

The Impact of Leadership Modes on Team Dynamics and Performance in Undergraduate Management Classes

PETER MARKULIS
AVAN R. JASSAWALLA
STATE UNIVERSITY OF NEW YORK
GENESEO, NEW YORK

HEMANT SASHITTAL
ST. JOHN FISHER COLLEGE
ROCHESTER, NEW YORK

ABSTRACT. In business school environments, teamwork often factors into discussions about effective pedagogy. However, leadership of classroom teams has attracted virtually no attention from scholars. How teams should be led in the classroom and what kinds of outcomes different types of team leaders produce remain underdeveloped areas of inquiry. In this article, the authors present findings from a study of the relationships between leadership modes and the performance and dynamics of classroom teams. The authors found that emerging leaders are least effective, while designated and rotating leaders are most effective for fostering differing types of team dynamics. The authors also discuss pedagogical and future research implications.

Copyright © 2006 Heldref Publications

Assigning teamwork in undergraduate management classes is common practice in business schools. This practice has proliferated because it makes pedagogical as well as practical sense. It makes pedagogical sense because students feel empowered and often learn more from each other than from their instructors; it makes practical sense because the industry and potential employers increasingly value employees who can work effectively in teams (Schatz, 1997; Thacker & Yost, 2002). However, there are two problems that call for a renewed interest in teamwork as a pedagogical tool. First, there is evidence to suggest that classroom teams are ineffective, filled with negative experiences for students, and breed cynicism (Buckenmyer, 2000; Jones, 1996). Second, there is not much in the literature about how classroom teams ought to be led, an issue that becomes important when research evidence highlights the problems with classroom teams in practice. In particular, the impact of leadership modes on team outcomes (i.e., performance of the team evident from the grades they receive for team assignments) and team dynamics (i.e., the interaction, communication, and perceptions of participants) has yet to be systematically assessed. The rationale for our study is easily derived from current thinking: (a) if teamwork is effective pedagogy and team leadership mat-

ters, then it follows that the type of leadership in classroom teams must matter as well and (b) at present, little is known about the link between leadership of classroom teams and team performance and dynamics.

The rationale for this article was also reinforced by anecdotal evidence that we gathered. At an academic conference devoted to pedagogy, we asked an audience in a workshop on team leadership the following question: "How many of you have thought about the issue of team leadership?" While all the instructors agreed that they spent considerable time thinking about and working on team building, only one said he spent any time addressing the issue of leadership of student teams. While these results were not obtained from a representative sample, they do hint at the possibility that issues of team leadership modes in classroom teams exist outside the focal consciousness of both scholars and faculty in business schools.

Our purpose in this article is to present our findings from a preliminary study that examined the link between three leadership modes, team dynamics, and outcomes in undergraduate management classroom settings. We found that, while leadership modes do not have much of an impact on performance, they have an interesting impact on the team dynamics.

Team Leadership in the Classroom and Hypotheses

We focused on three types of leadership modes (emerging, rotating, and designated leadership) and tested their impact on team performance and team dynamics in classroom settings. Our hypotheses were rooted in the widely accepted notion that leadership affects team performance (Trent, 1996), and that a link between leadership and team dynamics exists (e.g., Roberto, 2001; Thacker & Yost, 2002). For instance, in terms of team dynamics, team leaders are known to (a) help ensure member involvement and commitment, (b) hold members accountable for task completion, (c) use rewards to motivate members, (d) differentiate between and manage destructive and constructive conflict, and (e) increase team cohesiveness and cooperation (Trent; Wheatley, Armstrong, & Maddox, 1989).

We drew inspiration for the notion of emerging leadership in classroom teams from the literature that has examined empowered, self-managed teams in the classroom (Erez, Lepine, & Elms, 2002; Jones, 1996) and other contexts (Manz & Sims, 1987; Taggar, Hackett, & Saha, 1999; Wolff, Pescosolido, & Druskat, 2002). Emerging leaders are those who have no formal authority or appointment and are perceived by teammates as having substantially influenced the team (Schneider & Goktepe, 1983; Taggar et al.). Based on personality and personal motivations, a team member may be perceived by others on the team as leadership material and, through a series of interactions, come to be viewed as the team's informal leader (Seers, Petty, & Cashman, 1995). Empathy is frequently cited as a key characteristic of emerging leaders in self-managed teams (Wolff et al.). Some authors suggest that emerging leaders are just as capable as others in facilitating task completion on teams (Taggar et al.). The assumption is that students would step up to take charge of the process by which the assigned tasks are completed, perhaps based on the skills they possess (e.g., O'Brien & Buono, 1996), their personalities (Seers et al.), or their emotional intelligence (Wolff et al.). Hence, we made the following hypotheses:

H1a: Emerging leaders impact team performance.
H1b: Emerging leaders impact team dynamics.

