

Student Views of Class Projects as Learning Experiences

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Abstract

Group projects have long been an important element of higher education classes. Class projects involve additional cooperation and coordination among students. Student perceptions are an important factor in evaluating the effectiveness of projects. This exploratory study used a 39-item questionnaire to examine undergraduate student perceptions of class projects in courses in recreation and sport management at the conclusion of the projects. Students were highly favorable of class projects as a learning experience and identified increased skill development in time management, planning, and organizing and working with others. Presence of a noncontributing group member had no effect on student perceptions of class project benefits ($t(38) = 1.7, p = 0.09$). These findings provide support for the use of class projects in recreation and sport management courses as a valuable teaching tool. Further research of student perceptions of class projects across multiple universities is needed.

Keywords: *class projects; group projects; teamwork*

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Just outside a university classroom, students are talking after their first class meeting. A small group includes a student who is bemoaning the project that the instructor had introduced during the class period. The student vigorously complains about previous group projects and states a strong preference to work independently rather than in groups. Across the hallway, a large group of students eagerly discuss the class project expressing excitement about the relevance of the project to their future career and tell how much they have learned from group projects in the past. Scenarios such as this one, with similar mixed reviews, are likely to be repeated as instructors in recreation and sport management implement group projects and/or class projects into the curriculum.

Group projects have been defined as “an assignment that requires two or more individuals, interacting and interdependent, to come together to achieve specific objectives” (Young & Henquinet, 2000, p. 56). Group projects are used in higher education curriculum for a variety of reasons. Group projects may be used for student-centered reasons, such as to engage students in realistic application of course material and to encourage positive student attitudes and motives. Alternatively, group projects may be used to better prepare students for the work place and to satisfy outside stakeholders (Blowers, 2003; Colbeck, Campbell, & Bjorklund, 2000; Young & Henquinet, 2000).

Potential employers of university graduates demand a workforce in which employees are able to work well together (Blowers, 2003; Colbeck, Campbell, & Bjorklund, 2000; Hansen, 2006; Young & Henquinet, 2000). Accrediting bodies are another set of influential external stakeholder groups for colleges and universities that sometimes require development of students’ skills in working with others. Hansen (2006) notes the Association to Advance Collegiate Schools of Business has established teamwork skills as a required learning standard for its members. The Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COARPT) does not specifically mention “teamwork skills” in its standards (COARPT, April 2013). The Commission on Sport Management Accreditation (COSMA) does not specifically mention “teamwork skills” in its common professional components (COSMA, 2013). Nevertheless, teamwork skills are necessary for management of contemporary sport organizations especially those with team-based designs (Covell, Walker, Siciliano, & Hess, 2007). Group projects have been found to be effective teaching tools for development of teamwork skills demanded by external stakeholders (Colbeck, Campbell & Bjorklund, 2000; Hansen, 2006). Therefore, teamwork skills are one benefit of group projects as a teaching tool.

The authors’ personal experience has been that class projects, such as planning and implementing a sport or recreational event, involve even more cooperation and coordination among students than group projects such as a marketing plan or facility plan. Extensive cooperation and coordination is needed in class projects because all students in the class work together on a single project and are organized into small groups to work on different components of the single class project. For the purposes of this work, we define a class project as a semester long project in which all students in a class work collectively to complete the project requiring interaction and interdependence within and among subgroups. Class projects may be another method that can help students to develop teamwork skills. However, there has been no research on class projects. The purpose of this study is to examine student perceptions of class projects.

Literature Review

The existing literature on group projects may be divided into three main segments. One area of research on group projects has focused on identifying group project benefits and group project problems (Hansen, 2006). Other studies on the use of group projects as a teaching methodology have highlighted best practices for effective organization and management to minimize group project problems and maximize the positive student outcomes from group projects (Blowers, 2003; Brooks & Ammons, 2003; Chen & Lou, 2004; Cummings, 2010; Payne, Monk-Turner, Smith, Sumter, 2006; Myers et al., 2009; Tyagi, 2010; Wicks & Stribling, 1991; Young & Henquinet, 2000). Finally, some studies have focused on student perceptions of group projects (Hansen, 2006; Brooks & Ammons, 2003; Payne, Monk-Turner, Smith, & Sumter, 2006).

