Rethink Student Evaluation of Teaching

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Abstract

Does the student evaluation of teaching (SET) reflect the reality? In fact, there is a gap between SET scores and students' achievement. Therefore, the purpose of this study is to stress the measurement of classroom dynamics in light of the conceptualization of transformational leadership. In order to picture more accuracy of the teaching evaluation procedure, it is argued that teacher leadership behaviors could be a potential component for examining teaching evaluations. The research findings revealed the moderate positive relationships between instructor's transformational leadership and student engagement and satisfaction. Accordingly, it is conducive to include teacher leadership in the components of student evaluation of teaching. The implications and limitations of this study are discussed.

Keywords: Student evaluation of teaching, Transformational leadership, Student engagement, Student satisfaction

1. Introduction

Does the student evaluation of teaching reflect the reality? In the field of higher education, student evaluation of teaching (SET) is the most common strategy to evaluate teachers' teaching quality in the classroom. However, there is a gap between SET scores and students' achievement. The key issue found by researchers is that it lacks strong correlation between these two variables (Pounder, 2008). Many SET researchers reported that other factors that may cause a bias while students rating teachers. These factors consist of the size of class, instructor's personality, grading criteria, gender of both students and teachers, course workload, time that class meets, type of class, and the class is either compulsory or elective (Aleamoni, 1999; Theall & Franklin, 2001; Marsh & Roche, 1997).

1.1 Purpose

The purpose of this study is to stress the measurement of classroom dynamics in light of the conceptualization of transformational leadership. In order to picture more accuracy of the teaching evaluation procedure, it is argued that teacher leadership behaviors could be a potential component for examining teaching evaluations.

1.2 Research Question

Some scholars (Bolkan & Goodboy, 2009, 2010; Pounder, 2008b) evidenced that student engagement and satisfaction have a positive relationship with instructor transformational leadership behaviors. Accordingly, for this pilot study, the focus is to investigate the utility of notion that teaching evaluations are referencing the merits of transformational leadership in the education context. How does teacher leadership relate to student engagement and satisfaction in the classroom? Further, does the teacher leadership behavior have its unique value included in elements of teaching evaluation?

Drawing from the assumption, the authors hypothesize:

H1: Instructor transformational leadership behavior has no relationship with student engagement.

H2: Instructor transformational leadership behavior has no relationship with student satisfaction.

1.3 Significance

The idea that teacher leadership behavior relates to students' engagement and satisfaction and, if confirmed, would be of considerable theoretical and practical significance. Determining a correlation or lack thereof between leadership style and student attitude towards learning experience might encourage teachers to adopt an appropriate leadership style, which is effective in improving students learning. The empirical data from this study may also provide teachers and administration with a deeper understanding of the potential impact of teacher leadership style, and most important design a more accurate teaching evaluation.

2. Review of Literature

2.1 The Current Situation of SET

According to Schmelkin, Spencer, and Gellman (1997), SET, generally, can provide three functions. First it offers a feedback mechanism, proposing instructional improvement to faculty. Next, the information of an evaluation mechanism, an index of faculty's hiring, and tenure and promotion will be accessed (Newport, 1996). It also provides students some information in selecting courses in the future (Marsh, 1987).

However, critics claimed that the outcomes of SET tend to cause bias which in turn students are incapable of evaluating instructors very effectively (Wachtel, 1998). Due to the fact that SET might affect the employment decisions, instructors might grade leniently.

Spencer and Schmelkin (2002) argued that if schools use only one evaluation conducted at the end of the semester, there might be a tendency that students remember more about what the instructor has done right before the evaluation. Although, at the end of semester, students could give an overall evaluation, students' attitudes towards the evaluations are seldom inquired. These attitudes include how attentively they respond, how seriously they complete the evaluation, and for what purposes they think the results will be used (Spencer & Schmelkin, 2002). Under this circumstance, another concern arises; that is, whether the results of SET can actually measure teaching effectiveness (Steiner, Holley, Gerdes, & Campbell, 2006).

