comments, such as those listed below, suggest that there is strong support for using peer evaluations when team projects are assigned:

1) “I’ve refined my peer evaluation over many years and feel it works well.”; 2) “[Peer evaluations if] done well, [are an] effective and fair way to gauge group dynamics.”; 3) “[Peer evaluations] are needed for any class that uses team projects.”; 4) “It should be used in every team project.”; 5) “I think it is a requirement for team work.”; 6) “Necessary where groups are used.”; 7) “I believe peer evaluations are very important for business classes as students will be working often in cross-functional teams in their careers and need to get used to it.”; 8) “I think business classes should have peer evaluations as students will, upon graduation, be evaluated by their superiors in the workplace.”

Several comments indicate there is considerable interest in research that reports the attitudes of instructors and students about peer evaluations.

1) “Your survey really made me think.”; 2) “This is an important project.”; 3) “Interesting teaching implications.”; 4) “I think this is a valuable issue to take a look at”; 5) “Look forward to… reading about the findings.”; 6) “Love to see the results.”

After reviewing the data, we leave the reader with the following thoughts. Some instructors believed teachers did not use P.E.’s because instructors are too lazy or did not want to do any extra work to discover which team members were hard workers and which students are slackers. Sadly enough, several respondents felt their students would not be truthful when doing peer evaluations while other respondents believed their students did not possess the skills necessary to provide valid and reliable peer evaluations. Other instructors appear to be out of touch with the “real-world” workplace by making comments similar to the following comment: “In the workforce, peer evaluations are often no part of the process.”

On the plus side, several comments suggest that instructors find peer evaluations helpful and valuable when team projects are assigned. Also, a number of instructors felt the current research was valuable and would like to see the results of the research.

Finally, students who have worked on a complex and multi-dimensional client-financed project overwhelmingly agreed that peer evaluations should be used when a team project was assigned. When the students were asked to respond to the following statement: “Professors who do team projects should use peer evaluations to determine the effort each teammate contributed,” out of 116 students who responded to the statement, 93% of the students at least “Tend to Agree” with the statement. Additionally, 89% of the instructors at least “Tend to Agree” with the statement. In conclusion, if a team project is assigned, peer evaluations should be used to determine who are the hard workers and who are the slackers on the team. As one Full Professor wrote: “Free riders should never be rewarded in college or at work.”

REFERENCES