Group Project Benefits and Problems

The literature on the benefits and problems associated with group projects has been summarized by Hansen (2006) in his meta-analysis of group projects literature. Benefits included collaborative learning, experience with complex work, realism or emulating work environment, improved communication skills, improved interpersonal /social/team skills, active or advanced learning, persistence when facing adversity, increased knowledge base or deep thinking, higher student motivation, positive interdependence, greater achievement, sense of meaningfulness, and improved multicultural relations. These benefits included both student outcomes and educational goals. Hansen (2006) also noted the costs or problems associated with group projects identified in the literature are free-riding or social loafing, inadequate rewards or poor grading schemes, behavioral or attitude problems, inferior skills, lack of leadership, specialization of skills, transaction cost issues, and stifling of individual innovation or creativity. While the positive outcomes of group work have been found to be valuable for student learning, the problems may reduce the effectiveness of student outcomes and may have caused educators to question the appropriateness of group projects to achieve educational goals in the curriculum.

Faculty Best Practices

Scholars of pedagogy in a variety of disciplines have provided insight into effective methods to counter group project problems and enhance the benefits associated with group work. The literature shows group selection techniques and methods for organization for group projects can increase the positive outcomes of group projects (Ashraf, 2004; Blowers, 2003; Young & Henquinet, 2000). For example, Blowers advocates using student self-assessments of skill to form balanced groups rather than random assignment. After groups are determined, researchers have found specific instruction in group management skills is effective to help students improve group work (Cummings, 2010; Hansen, 2006; Payne, Monk-Turner, Smith, & Sumter, 2006; Wicks & Stribling, 1991). Multiple methods are available for evaluation of students work including the use of peer evaluation, practitioner evaluation, and instructor evaluation (Young & Henquinet, 2000; Hansen, 2006). Peer evaluation has the advantage of motivating student's participation and providing more accurate assessment of student contributions to the project (Chen & Lou, 2004). Wicks and Stribling (1991) outline a process for using standardized scores from peer evaluations to adjust the group grade according to individual contribution. Another effective method which can maximize the benefits of group work is adjusting grades based on individual

contributions rather than assigning all students in a group the same grade (Blowers, 2003; Brooks & Ammons, 2003; Chen & Lou, 2004; Wicks & Stribling, 1991; Young & Henquinet, 2000). Hansen (2006) advocates using multiple methods of evaluation.

The presence of a noncontributing group member may have a negative impact on group work and requires effective group management skills. *Social loafing* (Su, 2007), *free riding* (Brooks & Ammons, 2003), and *slackers* (Payne & Monk-Turner, 2006), are terms used to describe the phenomenon when a group member contributes little or nothing to the group outcomes and stands to benefit from the work of his or her peers (Su, 2007). Myers and colleagues (2009) examined the presence of slackers in college classroom and student reaction to slackers. These researchers (Myers et al., 2009) concluded from their qualitative study that students were frustrated by the indifferent attitude of slackers in their groups. Students said they dealt with their frustration by ignoring slackers or assigning them minor tasks (Myers et al., 2009). Payne and Monk-Turner (2006) found students with a slacker in their group were less positive toward group projects compared to other teaching methods. According to Ashraf (2004), the presence of a less motivated student lowered the grades of an industrious student in group projects when all students in the group receive the same grade. Faculty using group projects must be aware of the potential for social loafing and measures that can be used to counter the negative impact of social loafing.

In an effort to determine interventions instructors might use to improve group work and student perceptions of group work, researchers have attempted to determine frequency of peer evaluation needed during the group process to reduce social loafing (Brooks & Ammons, 2003). They found that evaluation every four weeks (at the end of each learning module) improved students' view of group experience and reduced social loafing problems (Brooks & Ammons, 2003). Tyagi (2010) found that student motivation was related to social loafing. Further he determined when faculty frequently reinforced the positive relationship between effort, performance and the rewards (good peer evaluations and good grades), social loafing decreased. Thus, faculty strategies and practices in managing group projects have been found to influence student effort.

Student Perceptions

Researchers have found that students generally responded positively to group work (Hansen 2006; Payne, Monk-Turner, Smith & Sumter, 2006). In addition, student attitudes toward group projects have been shown to be positively related to team work effectiveness (Hansen, 2006). Hansen (2006), in his meta-analysis of the literature, stated that numerous researchers have shown that active learning through group projects leads to increased student motivation, better comprehension, and increased levels of critical thinking skills. Bourner, Hughes, and Bourner (2001) reported first-year students had positive attitudes and had increased in both knowledge and personal skills from involvement in a group project. Students reportedly improved their time management, oral presentation, and teamwork skills.

Although most researchers have found students have positive views of group work, Brooks and Ammons (2003) noted some research shows some students had negative perceptions of group projects based on previous experience with poor communication and underperforming group members. Student views, both positive and negative appear to be an important consideration for instructors designing group projects.

Group Projects in Recreation and Sport Management

Literature related to the pedagogical tool of group work in recreation and sport management is limited. Scholarship in recreation and sport management has focused on elements of course design (Won & Bravo, 2009), effective practices for using group work (Cummings, 2010; Wicks & Stribling, 1991), experiential learning projects (Irwin, Southall, & Sutton, 2007; Pauline & Pauline, 2008; Pierce & Peterson, 2010), and service learning projects (Bruening, Madsen, Evanovich, & Fuller, 2010).

