# Student Project Teams: Understanding Team Process through an Examination of Leadership Practices and Team Culture

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## Abstract

Student-led project-based teams are widely used by faculty but do we really understand the process that students experience as a result of participating in a team? This study sought to understand the team process by examining leadership practices exhibited by assigned leaders and their team culture. Using a mixed-methods case study design it was found that students perceived team leaders to be strongest in the leadership practice-enable others to act described as fostering collaboration and sharing power and weakest in the leadership practice-encourage the heart described as recognizing individual contributions and celebrating team successes. Two of the teams were identified as a clan culture and the third team was determined to be a market culture. It was recommended that instructors who use teams to enrich learning examine the relationship between specific team cultures and enhanced team performance.

## Introduction and Theoretical Framework

Learning through projects is one of the four tenets of experiential learning in agricultural education and was first described by Seamann A. Knapp, described as the father of Agricultural Extension Education (Knobloch, 2003). The influence of Knapp is strongly realized in the agricultural education classroom today evidenced by an educational approach based on the philosophy of learning by doing. Student projects teams are widely-used by agricultural education faculty

even though the tenets supporting learning through projects are poorly understood, begging the question, do faculty really understand the nature of student teams? Specifically, do faculty understand the process that students experience as a result of participating in student-led teams?

Research examining team leadership within classroom teams clearly identified team leadership as a vital component of successful project team performance (Buckenmyer, 2000; Grant, Graham, & Heberling, 2001). However, much of the research examining classroom project teams and leadership failed to explore culture—a vital component when examining leadership. The literature states that "leaders create culture" (Schein, 1992, p. 209) and that the study of leadership must be considered in relationship to culture (Schein, 1992; Kotter & Heskitt, 1993; Cameron & Quinn, 1999; Kouzes & Posner, 2002; Hunt & Dodge, 2000).

Student leaders of newly formed teams, like leaders of newly developed organizations, highly influence the culture that emerges within the student team. We know that culture originates when leaders impose "their values and assumptions on a group" (Schein, 1992, p. 1). Furthermore, leadership "must be guided by a realistic vision of what kinds of cultures enhance performance" (Kotter & Heskitt, 1993, p. 12). What we do not know is what happens when students leave the classroom and begin work on their student-led projects; as faculty we see the final product but rarely are privy to the process (Kent & Hasbrouck, 2003). Without understanding the process that students experience from participating in student-led teams, we can not accurately determine what team cultures have the potential to enhance student team performance nor do we know which students may be better suited for assigned leadership roles.

The literature recommended that research develop a deeper understanding of leadership and culture (Brundgart, 1996; Hunt & Dodge, 2000; Lewis, 1996; Pennington, Townsend, & Cummins, 2003). This study specifically sought to add value to the literature through the exploration of leadership and culture in the context of collegiate-level classroom project teams. As recommended by Den Hartog, Van Muijen, and Koopman (1996) both leadership and culture were specifically defined and measured using tools empirically supported and widely used in practice. Leadership was defined based on Kouzes and Posner's (2002) five leadership practices (Table 1) and measured by the Leadership Practices Inventory (LPI-Self and LPI-Observer), also developed by Kouzes and Posner.

Table 1
*Key Descriptors for Leadership Practices as Defined by Kouzes & Posner (2002)*

| Leadership Practices | Key Descriptors |
|---|---|
| Challenging the Process | Seeking out change, growth, innovation; taking risks; learning from mistakes |
| Inspiring a Shared Vision | Envisioning the future; enlisting others; appealing to hopes and values |
| Enabling Others to Act | Fostering collaboration; building trust; giving power away; offering support |
| Modeling the Way | Setting the example; promoting consistent progress; building commitment |
| Encouraging the Heart | Recognizing individuals; celebrating team accomplishments |

Furthermore, this study specifically defined culture based on the research of Cameron and Quinn (1999) and sought to measure four cultural profiles (Table 2) through the use of the Organizational Culture Assessment Inventory (OCAI) developed by Cameron and Quinn (1999).