Rotating leadership in classroom teams occurs when the instructor appoints each member to lead the team for a set period of time, after which the leader role rotates to another member. We drew inspiration for the notion of rotating leadership in classroom teams from scholars who have noted that (a) this mode prevents one individual from dominating the team, which could adversely impact team performance and team dynamics (Pearce & Barkus, 2004) and (b) rotating the leader role is likely to generate a climate of shared ownership and improve the team's capacity to function (Mohrman, Cohen, & Mohrman, 1995). Erez, Lepine, and Elms (2002) found that when every member had the opportunity to experience the team leader's responsibilities, she or he is likely to extend more efforts and greater cooperation toward goal achievement and ultimately feel higher levels of satisfaction. However, Erez et al. found no impact of rotating leadership on workload sharing, member satisfaction, or team performance. Hence, we developed the following hypotheses:

H2a: Rotating leaders impact team performance.
H2b: Rotating leaders impact team dynamics.

Designating team leadership is the notion of appointing one leader throughout the team's project. The purpose is to ensure that one team member is working on team process and team management issues (Erez et al., 2002). Some scholars contend that carefully selecting and training team leaders facilitates communication within the team, fosters trust among members, and ultimately leads to team effectiveness (Thacker & Yost, 2002; Trent, 1996). Jassawalla and Sashittal (2000, 2001) identified a link between designated team leaders who were trained for managing team processes and positive team outcomes in the context of new product development project teams. Hence, we developed the following hypotheses:

H3a: Designated leaders impact team performance.
H3b: Designated leaders impact team dynamics.

As part of our study, we also questioned whether students (both those that had a chance to lead their teams and those that did not, felt that (a) the business school was abdicating its responsibility to train every student for leadership or (b) every student should have equal experience in leading teams. This question was important because accrediting bodies emphasize the teaching of leadership skills in management curricula and every student in our classes did not lead a team. Hence, we developed the following hypotheses:

H4: Management students believe that business schools should train student leaders.
H5: Management students believe that everyone should have a chance to lead a group.

METHOD

We conducted our study in three sections of an organizational behavior class during the same semester. In each section, 6 student teams were created (18 teams total) and assigned a complex project that spanned the entire semester. A total of 77 students, across the three sections, participated in the study. In section one, team leaders were allowed to emerge (i.e., the instructor provided no indication to the team regarding the need for a leader). When one emerged, it was as a result of the team's interactions and the personal motivations and perceptions of team members. In section two, team leaders were rotated. The instructor appointed a leader for each team and the team was directed to keep that individual in the leader role for the next 2 weeks. At the end of 2 weeks, the instructor directed the team to move the leader role to another member. Over the course of the semester, every member of the team had the opportunity to serve as team leader. The instructor indicated the point of rotation by handing the new team leader a sheet of paper, which provided brief guidelines on how to effectively lead the team (see Appendix A). In section three, the instructor asked for volunteers from

each team who were interested in acting as their team's leader throughout the semester. The instructor then directed each team to discuss and select one of the volunteers to be their team leader. These designated leaders were then provided with six training sessions outside of class that lasted about 15 minutes each. During each session, a management expert other than the instructor talked to the designated leaders about effective leadership and teamwork and addressed any questions or issues they raised.

At the end of the semester, all students were asked to complete a survey instrument. The survey was grounded in the instructors' observations about the conversations occurring in teams, and the issues that emerged. The questions focused on perceptions of leadership, group effectiveness, communication, and conflict (Appendix B). The surveys (Appendix C) took 5–10 minutes to complete. All students present during the last class of the semester completed the survey ($n = 77$).

RESULTS

We initially examined whether the team leader mode was related to team performance as evident from the grade received by students in their team projects (Hypotheses 1a, 2a, and 3a). An analysis of variance (ANOVA; team leader mode as factor, team grade as dependent variable) showed no statistical significance (see Table 1). Team leadership mode did not seem to significantly impact team performance.