Won and Bravo (2009) examined the perspectives of 502 undergraduate sport management students on six attributes of course design: teaching aids (field trip, guest speaker, or no aid), assessments (number of exams from 1 to 3), web tool, (web tool or no web tool), course content (specific or broad), teaching format (lecture and discussion, discussion alone, lecture alone), and assignments (individual and group, individual alone, group alone). They found that students preferred a combination of individual and group assignments over a course with either only individual assignments or only group assignments. Furthermore, Won and Bravo (2009) found that students favored a course with only individual assignments more than a course with only group assignments.

Wicks and Stribling's (1991) work described a method of summative peer review designed to counter vindictive peer evaluations in leisure education. Wicks and Stribling (1991) advocated that leisure educators form groups of approximately equal capabilities. Cummings (2010) allowed students to select their own groups to improve group cohesion. Cummings (2010) found that use of student-initiated group management strategies such as discussing group roles, identifying tasks, and setting clear goals were positively related to outcomes of perceptions of group effectiveness, enjoyment of working in the group and learning benefits. There are a variety of considerations for faculty determining the best way to form groups and help students manage group work.

Scholars have also studied student perceptions of experiential learning projects in sport management. Pierce and Petersen (2010) developed a pre- and posttest survey instrument to determine student expectations and perceptions related to a sport sales project. Students involved in sales training and four weeks of sales calls with minor league professional sports teams had lower expectations of a sports sales career at the end of their experiential learning experience than before the project. Student views of personal sales skills and preparedness were not significantly changed following the project. Pierce and Petersen's (2010) findings were similar to Pauline and Pauline's (2008) results in a study of student perceptions of a client-based experiential learning project in sponsorship activation. It was unclear whether group work was involved in either of these studies or if students worked primarily independently. Group work was an important aspect of Spence, Hess, McDonald, and Sheehan's (2009) study of experiential learning in an undergraduate leadership course. These scholars randomly assigned the 39 students to groups of 5 or 6 students that developed a project to positively impact the community. Students engaged in reflective journaling and evaluation of their leadership development throughout the experience. Researchers (Spence et al., 2009) found that overwhelming majority of students (73%) were highly favorable of the experiential project though many students (69%) felt the reflective journaling requirements were excessive. Thus, experiential learning projects in sport management may provide students realistic insight into sport and recreation jobs and help students make informed decisions about which jobs to pursue and enable them to develop leadership and other skills.

Service learning projects involve students in organized activity to meet community needs (Bringle & Hatcher, 1996). Sport management students completing service learning projects as part of required courses felt their service learning project experience with youth sport organizations (minimum of 15 hours) was helpful for social interaction skills, resume building, development of practical skills, awareness of social responsibility, and interaction with others from diverse cultures (Bennett, Henson, & Drane, 2003). Bruening, Madsen, Evanovich, and Fuller (2010), examined the written responses of 131 university students who took part in an elective service learning course completing a minimum of 35 hours at one or more of 5 community organizations. The researchers (Bruening et al., 2010) found student's leadership skills were developed through the project, class discussions, and reflective papers. Others reported student outcomes were increased knowledge of other cultures, reduction of negative stereotypes, increased self-knowledge, reward of helping others, feeling they could make a difference, and working with others (Bruening et al., 2010). Bruening and colleagues indicated that one group of students planned a field trip as part of their service learning project, but it was unclear whether all students in these studies (Bennett et al., 2003; Bruening et al., 2010) worked as a group in the completion of the service learning hours. Research on student views of service learning projects in sport management has demonstrated a variety of positive student outcomes beyond the outcomes of other types of projects.

Class projects add a layer of coordination not required in traditional group projects such as marketing plans, advertising campaigns, facility design projects, business plans or risk management assessments. In class projects, groups must work independently and interdependently for the success, defined as the achievement of student-produced goals, of the event or outcome. We distinguish "class projects" from traditional "group projects" for the purposes of this study. We define a class project as a semester-long project in which all students in a class work collectively to complete the project requiring interaction and interdependence within and among subgroups.

Purpose

It appears that there is a gap in the literature on class projects as a distinct learning experience from group projects. We found no mention of class projects in the literature. Furthermore, there has been no examination of class projects as a teaching tool in recreation and sport management. The purpose of this exploratory study is to examine student perceptions of class projects and secondarily to examine the influence of noncontributing committee members on student perceptions of class projects in recreation and sport management courses. The present research was guided by three research questions:

1. What are student views of class projects?
2. What are student self-evaluations of personal development?
3. What are student perceptions noncontributing group members?