Table 2
*Key Descriptors for Cultural Profiles as Defined by Quinn and Cameron (1999)*

| Cultural Profile | Key Descriptors |
|---|---|
| Clan | Internal maintenance; flexibility; concern for people; sensitivity to customers |
| Hierarchy | Internal maintenance; need for stability and control |
| Market | External positioning; need for stability and control |
| Adhocracy | External positioning; high degree of flexibility; individuality |

## Purpose and Research Questions

The purpose of the study was to develop understanding related to team process in a semester-long classroom project. Specifically, leadership practices of assigned student leaders were examined, as well as, emergent current and ideal team cultures. Research questions included:

1. What leadership practices did students' perceive to be demonstrated by the formal leader within the context of the classroom project?
2. What leadership practices did the formal leader perceive that he/she demonstrated within the context of the classroom project?
3. What culture emerged from each of the student-led teams?
4. Did students prefer the current team culture?
5. What was the relationship between leadership practices and team culture?

## Methodology

The case study used a mixed-method design. Twelve students were enrolled in the course, ten agreed to participate in the study ($N$=10). Findings resulting from the quantitative data (LPI-Self, LPI-Observer, OCAI) were used to develop questions for the interviews. Qualitative data were collected after a review of the quantitative data and analyzed to form conclusions and recommendations for practice.

The study was framed in the context of a graduate level program evaluation course. Students self-selected into three teams and chose a team captain that was responsible for communications between the client, the instructor, and the team. Each team presented their evaluation findings, judgments, and recommendations for program improvement to the client and interested stakeholders at the conclusion of the evaluation project.

### Data Collection and Analysis

*Quantitative Data Collection and Analysis*: Post-data was collected at the conclusion of the semester. The instructor administered two survey instruments, the Leadership Practices Inventory (LPI-Self or LPI-Observer) and the Organizational Culture Assessment Inventory (OCAI). Assigned leaders were asked to complete the LPI-Self while team members were asked to complete the LPI-Observer. The descriptive data was analyzed using Microsoft Excel® (Gall, Borg, & Gall, 1996).

Responses to the 30 items on the LPI were measured on a five point Likert-like scale ranging from A-very frequently to E-seldom or rarely. The internal reliability coefficient of the scales used to measure the five leadership practices ranged from .81 to .91. Cronbach alpha coefficients for the LPI-Self, .71 to .85, measured slightly higher than those for the LPI-Observer, .82 to .92 (Kouzes & Posner, 1997).

The previously modified version (Pennington, 2003) of the OCAI replaced the word "organization" with "team" was used to identify team culture. Participants completed six items in a questionnaire format related to key dimensions impacting culture: dominant characteristics, team leadership, management of followers, team glue, strategic emphasis, and criteria for success. Participants in the study were asked to distribute 100 points across four alternatives for each dimension. The point distribution determined the strength of each of the four cultures (Cameron & Quinn, 1999). The OCAI had been shown to consistently measure culture types with Cronbach alpha coefficients ranging from .71 to .80 (Cameron & Quinn, 1999).

*Qualitative Data Collection and Analysis*: The authors interviewed nine participants face-to-face on campus between May 3rd and 5th. One student lived 70 miles from campus and was interviewed via telephone. The transcripts were sent to participants for edification and to ensure their statements accurately reflected their opinions. Qualitative data analysis consisted of the following procedures (Creswell, 1998): 1. *Organization of data*. The interviews were audiotaped for verbatim accuracy and transcribed by a professional transcriptionist, edited by the participant, and then loaded into ATLIS/ti. 2. *Categorization of data*. Categories were identified (codes) and the data were clustered into meaningful groups using ATLIS/ti. Both authors coded the data to ensure all themes were captured. 3. *Interpretation of the data*. Specific statements that fell into like clusters were examined in relationship to the purpose of the study. 4. *Identification of patterns*. The data and their interpretations were scrutinized for underlying themes that characterized the students' leadership experiences. 5. *Synthesis.* An overall portrait of participants' responses was constructed where conclusions and recommendations were drawn based on the data.