Regarding hypotheses 1b, 2b, and 2c about the link between leadership modes and team dynamics, we found mixed evidence. Team leadership mode appeared to affect some but not all types of dynamics within classroom teams. The ANOVA (team leader mode as factor, each question as dependent variable) showed the list of variables that were statistically significant (Table 2). As Table 2 indicates, the designated leader seemed most effective for equitable distribution of workload (i.e., survey questions 1, 2, and 3) and for functioning as a clearly identified leader who performed what was perceived as leadership roles (question 7). The rotating

leader seemed more effective for ensuring good, open, and honest communication among team members (questions 8 and 15) and for cooperation among team members (question 13). The emerging leader consistently scored low on all items and was associated with the highest level of conflict (question 5).

In terms of Hypotheses 4 and 5, 59.7% of the participants believed that it was the responsibility of the business school to train them to be leaders (40.3% disagreed with the statement in question 19 on the survey). However, the chi-square test (with expected proportion = 50%) was insignificant, $\chi^2(1,$

TABLE 1. ANOVA Results for the Effect of Team Leader Mode on Team Performance (Actual Final Grade)

Variance	SS	df	MS	F	p
Between groups	.010	2	.005	.040	.961
Within groups	9.062	74	.122		
Total	9.072	76			

Note. SS = sum of squares; MS = mean squares.

TABLE 2. ANOVA Results for Survey Questions That Were Significantly Related to Team Leader Modes

Question	p	Emerging group (M)	Rotating group (M)	Designated group (M)	α
Perception of equitable distribution of workload					0.84
Our group worked on all parts of the project as a team	.023	4.958	5.074	5.808	
In general, all group members contributed to the project	.020	5.042	5.296	6.000	
There was a balance of workload among the team members	.014	4.583	5.296	5.538	
Nature and extent of conflict					
There was conflict in the group	.001	4.458	3.360	3.423	
Perception of leadership					
There was a clear leader present at our group meetings	.000	4.583	4.852	6.269	
Nature and extent of communication					0.7188
There was good communication among our team members	.000	4.750	5.852	5.692	
Communication was open and honest	.000	4.792	5.741	5.654	
Organization (or cooperation)					
Our team was highly cooperative	.011	5.292	5.963	5.923	

Note. Bold-faced and italicized values indicate highest means.

$N = 77$), = 2.922, (see Table 3). Of the participants, 80.5% felt that everyone should have had a chance to lead the group. The associated chi-square test (with expected proportion = 50%) showed that this belief was held by a significant number of those in the sample, $\chi^2 = 26.688$ (see Table 4). There was no apparent link between leadership modes and student responses to the questions about the responsibility of business schools to train leaders and whether everyone should have a chance to lead a group (i.e., between team dynamics and student responses to questions 19 and 20 on the survey); the chi-square test of association was insignificant. Similarly, cross-tabulation of responses to questions 19 and 20 showed an insignificant link between the responses to these two questions.

DISCUSSION

Our results strongly suggest that instructors should avoid the emerging leadership mode in classroom teams, even though the notions of self-directed teams and emerging leaders are widely lauded in corporate contexts. There is some evidence that self-directed teams in the classrooms are simply leaderless and

often directionless teams that breed cynicism (Buckenmyer, 2000). We found evidence to support this view. Our observation of team dynamics in classrooms suggests that, unlike teams in business organizations, classroom teams are characterized by inequitable distribution of the workload, lack of member commitment to team goals, and low levels of communication and cooperation among members (also see Jones, 1996). We found that leaders do not emerge with any degree of certainty in the teams where we attempted to implement the self-directed mode, leaving the team to struggle with ineffective dynamics. Emerging leadership teams can only claim one aspect of team dynamics—high levels of tension and conflict—which indicates that these teams are unable to make their way out of the storming stage of development.

Although all students do not believe that business schools are responsible for training them to become leaders, they do expect everyone to have a chance to lead a group during their undergraduate experience. This finding implicates rotational leadership as the preferred choice for student teams in classrooms; however, this style of leadership comes second to designated leaders when it comes to some aspects of team dynamics. For instance,

if the intent is to ensure that all team members participate highly and contribute equally to the team's mission and frequently communicate and cooperate toward the achievement of team goals, then designated leaders are most useful.

We recognize that many instructors may be strapped for time and may not have the expertise to train and use designated leadership. To those, we recommend implementing rotating leadership where the instructor provides the team with basic guidelines on rotating the leader role (e.g., every 2 weeks the role of team leader must switch to a different member) and provides written instructions to the student playing the role at any given time.