Methods

Background Information

The study was undertaken at a university with both sport management and recreation undergraduate majors. The programs in recreation and sport management are separate.

Each academic program has a course in which faculty members have used class projects, sporting event management in the sport management program and programming in the recreation program. Both courses are required upper-level courses for majors. The class projects were designed independently by different faculty members and taught by different faculty members.

Sport management students in the sporting event management course were given the class project of planning and staging a fundraising 5K road race. Students were assigned to committees. Each committee was designated specific responsibilities in race operations, activities and concessions, marketing, publicity, and race registration and budget. Data were collected from students taking the course in two separate semesters and the same instructor taught the course both semesters.

In the recreation programming course, the experiential class project involved applying programming principles in order to facilitate a campus-wide event. Students were assigned to committees for specific tasks such as assessing campus needs, planning activities, budgeting and acquiring funds, marketing and promotion, contracting with vendors, event logistics, and event evaluation.

Though some aspects of the recreation and sport management courses were distinct, there were many aspects of the class projects that were the same. Each committee worked in conjunction with all the other committees for a successful event in both courses. Likewise, peer evaluation was an essential part of students' individual class project grade in both courses. Both the recreation and sport management courses incorporated both individual work and group work. Students were given individual assignment scores and examination scores in addition to the class project score as part of their overall grades for the courses. Students were given time in the normal class meetings to work on the class project to work on organization and planning though many responsibilities had to be completed outside the classroom. Students in all classes were told that peer evaluation would be part of their individual project grade.

Study Participants

Participants were undergraduate students in two separate academic programs, recreation and sport management. Sport management students who were enrolled in a sporting event management course ($N = 25$ in the fall semester; $N = 20$ in the spring semester) and recreation students ($N = 23$) who were enrolled in a programming course participated in the study. The fall semester sport management class (16 sophomores, 6 juniors, and 3 seniors) was composed of 19 males and 6 females. The spring semester sport management class (14 sophomores, 5 juniors, 2 seniors) was composed of 17 male students and 8 female students. The upper level recreation class (13 juniors and 15 seniors) was composed of 15 male students, 13 female students. Class sizes were typical for courses at the university (average class size = 20) at the time of data collection.

Instrument

To determine student perceptions of the class project, a 39-item questionnaire was adapted based on a review of literature dealing with group projects as an educational tool. All of the items have been previously used in previously published research (Bourner, Hughes & Bourner, 2001; Hansen, 2006; Payne & Monk-Turner, 2006). Authors of these studies reported no measures of internal consistency or factor analysis in published reports.

The first part of the questionnaire asked students to evaluate personal development in knowledge and skills using a semantic differential with adjective pairs to anchor each end of a single continuum on a numbered 5-point scale (McMillan & Schumacher, 2001). For example, “At the end of the project, I felt knowledgeable about the topic . . . ignorant about the topic.” Between the two descriptive phrases was a 5-point scale with 5 being closest to “knowledgeable about the topic” and 1 being closest to “ignorant about the topic” and “At the beginning of this project I felt competent . . . incompetent” with 5 being competent and 1 being incompetent. Students were instructed to mark the number best fitting their view. This section was adapted from Bourner, Hughes and Bourner (2001).

The second part of the questionnaire dealt with perceptions of the project in general using a 5-point Likert scale with neutral midpoint. For example, items included “all of the members of my group contributed equally” with a 5-point scale from *strongly agree* to *strongly disagree*. This section was adapted from Hansen (2006) and dealt with the presence of a slacker and use of various instructional methods. McMillan and Schumacher (2001) stated that including a neutral midpoint point is appropriate for this type of scale.

The third part of the questionnaire focused on perceptions of working with others on a committee using a 5-point Likert scale with a neutral midpoint. For example, “how often were students told peer evaluations would specifically be used in determining each team member’s grade?” and a scale with *most frequently* (5), *frequently* (4), *neither frequently nor rarely* (3), *rarely* (2), and *never* (1). This section was adapted from Payne and Monk-Turner (2006). Including a neutral midpoint point has been considered appropriate for this type of scale (McMillan & Schumacher, 2001).

Data Collection

Instructors collected data using a paper questionnaire in class. The instructors explained the purpose of the study and how the results would be used and that participation was strictly voluntary and in no way impacted grades. Data collection from sport management students took place the week following the conclusion of the class project but prior to the end of the class. Recreation students were given the questionnaire on the last class day after class project grades had been entered on the course website’s grade book within one week of conclusion of the class project.