Validity (Merriam, 1998) was enhanced by triangulating participants' claims with the survey instruments (LPI-Self, LPI-Observer and OCAI) and other team members' data regarding team leadership and culture. Member checks were accomplished by mailing participants a copy of their interview transcripts for verification of accuracy. Draft copies of the report were shared with colleagues for peer examination and feedback. The study was conceptualized with

colleagues, adding an element of collaborative research to further enhance validity. Researcher's bias can never fully be removed; however, an awareness of personal biases was acknowledged during the study and analysis of results. Specifically, findings concerning leadership styles and behaviors were checked by the research team and participants to guard against overrepresentation. There is no attempt to generalize results of a case study to other populations; however, some analytical generalizations can be drawn if other situations are similar to this one.

## Findings and Conclusions

### Descriptive Analysis

Using the OCAI each of the three teams diagnosed their current team culture and their preferred (now) team culture. Teams A, B and C diagnosed their current team culture as a clan culture (Table 3). Both Team A and Team C preferred a clan culture. Team culture diagnostics also revealed the current secondary culture for both Team A and Team C to be a hierarchy culture while Team B's secondary culture was an adhocracy culture. Diagnostics showed Team B preferred an adhocracy culture.

Table 3.
*Now and Preferred Team Culture, N=10*

| | **Sam's Team Team A** | | **Joy's Team Team B** | | **Meg's Team Team C** | |
|---|---|---|---|---|---|---|
| ***Culture*** | *Now* | *Preferred* | *Now* | *Preferred* | *Now* | *Preferred* |
| **Clan** | *33.167* | *42.222* | *32.000* | 31.167 | *45.417* | *42.500* |
| **Adhocracy** | 22.111 | 37.778 | 28.875 | *33.250* | 11.167 | 13.333 |
| **Market** | 18.889 | 8.056 | 23.458 | 19.292 | 18.417 | 21.667 |
| **Hierarchy** | 25.833 | 11.833 | 16.667 | 16.292 | 25.000 | 21.667 |

(Note: 100 points were distributed across four scales, possible range 0-100)

Each of the three teams preferred changes in their team culture (Table 4). All three teams preferred changes towards an adhocracy culture: Team A (15.667), Team B (4.375), and Team C (2.167). One team, Team A, desired a stronger clan culture (9.055). Two teams, Team A (-14.000) and Team B (-3.333), desired a weaker hierarchy culture. Additionally, the same two teams, Team A (-10.830) and Team B (-4.167), desired a weaker Market culture.

Table 4.
*Difference between Preferred Culture and Now Culture of Teams, N=10*

| *Culture* | **Sam's Team Team A** | **Joy's Team Team B** | **Meg's Team Team C** |
|---|---|---|---|
| **Clan** | 9.055 | -0.830 | -2.910 |
| **Adhocracy** | 15.667 | 4.375 | 2.167 |
| **Market** | -10.830 | -4.167 | 3.250 |
| **Hierarchy** | -14.000 | 0.625 | -3.333 |

The instruments LPI-Observer and LPI-Self identified leadership practices exhibited by the assigned leader while interacting with their evaluation team. All assigned leaders rated themselves highest in the leadership practice-Enable Others to Act (Table 5). All teams rated their assigned leader highest in the leadership practice-Enable Others to Act. All teams rated their assigned leader lowest in the leadership practice-Encourage the Heart. Team C's assigned leader, also, rated herself lowest in the leadership practice-Encourage the Heart while Team A's and Team B's assigned leaders rated themselves lowest in the leadership practice-Challenge the Process.