A number of proponents contend a well-developed SET can be the best tool to measure teaching effectiveness (Hobson & Talbot, 2001). However, some of instructor's attributes, irrelevant to teaching quality, are found to have an impact on SET scores. The attributes encompass years of teaching, gender, age, the time the course taught, class size, and level of the course (Langbein, as cited in Steiner, Holley, Gerdes, & Campbell, 2006). Allison-Jones and Hirt (2004) stated that students would even rank part-time instructors as significantly less effective than full-time ones. Brown (2008) further pointed out that students' expected grade might affect the SET scores. SET is a common fixture in higher education; however it harbors surprising biases (Merritt, 2008).

2.2 The Promising Position of Transformational Leadership in the Classroom

Teachers have an imperative resource at their disposal to facilitate students learning experience and unleash their potential in the classrooms. The importance of leader behaviors in the classroom is that teachers see themselves differently and thus behave differently owing to expanding their leadership roles (Searby & Shaddix, 2008).

Bass (1985, 1999) conceptualized the transformational leadership with four components: intellectual stimulation, individualized consideration, idealized influence (charisma), and inspirational motivation. Idealized influence and inspirational motivation demonstrate the influence of ideology and ideas, reaching over the desirable future. The function of intellectual stimulation is to kindle innovation and creativity of followers. Through the individualized consideration, leaders are referenced as coaches to facilitate the development needs of followers. Most important, the conclusion suggested by Bass is that developing a transformational leader is doable.

One of significant credits of exerting the philosophy of transformational leadership is the outperformance of followers, which is partly on account of their commitment, intrinsic motivation, or the sense of vision that prompts them to surpass the expectation (Howell & Avolio, 1993). A number of researchers supported the notion that the implementation of conception of organizational leadership in the classrooms has positively effects on students' performance. For instance, Bolkan and Goodboy (2009) observed that the implementation of transformational leadership skill produced a positive picture of student behavior, learning outcomes, and teacher credibility. In line with this results, Pounder (2008a) also found that the latent merit of transformational classroom leadership for promoting students' academic effort, which in turn resulting in direct educational value with regard to achievements.

Researchers posited that "leadership models developed in business settings are applicable to the study of teacher behavior" (Bolkan & Goodboy, 2010, pp. 91-92). The main idea is that the classroom functions as an organization. "It is possible to conceive of the classroom as a small social organization within teacher as leader and students as

followers" (Pounder, 2008b, p. 235). Many studies exhibited the benefits of transformational instruction having positively correlated with student achievement, affective learning, motivation, knowledge management, and student evaluations of teacher credibility (reviewed by Harrison, 2011). In line with this thread, it is beneficial for implementation of transformational leadership in the classroom. Especially, educators could integrate the components of transformational leadership through using motivational language in the syllabus, assignments, and communication (Harrison, 2011).

Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995) has become a significant source of measuring the transformational leadership. The initial idea was developed by Bass (1985). Since then, "MLQ has been examined in over 75 research studies…. The instrument has been used to study leaders in a variety of organizational settings" (Lowe, Kroeck, & Sivasubramaniam, 1996, p. 389). However, as Bolkan and Goodboy (2010) pointed out, "a standard for measuring transformational leadership does not exist and the measures that do may not be psychometrically sound" (p. 93). More centrally, the main concern is that "the MLQ was not created with an educational context in mind" (p. 93). Furthermore, the problems of MLQ lie in the multicollinearity of its scales, lower desirable reliability to some extent, and the university of the factor structure of the model (Bass, 1999). As a result, for this pilot study, we developed an instrument adapted from MLQ that is suitable for our purpose, which is grounded in the college context.

3. Methods

3.1 Research Design

This study was utilized a cross-sectional survey design. The participants completed the questionnaire at one point in time. The focus was to examine the relationship between instructor transformational leadership behaviors and student engagement and student satisfactions. Owing to the nature of this study, the researchers outlined the rationale of the questionnaire and exhibited preliminary analyses that illustrate the usefulness of the notion. The independent variables of this study were four components of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The dependent variables were student engagement and student satisfaction. Responses were solicited using 30-item, 5- point Likert-type scale, ranging from "strongly disagree" (1) to "strongly agree" (5).