Results

The response rate was 100% for sport management students ($N = 45$) and 82% for recreation students ($N = 23$). The response rates are sufficient (above 70% for a specific group) to ensure representation of the views of students in each course (Salant & Dillman, 1994). Face validity of the questionnaire were based on previous research (Bourner, Hughes & Bourner, 2001; Hansen, 2006; Payne & Monk-Turner, 2006). Cronbach’s alpha was computed as an internal consistency estimate of reliability for the questionnaire. The Cronbach’s alpha was .85 and indicates that the reliability of the questionnaire is satisfactory (above .70) for exploratory research (Nunnally & Bernstein, 1994). Results of data analysis related to the first research question indicating student’s perceptions of class projects (general perceptions, and self-evaluation of personal development) are presented first followed by data analysis of the effect of a noncontributing group member on student perceptions of class projects to answer the second research question.

Student Views of Class Projects

Students reported generally favorable opinions of the class projects as shown in Table 1. Less than 20% of the students ($n = 10$) disagreed that they learned more from the project than from other teaching methods. Most students look forward to projects in other courses ($n = 43$, 63.2%). None of the participating students disagreed or strongly disagreed with the statement that “this experience will help when I work on teams in my future jobs.” On the whole, students believed the project to be a good learning experience ($M = 4.51$, $SD = 0.76$). Carifio and Perla (2008) endorse the reporting of means and standard deviations with Likert scale data. The low standard deviation indicates consistent student agreement within the sample. Furthermore, over half of the students ($n = 38$, 55.9%) indicated they learned more from the class project than from other teaching methods while only 10 students (14.8%) disagreed or strongly disagreed.

Table 1

General student perceptions of project

	<i>M</i>	<i>SD</i>
I learned more from project than other teaching methods	3.50	1.08
Project was a good learning experience	4.51	0.76
Group worked together well	4.29	0.75
I look forward to working on group projects later in life	3.60	1.02
Group projects should be used in more classes	3.61	1.03
This experience will help when I work on teams in my future jobs	4.29	0.67

Note: Means are from a 5-point Likert scale with 1 being *strongly disagree* and 5 being *strongly agree*.

Table 2 shows students found working together on the project enjoyable, stimulating, beneficial, and creative as indicated by means above 4 on a 5-point semantic differentiation scale. The overwhelming majority (61 students, 90%) felt the class project was beneficial. Similarly, most students (59, 87%) viewed the class project as enjoyable while 60% (47 students) thought the project was stimulating.

Student Self-Evaluation of Personal Development

Students also gave a positive assessment of their personal skill development through working on the class projects as seen in Table 3. The most improved skills reported by participants were planning and organizing ($M = 4.42$, $SD = 0.80$), time management ($M = 4.26$, $SD = 0.80$), and working with others ($M = 4.22$, $SD = 0.76$).

Students reported further self-evaluation by indicating their perceptions of knowledge, confidence, flexibility in thought, independence, competence, enthusiasm, and creativity at the end of the project. These self-evaluations are reported in Table 4. Students indicated they felt more knowledgeable about the topic than ignorant of the topic ($M = 4.29$, $SD = 0.54$). More students expressed feeling confidence at the conclusion of the project (96%) than at the beginning of the project (41%).

Table 2

Question 1 Frequencies (Working Together on the Project Was . . .)

		<i>M</i>	<i>SD</i>
Not enjoyable	Enjoyable	4.19	0.70
Dull	Stimulating	4.06	0.69
Difficult	Easy	3.17	0.87
Frustrating	Satisfying	3.85	0.98
Not beneficial	Beneficial	4.37	0.75
Not creative	Very creative	4.05	0.77

Note: Means are from a numbered 5-point scale anchored on either end by the adjective pairs with 1 being the adjective on the left and 5 the adjective on the right. ($N = 68$)

Table 3

Student Perceptions of Skill Development

	<i>M</i>	<i>SD</i>
I improved skills in problem solving	3.88	0.68
I improved skills in researching	3.81	0.86
I improved skills in data analysis	3.68	0.95
I improved skills in presenting information in writing	3.65	0.96
I improved skills in working with others	4.22	0.76
I improved skills in planning and organizing	4.42	0.80
I improved time management skills	4.26	0.80

Note: Means are from a 5-point Likert scale with 1 being *strongly disagree* and 5 being *strongly agree*. ($N = 68$)

Table 4

Question 2 Frequencies (At the End of the Project I Felt . . .)