Table 5.
*Leadership Practices: Self and Observer Scores for Assigned Leader, N=10*

| **Leadership Practice** | **Sam's Team Team A** | | **Joy's Team Team B** | | **Meg's Team Team C** | |
|---|---|---|---|---|---|---|
| | Self | Observer | Self | Observer | Self | Observer |
| Challenge the Process | *24.0* | 17.5 | *22.0* | 26.0 | 28.0 | 24.0 |
| Inspire a Shared Vision | 26.0 | 15.5 | 26.0 | 27.0 | 28.0 | **27.0** |
| Enable Others to Act | **30.0** | **19.0** | **29.0** | **28.7** | **29.0** | **27.0** |
| Model the Way | 27.0 | 17.0 | **29.0** | 27.7 | **29.0** | 24.0 |
| Encourage the Heart | 28.0 | *14.0* | 26.0 | *25.7* | *26.0* | *23.0* |

(Note: Possible range of scores 5 to 30 based upon a likert-like scale in which scores were calculated as follows: Seldom=1 pt…Very frequently=5pts)

## Qualitative Analysis: Team Culture

The qualitative data clearly documented Teams A and B as being grounded in the clan culture by emphasizing harmony over conflict, long-term relationships over competitiveness, informal structures over hierarchy, and loyalty over creativity and risk taking. However, there were undertones of a market culture within each group as the size of the task and the concrete deadlines forced teams to be results-

oriented. Team C reported being a clan culture and preferring a clan culture on the survey instruments; however, the interviews uncovered a market culture orientation as the team leader, Meg, was driven more by tasks than people and was unquestionably goal-oriented. Team B's leader, Joy, and member, Tracy were also more results-oriented (market culture) than people-oriented, but were tempered by their other team members who were people-centered.

*Team A:* Team A evolved into a solid clan culture. Team A's leader, Sam, described himself as sharing power with the other team members (Julie and Leah) and engaging in an egalitarian relationship with his group after an initial attempt to drive the team with a hierarchical orientation. "Even though I was appointed the leader there was a lot of leadership responsibilities that we all shared because I was not dictatorial. I wanted them to feel equally important in the process" (373:376). All three team members described the team as flexible and people-oriented and each other as equally capable of carrying out necessary tasks. Leah said "we didn't stick rigidly to what we had decided we were going to do" (11:21).

Julie felt that her team did not need an assigned leader, and in fact having an assigned leader impeded the group's progress. "Had we not had an assigned leader Leah and I both would have stepped up earlier and probably, it would have been interesting. The first few weeks were a little rocky. There was a trying point when Leah was trying to work with Sam and I was the mediator for awhile and things were a little crazy. I am not sure we would have had that if we had not had an assigned leader" (274:295). Julie said that an assigned leader was not necessary because "with three strong personalities we all had a pretty strong influence on the team" (205:206).

At times Julie assumed the role of informal leader and set up a clan culture that was highly flexible and people centered. Julie said "one of the reasons (Sam) stepped back was he realized we didn't need an assigned leader and would work better as a team if we all felt like we had some responsibility in taking on leadership" (264:272). Team A valued long-term relationships (clan) above task orientation (market) evidenced by Julie's willingness to informally lead the team from behind the scenes rather than confront the leader (28:39). Julie and Leah both valued maintaining harmony within the group (clan) over seeking efficient results (market). Leah described her choice to not assume the formal leadership role because "I am just the visitor (in the department) and am not part of the (college of agriculture) family…and it would not be smart for a visitor to come over and start pushing her weight around" (P4:251:268), valuing tradition (clan) over results (market).

Although Team A was clearly a clan culture, there were nuances of a market culture at work. Leah felt that the clan culture was impeding progress and said "I did not want to go have lunch with my team. I wanted to do the tasks" (41:45). She also said that as time went on and personalities clashed "the focus became more upon completing that task, completing the project, that it was a check mark on the syllabus and we became what I call syllabus students" who were more concerned with completing a task than deep learning (49:70). When asked if the team was successful Leah said "no" because she was not satisfied with the quality of final report (results-oriented) where as Julie felt the project was successful because the group was able to produce a report at all with the many obstacles that arose during the semester (people-oriented). Sam noted that although the team was people-centered, they were set on "meeting our objectives" and "not letting the setbacks get to us" (53:55). He discussed deliverables and deadlines and a need to renegotiate power to accomplish the project goals. The team was flexible in nature, but kept their eye on the target.