Although ensuring the right mode of leadership in student teams is an important issue, it continues to exist largely outside of the focal concerns of instructors. This explains the paucity of studies aimed at systematically assessing available leadership modes and their impact on team dynamics and team performance. We sought to take the first step toward an examination of leadership and its impact on classroom teams. Our study of three leadership modes in classroom teams demonstrates that leadership impacts team dynamics. Moreover, we found that the commonly adopted mode of emerging leadership not only distracts from positive team dynamics but also actually leads to tension and unorganized teamwork. Alternative modes such as rotating and designated leadership are more successful in creating positive team dynamics and should be used in classroom teams.

NOTE

Correspondence concerning this article should be addressed to Dr. Hemant Sashittal, Bittner School of Business, St. John Fisher College, Rochester, New York 14618. E-mail: sashi@sjfc.edu

REFERENCES

- Buckenmyer, J. A. (2000). Using teams for class activities: Making course/classroom teams work. *Journal of Education for Business*, 76(2), 98-107.
- Erez, A., Lepine, J. A., & Elms, H. (2002). Effects of rotated leadership and peer evaluation on the functioning and effectiveness of self-managed teams: A quasi-experiment. *Personnel Psychology*, 55, 929-949.
- Jassawalla, A. R., & Sashittal, H. C. (2000). Strategies of effective new product team leaders. *California Management Review*, 42(2), 34-51.

TABLE 3. Student Responses to the Question: Is It the Responsibility of the Business School to Train Students to Be Leaders?

Answer	Observed		Expected		Residual
	<i>n</i>	%	<i>n</i>	%	
Yes	46	59.7	38.5	50.0	7.5
No	31	40.3	38.5	50.0	-7.5

Note. $\chi^2(1, N = 77) = 2.922$.

TABLE 4. Student Responses to the Question: Should Everyone Have Had a Chance to Lead a Group?

Answer	Observed		Expected		Residual
	<i>n</i>	%	<i>n</i>	%	
Yes, everyone	62	80.5	38.5	50.0	23.5
No, only qualified people	15	19.5	38.5	50.0	-23.5

Note. Expected frequencies < 5. The minimum expected cell frequency is 38.5. $\chi^2(1, N = 77) = 26.688$.

- Jassawalla, A. R., & Sashittal, H. C. (2001). What senior management and team leaders must do to develop effective new product teams. *Engineering Management Journal*, 13(2), 33-39.
- Jones, D. W. (1996). Empowered teams in the classroom can work. *The Journal for Quality and Participation*, 19, 80-87.
- Manz, C., & Sims, Jr., H. P. (1987). Leading workers to lead themselves: The external leadership of self-managing work teams. *Administrative Science Quarterly*, 32(1), 106-128.
- Mohrman, S. A., Cohen, S. G., & Mohrman Jr., A. M. (1995). *Designing team based organizations: New forms of knowledge work*. San Francisco: Jossey Bass.
- O'Brien, C. D., & Buono, A. F. (1996). Creating a networked, learning organization in the classroom. *Journal of Management Education*, 20, 369-382.
- Pearce, C. L., & Barkus, B. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *The Academy of Management Executive*, 18(1), 47-59.
- Roberto, M. A. (2001). Group decision simulation: Examining procedural justice in group decision-making processes. *Developments in Business Simulation and Experimental Learning*, 28, 207-209.
- Schatz, M. (1997). Why we don't teach leadership in our MBA programmes. *The Journal of Management Development*, 16, 677-678.
- Schneider, C. E., & Goktepe, J. R. (1983). Issues in emergent leadership: The contingency model of leadership, leader sex, leader behavior. In H. H. Blumberg, A. P. Hare, V. Kent, & M. F. Daview (Eds.), *Small groups and social interactions* (Vol. 1). Chichester, England: Wiley.
- Seers, A., Petty, M. M., & Cashman, J. F. (1995). Team-member exchange under team and traditional management: A naturally occurring quasi-experiment. *Group and Organization Management*, 20, 18-38.
- Taggar, S., Hackett, R., & Saha, S. (1999). Leadership emergence in autonomous work teams: Antecedents and outcomes. *Personal Psychology*, 52, 899-926.
- Thacker, R. A., & Yost, C. A. (2002). Training students to become effective workplace team leaders. *Team Performance Management*, 8, 89-95.
- Trent, R. (1996, Fall). Understanding and evaluating cross-functional sourcing team leadership. *International Journal of Purchasing and Materials Management*, 32, 29-36.
- Wheatley, W. J., Armstrong, T. R., & Maddox, E. N. (1989). The impact of leader and team member characteristics upon simulation performance: A start-up study. *Developments in Business Simulation and Experiential Exercises*, 16, 13-16.
- Wolff, S. B., Pescosolido, A. T., & Druskat, V. U. (2002). Emotional intelligence as the basis of leadership emergence in self-managing teams. *The Leadership Quarterly*, 12, 505-522.