		<i>M</i>	<i>SD</i>
Ignorant about topic	Knowledgeable about topic	4.29	0.54
Lacking in confidence	Confident	4.37	0.57
Less flexible in thought	More flexible in thought	4.09	0.79
Dependent	Independent	3.81	0.78
Incompetent	Competent	4.11	0.61
Unenthusiastic	Enthusiastic	4.09	0.94
Less Creative	Creative	3.88	0.86

Note: Means are from a numbered 5-point scale anchored on either end by the adjective pairs with 1 being the adjective on the left and 5 the adjective on the right. ($N = 68$)

Students also reported their feeling at the beginning of the class project in seven areas (knowledge, confidence, flexibility in thought, independence, competence, enthusiasm, and creativity). These are reported in Table 5. There was larger distribution of scores for students' feelings at the beginning of the project than after it as demonstrated by larger standard deviations. Not quite one half of the students ($n = 30, 44.1\%$) indicated they were ignorant about the topic at the beginning of the project. Students report that they felt more positive at the end of the project compared to the beginning.

A paired-samples *t*-test was conducted to analyze whether students reported knowing more about the topic after the class project than before the class project. The results indicated that the mean degree of reported knowledge after the class project ($M = 4.29, SD = 0.55$) was significantly higher than the mean degree of reported knowledge prior to the class project ($M = 2.91, SD = .99, t(67) = 10.43, p = .00$). The standardized effect size index, *d*, was 1.26. Carifio and Perla (2008) indicate that using means, standard deviations and parametric techniques to analyze data from Likert scales is appropriate in pedagogical research.

Perception on Noncontributing Group Members

Less than half of the students agreed that their committee had a noncontributing group member making the mean nearly neutral. In fact, 27 students (40.3%) agreed that their group had a noncontributing student. Most ($n = 30, 44.1\%$) agreed or strongly agreed that all committee members contributed equally ($M = 3.17$), as seen in Table 6. Only 15 students (22.1%) reported that they did most of the work, resulting in a low mean agreement with the statement "I did most of the work" ($M = 2.69$).

There was no statistically significant difference in students' agreement with the statement that "working together on the project was a good learning experience" between those who did report a noncontributing group member and those who did not report a noncontributing group member ($t(38) = 1.7, p = 0.09$).

Table 5

Question 3 Frequencies (At the Beginning of the Project I Felt . . .)

		<i>M</i>	<i>SD</i>
Ignorant about topic	Knowledgeable about topic	2.91	0.99
Lacking in confidence	Confident	3.18	0.99
Less flexible in thought	More flexible in thought	3.16	0.71
Dependent	Independent	3.24	0.92
Incompetent	Competent	3.30	0.84
Unenthusiastic	Enthusiastic	3.32	1.37
Less Creative	Creative	3.31	0.76

Note: Means are from a numbered 5-point scale anchored on either end by the adjective pairs with 1 being the adjective on the left and 5 the adjective on the right. (*N* = 68)

Table 6

Student Perceptions of Group Member Contributions

	<i>M</i>	<i>SD</i>
All committee members contributed equally	3.17	1.21
At least one committee member was a non contributor/underperformer	2.93	1.45
I did most of the work in my committee	2.69	1.10

Note: Means are from a 5-point Likert scale with 1 being *strongly disagree* and 5 being *strongly agree*. (*N* = 68)

Differences between Sport Management and Recreation Student Perceptions

There were statistically significant ($p = .05$) differences in the perceptions of sport management students and recreation students in several areas as reported in Table 7. Sport management students were more positive than recreation students that working on the project was stimulating and satisfying. There was no statistically significant difference between sport management and recreation students agreement that “working together on the project was a good learning experience” or that “this experience will help when I work on teams in my future jobs.” There were no statistically significant differences in the skills students reported improving as a result of the project. However, sport management students were more likely to report that they identified further need to develop skill working with others ($t = 2.21, p = .031$), skill in planning and organizing ($t = 2.78, p = .007$), and skill in time management ($t = 2.39, p = .020$). Recreation students were significantly more likely to report that team building was taught by their instructor ($t = -2.41, p = .019$) but significantly less likely to report that they were required to submit interim reports ($t = 2.523, p = .016$). (See Table 7). Thus, the differences in student perceptions may be related to the types of skills emphasized by instructors and the nature of the two events. Whereas the focus of the

sport management project was on planning and organizing, the recreation project required students to be involved actively in both programming and facilitating activities at the event.

Table 7*Differences in Sport Management and Recreation Student Views*

	<i>T</i> (<i>p</i>)	Sport Management <i>M</i> (<i>SD</i>)	Recreation <i>M</i> (<i>SD</i>)
Working together on the project was stimulating.	2.04 (.05)	4.18 (.66)	3.83 (.71)
Working together on the project was satisfying.	2.34 (.02)	4.04 (.93)	3.47 (.99)
Because of this work I have identified skills I need to develop further in working with others in a group.	2.21 (.03)	3.13 (1.10)	2.52 (1.04)
Because of this work I have identified skills I need to develop further in planning and organizing.	2.78 (.01)	3.60 (1.07)	2.78 (1.28)
Because of this work I have identified skills I need to develop further in time management.	2.39 (.02)	3.71 (1.06)	3.04 (1.15)
Team building was frequently taught.	-2.41 (.02)	3.51 (.82)	3.91 (.53)
Your committee had to submit one or more interim reports to the instructor.	2.59 (.01)	3.89 (.86)	3.3 (.93)

Note: Sport Management $N = 45$, Recreation $N = 23$

Discussion

Similar to the findings of researchers on group projects (Hansen, 2006; Spence et al., 2009), students in the current class project study had highly favorable opinions of the project as a learning experience. Students felt the project was a good learning experience and they learned more from project than other teaching methods.