*Team B:* Team B consisted of four people. Joy was the leader; Ben, Kris, and Tracy were members. Using the OCAI, Team B reported being a clan culture but preferring an adhocracy. The qualitative data revealed a team that was people-centered, flexible, able to take risks, and externally driven, blending behaviors from clan, adhocracy, and market cultures. Joy and Tracy exhibited more market culture behaviors and Ben and Kris exhibited more clan culture behaviors. The team was focused on group harmony and wanted to produce and excellent product while honoring each others' individuality.

Joy described herself as being task-oriented. "It was really about getting the project complete… let's get the data out, let's get the assignment done" (22:27). Tracy said that Joy was "very task driven but because of that we got things done" (85:90). "Most of the talking that we did about learning and people was just a way of getting the task done" (23:31). Kris said Joy was more task- than people-oriented. He said that Joy and Tracy were strong leaders, dynamic, and tough. "They don't take any messing around" (80:88), "she kept us on task… we put a lot of work into it and we learned a lot" (153:161). However, Kris was more people-oriented, focusing on group harmony. Kris noted that "everybody on the team did an outstanding job" (176).

Ben said Joy started off "very task oriented" but adjusted her style to be more people-oriented (62:72). Joy managed, coordinated, and facilitated team activities. She quickly learned what each member needed from her and treated them accordingly. Joy said "I knew when somebody was an expert in a situation and

was able to back down and support them. I was a team member sometimes, and I was a team leader or coordinator, so I would modify myself to what that situation called for. I made sure that everybody felt involved. I created ownership of the project and it was definitely a project that had four people committed to it" (79:96).

*Team C:* Team C consisted of four people. Meg was the leader, Tina, Dixie, and Mac were members. Both Dixie and Mac declined to participate in the study; therefore, findings are based on Meg and Tina's responses to the survey instruments and interviews. Although Meg and Tina reported being in a clan culture on the surveys, their responses to interview questions revealed a strong market culture orientation by being task and results-oriented and competitive. A constant theme in the data was the need to *get things done*.

Meg began her leadership post by providing structure, security, and control to the group (hierarchy), but shifted to a more results-oriented stance over time. "I tried to control the first part of meetings. I would try to set the mood for our meetings. But after that everybody was listening, we were all in it together" (83:87). Meg assumed the role of facilitator and goal setter for the team. She organized weekly meetings, set goals and deadlines, and served as liaison between the instructor and client (128:133). She took primary responsibility for compiling reports and getting feedback from the instructor and client. She was results-driven and drove the team by assigning tasks, following up, and making up deficiencies in other's work. Meg said "I was a good manager because I made sure that everything got done. I think maybe I might have been too efficient as a leader because I think that they didn't worry that something wasn't going to get done because they knew I was going to take care of it" (146:154).

Tina reported that Meg "took more upon herself than the rest of us did" (84). Meg "was the one who kept in contact with (the instructor and client). She made sure we knew exactly what needed to be done and when. She kept in contact very well by email. I must have 200 emails from her. She was very good at communication" (93:96). Tina agreed that Meg was "very organized, very on top of things. She knew exactly what needed to happen. She was very flexible… and very task oriented" (71:79). When asked if the group was more people or task oriented, Tina said "more task…our goal was that we wanted an A in the class, we wanted to get it done early and not be lagging behind. So we really pushed everybody to get things done, make sure that everybody was doing their fair share" (31:41).

Team C was also the most competitive team of the three. The team was aware, and proud of the fact, that they were the first to submit their IRB application and

to collect data. They were the first team to complete their project as well. As Tina said "None of the other teams had (the IRB completed and the final proposal turned in) so we were feeling pretty cocky about that" (43:56). Team C measured success by accomplishing their goals and turning in their assignments on time.