APPENDIX A The Team Leader's Role

As team leader, your role is threefold:

1. Facilitate team discussions to ensure that the agenda items are completed in a timely manner (i.e., end contributions from team members going off on tangents, remind the team of milestones coming up or of time limits).
2. Encourage maximum contribution and debate on each topic (i.e., draw out silent or shy members, for each idea ask for pros and cons, remind teammates of the criteria for the project).
3. Motivate the team and individual teammates by actively listening to their contributions, reminding them of the team's mission (e.g., get an A, develop an interactive presentation), using individual strengths to achieve that mission, and explaining the benefits of constructive conflict.

APPENDIX B Measures for Survey of Team Effectiveness

Scales. In our survey instrument, we used 7-point itemized rating scales for the following measures (numbers in parentheses indicate the question number on the survey instrument).

- a. Perception of equitable distribution of workload.
 - Our group worked on all the parts of the project as a team (question 1).
 - In general, all group members contributed to the project (question 2).
 - There was a balance of workload among team members (question 3).
- b. Perceptions of leadership.
 - There was a clear leader present at our group meetings (question 7).
 - The leader/facilitator of our group positively affected team communication (question 9).
 - Our team leader/facilitator was effective (question 12).
 - Our team leader/facilitator contributed to positive group dynamics (question 16).
 - Our team leader/facilitator contributed to positive group performance (question 17).
- c. Extent and nature of organization of activities and tasks.
 - Our team meetings were well organized (question 4).
 - Our meetings had written agendas (question 6).
 - Group members were accountable for how they performed (question 10).
 - Our group had penalties and/or rewards for member contributions/behaviors (question 11).
 - Our team was highly cooperative (question 13)
- d. Extent of conflict
 - There was conflict in our group (question 5).
 - Our group had a high level of tension (question 18).

(appendix continues)

(continued)

e. Nature and extent of communication

- There was good communication among our team members (question 8).
- Team members provided constructive feedback (question 14).
- Communication was open and honest (question 15).

To test hypotheses 4 and 5, we included the following questions:

Is it the responsibility of the School of Business to train students to be leaders?

- A. Yes.
- B. No.

Do you feel everyone should have a chance to lead a group?

- A. Yes, everyone should.
- B. No, only qualified people should.

APPENDIX C
Survey of Team Effectiveness

Team Number _____

Using the scale below, write the appropriate number next to statements 1–18.

1 = Never 2 = Almost Never 3 = Rarely 4 = Sometimes
5 = Frequently 6 = Most of the time 7 = Always

- _____ 1. Our group worked on all the parts of the project as a team.
- _____ 2. In general, all group members contributed to the project.
- _____ 3. There was a balance of workload among team members.
- _____ 4. Our team meetings were well organized.
- _____ 5. There was conflict in our group.
- _____ 6. Our meetings had written agendas.
- _____ 7. There was a clear leader present at our group meetings.
- _____ 8. There was good communication among our team members.
- _____ 9. The leader/facilitator of our group positively affected team communication.
- _____ 10. Group members were accountable for how they performed.
- _____ 11. Our group had penalties and/or rewards for member contributions/ behaviors.
- _____ 12. Our team leader/facilitator was effective.
- _____ 13. Our team was highly cooperative.
- _____ 14. Team members provided constructive feedback.
- _____ 15. Communication was open and honest.
- _____ 16. Our team leader/facilitator contributed to positive group dynamics.
- _____ 17. Our team leader/facilitator contributed to positive group performance.
- _____ 18. Our group had a high level of tension.

For the following questions, circle the best answer.

- 19. Is it the responsibility of the school of business to train students to be leaders?
A. Yes. B. No.
- 20. Do you feel that everyone should have a chance to lead a group?
A. Yes, everyone should. B. No, only qualified people should.