Student perceptions of class projects differed, however, from student perceptions in previous studies of first year undergraduate accounting students (Bourner, Hughes, & Bourner, 2001). The means of student responses on the question about working together on the project were higher in the current study than in the Bourner, Hughes and Bourner study. The higher means of the current study may be due to differences between first-year students (Bourner, Hughes, & Bourner) and upper-level students (current study). Pascarella and Terenzini (1991) have summarized the commonalities of student development theories and note that one of the affects of college on students is growth in understanding the importance of interdependence such that students work independently and yet rely upon others. Though most scholars researching group projects have focused on the impact of projects as a specific teaching methodology, Colbeck, Campbell, and Bjorklund (2000)

remind scholars that college learning is cumulative and experiences on campus and in other classes also foster development of interdependence and interpersonal skills. Therefore, finding that the upper-level recreation student and sport management students (in their sophomore year or above) had higher opinions of the value of class projects than first year accounting students had of a group project is understandable. Furthermore, the differences may be partially explained by exposure of sport management and recreation students' to more professional field experiences which allow them to relate the project to the work environment. Prior to enrollment in the course that included the class project, recreation students are required to complete 90 hours in two different field study organizations. Sport management students were encouraged to volunteer in sport management organizations, and were required to interview a sport management professional as part of their introductory course and typically complete 80 hours of field study in sport organizations after taking the sporting event management course. Researchers did not track which students had previous experience planning and organizing events. Further research is needed to determine the impact of previous experience in recreation and sport organizations on student perceptions of class projects.

In addition to generally positive perceptions, the results indicate the students' self-evaluation of knowledge and skills. These skills include problem solving, researching, data analysis, presenting information in writing, working with others, planning and organizing, and time management skills. Students felt they improved on all these skills, a finding that is consistent with results reported by Bourner, Hughes, and Bourner (2001). The order in which improved skills were ranked varied between the two studies. Students in the current study indicated the most improvement in planning and organizing skills, followed by time management skills and teamwork skills. The most improved skills reported by students in the by Bourner, Hughes, and Bourner (2001) were time management, oral presentation, and teamwork. The variation is likely due to different curricular purposes and project design within different courses. For example, Colbeck, Campbell, and Bjorklund (2000), in their qualitative study of engineering students, found that students reported development of communication skills, conflict management skills, and problem-solving skills after completing group design projects. Pierce and Petersen (2010) reported student perception of sports sales skills were unchanged following an experiential learning project. Thus, various types of skills are utilized by students based on design and purpose of the project for the particular course and may improve through a variety of projects.

Student perception of personal development was also indicated by participants' responses to questions about their feelings at the end of the project and their feelings at the beginning of the project. Students were more positive at the conclusion of the class projects than at the beginning. They reported growth in knowledge, confidence, independence, competence, and enthusiasm. These results support previous research that found group work, a form of active learning, enables students to gain knowledge about a particular topic (Payne, Monk-Turner, Smith, & Sumter, 2006). Hansen (2006) in his meta-analysis summarized the importance of the active learning well when he said,

Numerous researchers have shown that the learning- by-doing approach of group projects results in active learning and far greater comprehension and retention of information, higher levels of student motivation and achievement, development of critical reasoning skills, improved communication skills and stronger interpersonal

and social skills than is found with traditional lecture-style teaching methods. (p. 12)

Perhaps the best indication of students' positive perceptions of class projects is their agreement that they look forward to projects in more classes in the future.

Both sport management students and recreation students found their class projects to be valuable. However, sport management students were more likely to report that they found the project stimulating and satisfying. Differences in sport management and recreation student perceptions appear to be related to the nature of the different class projects. Further, instructors are able to emphasize particular skills needed for class projects depending on the curricular goals and purpose for the project as evidenced by recreation students noting the emphasis on teambuilding. Thus, class projects may be used to meet specific goals.

Impact of Noncontributing Group Member

The benefits of group projects are numerous due to students' active learning through interaction; however, some students have little enthusiasm for group projects. One reason for this, shown in the literature, has been the presence of a noncontributing group member (Brooks & Ammons, 2003; Chen & Lou, 2004; Payne & Monk-Turner, 2006).