## Qualitative Analysis: Leadership in Relation to Culture

The qualitative data were cross-coded to identify relationships among clan culture and Kouzes and Posner's (2002) framework. Careful analysis of the qualitative data revealed that Sam and Meg did not systemically apply the five leadership practices although they served as the assigned leader of their teams. Joy did; however, practice many of the practices and commitments of leadership. Her team flourished as a result by increasing positive relationships within the team and producing a high-quality, rigorous evaluation report.

*Team A:* Specific behaviors within Team A's clan culture overlapped with two of Kouzes & Posner's (2002) leadership practices: enabling others to act and challenging the process. The team was flexible and able to share power. Leah noted "many times we would come up with a plan and we would find that the plan we had created was not going to be attainable and we would back up and go in another direction… we were good at saying we need to back up and go with another plan" (11:21). Julie identified a learning culture when she said "we were successful because we managed to work together to get some information out of a project that wasn't very willing to give up information. We kept going back at it as a team and coming up with new ways to get information until we were able to come up with enough data to write a good report" (80:86).

However, Team A's clan culture appeared to diminish other behaviors of effective teams such as modeling the way, inspiring a shared vision, and encouraging the heart. Julie, the informal leader, did not want to overtly lead the team because the clan was unable to acknowledge her role as leader for fear of conflict. Without a clearly defined leader the group failed to benefit in several ways. For example, Leah was market driven in her approach to team work but constantly suppressed her need to drive the group by her need to belong in the group. While growing increasingly frustrated with the assigned leader she did not discuss her needs with the group directly because she knew she would be taking other courses with Sam and Julie in the future. Sam, Leah, and Julie's theme was *let's get along.*

*Team B:* Joy most strongly demonstrated Kouzes and Posner's (2002) leadership practices. The team had a high regard for people and was flexible. Ben, Kris, and Tracy developed a strong and easy respect for Joy early in the process, and in

return Joy invested herself in her team and was a willing and capable leader. Joy modeled the way by clarifying the team's values and set the example by motivating the group to keep on task. As Kris said "she set an example. She led by example because she handled the lion's share of what needed to be done… she had the responsibility of coordinating all these parts into one major plan" (190:112).

Joy inspired a shared vision by tapping into each member's strengths and asking them to give their best. Because Joy was task-oriented she was able to keep the team focused on the target of completing the evaluation project. She challenged the process by taking risks and learning from mistakes. Joy admitted her mistakes, learned from them, and moved the team to a better place, thereby earning the respect of her older and more experienced team mates. She was most capable at enabling others to act by fostering cooperation, trust, and sharing power. She was the gatekeeper. Her team members described Joy as strong, dynamic, straight to the point, organized, on-task, respectful, dedicated, democratic, considerate, positive, non-threatening, encouraging, a cheerleader, and as a friend.

Joy encouraged the heart often by recognizing and appreciating her team's work. "She would thank us throughout the process, she would acknowledge the work that we had done and say thank you. Guys you did a great job, you did a wonderful job. Then the other day she sent a thank you note by email (Ben, 115:123). Tracy said Joy was "passionate about what was happening, kept everybody else motivated and wanting to make it a success" (101:104). Joy said she "felt really lucky to be on a team with (Ben, Kris, and Tracy) because they were so diverse. Just the thought process and their goals are so different but yet they are very respectful to each other and I would be lucky to work on a team with the three of them again" (151:157).

The clan culture established by the team allowed for the best of Kouzes and Posner's (2002) practices to be nurtured and expressed. Unlike Team A, whom allowed the clan culture to inhibit their growth for fear of conflict, Team B thrived in the safety and security of a clan culture because of mutual respect. Joy came to the team knowing she was younger and less experienced than her group; thus, she was respectful and open to learning from them. Her attitude of humility opened the doors for Ben, Tracy, and Kris to drop their guard and accept her. Ultimately, the team coalesced into an extremely functional unit that was people-oriented, yet exceedingly motivated to produce high-quality work. Joy, Ben, Kris, and Tracy's theme was *let's respect each other and the process.*