3.2 Sample and Procedure

Because of time constraints in conducting this research design, convenience sampling was used for this study. Participants were 30 college students, recruited from a business class at the University of the Incarnate Word. Once permission was granted by the instructor and Institution of Review Board, the questionnaire, along with a statement of informed consent was delivered to potential participants in the classroom. The instrument was distributed to all students attending on the 6th week of an 8-week semester in the autumn of the 2011-2012 academic year. The timing of the survey was to guarantee that participants were familiar with their instructors' classroom behaviors, thereby giving informed answers to items in the instrument. The instrument allowed for complete anonymity because student names were not required on the questionnaire. Participants completed the instruments in reference to the instructor of the course they attended. Participants in this pilot test also provided written comments directly on the survey; thereby researchers could modify or change the survey to reflect those concerns.

3.3 Instrument

Transformational leadership. The instrument developed for data collection was adapted from Bass and Avolio's (1995) Multi-factor Leadership Questionnaire (MLQ). A 20-item, 5- point Likert-type scale was used to take respondents' answers ranging from "strongly disagree" to "strongly agree." The 20-item measure contains 5-items measuring idealized influence, 5-items measuring intellectual stimulation, 5-items measuring individual consideration, and 5-items measuring inspirational motivation. Cronbach's Alpha was .67 for idealized influence, .75 for intellectual stimulation, .83 for individual consideration, .79 for inspirational motivation, and .91 for the overall scale.

The following are a sample of transformational classroom leadership items resulting from the above procedure:

- Idealized Influence: The lecturer explained that we should take the responsibility for our own learning.
- Intellectual Stimulation: The instructor uses different perspectives to solve problems.
- Individual Consideration: The instructor offers help to meet student's needs or solve their problems in or after class.
- Inspirational Motivation: The instructor emphasizes student's desire to succeed in this class.

Student engagement. Student engagement was measured on 5 items and asked participants to report on how often they participate during class. A five-point scale was used to take answers ranging from "strongly disagree" to "strongly agree." Cronbach's Alpha was .65 for the summed scale. One example from this item is "I like to spend extra time on this course."

Student satisfaction. Student satisfaction was measured on 5 items. It was a global assessment of student satisfaction resulting from the course and instructor. A five-point scale was used to take answers ranging from "strongly disagree" to "strongly agree." In this study, the obtained Cronbach's Alpha was .89. One example from this item is "I am willing to take another course taught by this instructor."

3.4 Data Analysis

Survey responses were analyzed by using Statistical Package for the Social Sciences (SPSS). This study employed descriptive statistics, inferential statistics, reliability coefficients (Cronbach's Alpha), and correlation coefficients, to determine the level of support for each hypothesis. A pilot test of the questionnaire was used to test the validity of the instrument. Two faculty members and one peer examined the survey and gave feedback related to the design of the survey. The researchers made changes in the instrument based on feedback from three individuals who completed and evaluated the survey. Furthermore, Cronbach's Alpha was also employed to test the internal consistency-reliability of the scales.

4. Findings

Cronbach's Alpha was utilized to test the internal consistency-reliability of the scales. Normally the widely used criterion is 0.7 for the scales. Four scales either met or exceeded that criterion with the Idealized Influence scale falling marginally short of the standard at 0.67 and student Engagement at 0.65. No scale had a score below 0.6. Therefore, alpha scores were acceptable given that the study was an initial investigation into modifying the original MLQ for the classroom setting. In sum, the instrument developed for this study was capable of valid and reliable measurement.

Correlations between each variable were examined between the four components of transformational leadership and their associations with student satisfaction (see Table 1). Variables correlated at $p < .05$ included interest of field with idealized influence, intellectual stimulation, student engagement, and student satisfaction. Additionally, idealized influence was positively correlated with all variables ($p < .01$). Intellectual stimulation was positively correlated with all variables (from $p < .05$ to $p < .01$). Individualized consideration was positively correlated with all variables ($p < .01$) except interest of field. Inspirational motivation was positively correlated with all variables (from $p < .05$ to $p < .01$) except interest of field. Student engagement and student satisfaction were positively correlated at $p < .01$.