Class projects are similar to group projects in that they are conducted on a larger scale than group projects with greater coordination and accountability required of students and between committees. Intuitively, this additional complexity could lead to more frustration when some students either do not contribute to committee work or underperform. About 40% of the students involved in the study felt that their committee had a noncontributing member. About 44% of the students reported that their committee did not have a noncontributing group member. Surprisingly, there was no significant difference between the two groups' perceptions of the value of the class project as a good learning experience. Most research on group projects and individual student evaluation has shown that the presence of a noncontributor negatively affects student's perceptions of group performance (Payne, Monk-Turner, Smith, & Sumter, 2006) and they are less likely to feel they learned more from projects than from other teaching methodologies (Payne & Monk-Turner, 2006). Utilizing peer evaluation in grading promotes positive student attitudes and effectively counters the impact of noncontributing students on student attitudes toward group work (Chen & Lou, 2004; Payne & Monk-Turner, 2006; Young & Henquinet, 2006). Peer evaluation was used for both sport management and recreation class projects. Students were told that peer evaluation would be utilized, which may have lessened the negative effect of the presence of noncontributing students. Support from previous research comes from Brooks and Ammons (2003), who also used peer evaluation with their sample and found that peer evaluation reduced the problems of noncontributing students and improved student attitudes towards group projects. Another explanation of why the student perceptions in this study were not negatively influenced by the presence of a noncontributing committee member may be that students are convinced that the class projects are realistic and emulated the professional environment of sport management and recreation practitioners. These results should be encouraging to instructors who desire to use class projects as a teaching tool, the potential negative impact of noncontributors can be offset by effective project design and implementation in the classroom.

Researchers did not ask students about group management strategies (Cummings, 2010; Hansen, 2006) in this study. It is possible that student use of group management strategies mitigated the affects of noncontributing students on group work and the class projects. Further research on the effects of noncontributing students on student views of class projects and student use of group management strategies in class projects is needed. Nor did researchers ask students about what instructors did to motivate them to work hard on the project.

Limitations

A number of limitations must be considered for this exploratory study. First, data collection was limited to one university so the results may not be generalized to recreation and sport management class projects on other campuses. Second, the small sample size is a limiting factor. At the time of data collection, the average class size at the institution was 20. Third, students were not asked to identify previous experience in programming or event management and not all students had completed field experience prior to participation in the class projects. Previous experience with programming or event management could influence student perceptions of class projects and their self-evaluation of personal development. Finally, students were not asked to report group management strategies. Group management strategies could alleviate the impact of noncontributing students and increase student satisfaction with class projects.

Conclusions

Class projects appear to be a valuable teaching methodology in sport management and recreation curriculum. Students tend to view class projects positively and recognize how working with other students on the projects parallels the work environment of professionals in their field. Students tend to report development of knowledge and skill at the conclusion of a class project. Though faculty may be hesitant to incorporate class projects into their courses due to concerns about the negative impact of noncontributing group members, utilizing peer evaluation in class projects appears to compensate for these concerns.

The present study was limited to student perceptions of class projects and the impact of noncontributors on their perceptions. Further research should use experimental design to examine the relationship of various elements of group project design (Hansen, 2006) or class project design on student learning experiences and perceptions of both group projects and class projects. For example, Hansen (2006) made 10 suggestions for improving group projects: (a) emphasizing the importance or relevance of teamwork, (b) teaching teamwork skills, (c) conducting team-building exercises, (d) determining the best method of team formation, (e) assigning a reasonable workload and clear goals, (f) requiring groups to have specific or assigned roles, (g) providing some class time for team meetings, (h) requesting multiple feedback points for monitoring typical team problems, (i) requiring individuals to keep a personal contributions file, and (j) using detailed peer evaluations as part of grading. He found that none of these suggestions were followed in all the classes that had group projects taken by the 34 senior-level business majors in his sample.

Additionally, further study of class projects as a learning experience exploring how students feel they develop specific skills would be instructive. For example, students in the current study did not report as much development of problem-solving skills as they did time management skills. The quantitative design of the study did not allow researchers to explore how students define problem-solving and which aspects of the class projects

and class project design were involved in student development of problem-solving skills. Allowing students to explain in their own words what was beneficial or detrimental could lead to richer data and better understanding of excellent class project design.

Though there is much room for more study of class projects in higher education curriculum, it appears that much of the literature related to group projects can guide faculty in the development and use of class projects. Furthermore, students see class projects as relevant to their development as sport management and recreation professionals. The benefits of using class projects may outweigh the potential costs of noncontributing group members when peer evaluation is used. Class projects, therefore, should be considered as a method to motivate students and help them develop team work skills and knowledge of sporting event management and programming.

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