*Team C:* Meg was very good at modeling the way by clarifying values and setting the example. According to Tina, Meg "was confident. She proved to be a very strong leader in that she was very organized and she did delegate. She pushed us, which was good. Her overall influence was that she was a positive leader and a positive member of the team" (104:116). Meg took full responsibility for the group's products. She was the official communication channel for the team. All written work was submitted to the instructor for feedback and revised accordingly so that maximum points were earned on all assignments. Meg picked up the slack within the group, at times to her demise as group members learned that they did not have to work as hard as Meg to earn the same grade.

Meg shared power within the group, but ultimately the buck stopped with her. She was results-driven and not willing to share power to the extent it would compromise her grade. She did not ease her burden of leadership by challenging the process, enabling others to act, or encouraging the heart. By the end of the semester there was considerable tension within the team as Meg was frustrated with Tina and Dick's overall contribution to the effort. She did not seek to motivate them using the 10 commitments to leadership, but rather relied on task assignment to accomplish the goal. Meg's theme was *let's get it done.*

## Recommendations for Practice and Future Research

When teaching with teams, the instructor must pay particular attention to the team process. The events that occur outside the classroom environment strongly influence the performance of student teams. In examining formal leadership within student project teams, two considerations for future research surface: 1) Are assigned leaders needed in graduate-level classroom project teams?; and, 2) If formal leadership is desired, what are best practices in determining which student should assume the leadership role? Related to leadership within classroom projects, Ellis, Bell, Ployhart, Hooenbeck, and Illgen (2005) found that teams benefited most from knowledge held by the team member with the most significant position related to workflow. In this case, the assigned leader was responsible for workflow and communication between the instructor and student-led team. Practitioners are cautioned to not assign leaders in student-led teams lightly and to consider using shared leadership in teams composed of equally strong students.

Research clearly identifies appropriate leadership practices that can be utilized in team situations and in this case those practices were not practiced wholly buy the assigned student leaders. Only one of the three teams reported engaging in encouraging the heart behaviors, which in turn contributed to a positive team

environment. Furthermore, the leader that appeared to most strongly exhibit the five leadership practices described by Kouzes and Posner (2002) created a strong clan culture. These findings were similar to a study conducted by Pennington (2003) examining the relationship between leadership practices and team culture in classroom teams in which there was a positive correlational relationship between the five leadership practices and the clan culture. Although we can determine what culture is most likely to emerge in student teams we need to know if students should be steered toward a different culture in order to enhance team performance and learning. Furthermore, there is evidence that learning and leadership are linked (Brown & Posner, 2001). Practitioners may enhance classroom learning by seeking to improve student use of established leadership practices.

In addition to questions and recommendations concerning assigned leadership, culture, and best leadership practices, one of the student teams was marked by conflict which was found by Porter and Lilly (1996) to hinder performance in project teams. Numerous variables, including conflict, learning, leadership, culture, trust, knowledge, have been studied in relation to teams, a synthesis of the literature specifically related to teams in the context of the collegiate classroom is needed and would benefit not only the scholarly community but classroom practitioners.

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## Biography

Penny Pennington Weeks is an Associate Professor at Oklahoma State University in the Department of Agricultural Education, Communications, and Leadership. She has led the effort to develop an undergraduate Agricultural Leadership major and a Leadership Education minor at OSU. She currently serves as the Past President of the Association of Leadership Educators and as the Director of the Leadership Education Institute for Faculty in Colleges of Agriculture, a USDA sponsored project. Her research interests include leadership education and training, team leadership, and organizational culture.

Kathleen D. Kelsey, Associate Professor of Agricultural Education, Communications, and Leadership at Oklahoma State University, has been teaching research and evaluation methods since 1999. She has published 41 refereed journal articles and presented 29 referred conference papers since joining the faculty at Oklahoma State University in 1999. Her research interests include developing evaluation models for adult learning programs and understanding teaching and learning in the distance education context.