<Table 1 about here>

The first hypothesis suggests that instructor transformational leadership behavior has no relationship with student engagement. A Spearman correlation was calculated examining the relationship between four components of transformational leadership and student satisfaction. The results (from $rho(28) = .41$ to $.68$) showed the moderate positive relationships between the components of transformational leadership and student engagement. This relationship is significant, $p < .01$; therefore, H1 is rejected.

The second hypothesis states that instructor transformational leadership behavior has no relationship with student satisfaction. A Spearman correlation was calculated examining the relationship between four components of transformational leadership and student satisfaction. The results (from $rho(28) = .51$ to $.67$) showed the moderate positive relationships between the components of transformational leadership and student satisfaction. Also this relationship is significant, $p < .01$; therefore, H2 is rejected.

5. Conclusions

Overall, the results from the correlation analysis revealed moderate positive relationships between the components of instructor's transformational leadership and student engagement and satisfaction. Students' interest level of the course also displayed a significant moderate positive relationship with their engagement and satisfaction. The results of current study are in line with other research (e.g., Bolkan & Goodboy, 2009, 2010; Harrison, 2011; Pounder, 2008a, 2008b).

The results of this study have significant implications for the application of transformational leadership in the classroom. Transformational behaviors including idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation can be implemented and evaluated within the course, thereby increasing student learning outcomes. In particular, the study indicates the potential of transformational classroom leadership for producing the extra students' engagement as well as satisfaction that should be of direct educational value in terms of student achievement. Instructors have the opportunity to demonstrate these behaviors via the syllabus, communication, feedback, and office hours.

The study suggests that instructor leadership behavior has association with student engagement and satisfaction, which is one of the elements of evaluation. Accordingly, it is conducive to include teacher leadership in the component of student evaluation of teaching. More centrally, by doing so it could provide a more complete picture of the teaching effects. Based on the present study, the effective classroom leadership is a potential candidate of positive student learning results. Further, the results of this study illustrate that educational institutions could conduct the experiment and develop strategies for assessing classroom dynamics which is different from the traditional SET.

Nevertheless, a caveat is called that the purpose of this study is not to supplant the conventional teaching evaluations; instead, these evaluations should supplement classroom behaviors as criteria for a holistic landscape of successful teaching. It is hope that these findings may supplement and increase the conventional system of evaluation that reflects the dynamics of classrooms. In line with this notion, there is a scope for examining the extent to which classroom leadership behaviors maximizing students learning outcomes could be employed as part of a teaching excellence program for university teachers.

6. Limitations and Recommendations

Convenience sampling was used for this study from a small, private university in the United States. Further, the participants were only 30 college students in one business course. Therefore, the generalizability of the study's findings and the representativeness of the sample to the population are questionable. Further research should consider broadening the scope of the sample to include a variety of universities with cross discipline, different sizes, and affiliations. In addition, varying geographic and cultural regions were not considered in the present study. For instance, the instructor transformational behaviors might be valued in North America, but may not be of the same weight in other cultures. Thus, a cross-cultural study would be beneficial for further study. Furthermore, there are potential extraneous variables, such as the structure of the course and the course materials, which might potentially play a role on student's evaluation of teaching. Also an examination of additional student outcomes such as motivation, cognitive learning, and perceptions of teacher credibility is profitable. Further research on how to promote instructor transformational leadership behaviors within the classroom could be useful to higher education institutions. Owing to the nature of this research design, the findings were correlational and susceptible to common method error. A mix method which includes qualitative data would be beneficial in offering insights into the actual classroom experience of students and the impact of their evaluation.

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Table 1. Means, Standard Deviations, and Correlations of components of transformational leadership and student engagement and satisfaction (N=30)

Measure	M	SD	1	2	3	4	5	6	7
Interest of field	3.53	1.16	--						
Idealized influence	4.36	.50	.58**	--					
Intellectual stimulation	4.34	.55	.45*	.53**	--				
Individualized consideration	4.40	.59	.26	.60**	.74**	--			
Inspirational motivation	4.18	.57	.10	.41**	.58**	.59**	--		
Student engagement	4.06	.53	.58**	.59**	.65**	.68**	.41*	--	
Student satisfaction	4.32	.70	.60**	.64**	.64**	.67**	.51**	.70**	--

$*p < .05$. $**p < .01$.