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Professor's Role in Motivating Students to Attend Class

Ernest W. Brewer University of Tennessee-Knoxville David N. Burgess

While student success is important at every educational level, it gains significance during the college years because this phase often represents the last formal education many students receive before competing for work. During the college years, students develop their abilities and match them with specific needs in the labor market. For this reason, education during these years is of particular importance. However, as in other levels of their educational careers, students sometimes fail to attain adequate learning outcomes. A lack of motivation to learn could be at the root of the problem. In a study by Smilkstein (1989), a group of college students were asked to list the stages of the learning process. The students developed a six-step process, with the number one step being motivation. That is, motivation was considered to be the necessary cornerstone on which the other steps follow and build.

Although motivation was identified as a fundamental aspect of learning for college students, many teachers at the college level are not trained as extensively in teaching methods and communication as are their counterparts in elementary and secondary school. College teachers must manage several tasks simultaneously. The pressure to publish, to acquire external funds (grants), to serve on a variety of committees, and to stay on top of administrative duties may compete with the desire to improve classroom impact. Often the emphasis for college faculty is on research rather than on presentation skills. Sheridan (1988) stated that faculty members found themselves trapped in a value system in which status is gained through scholarly productivity, and even though they might have wanted to gain satisfaction from teaching, they were unprepared for the demands. Sheridan

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suggested that concerns about teaching at universities were generally regarded as a second-best preoccupation of college teachers who had not been successful in research. Trice and Dey (1997) stated that a major goal of college students was to receive practical training related to specific jobs, whereas their teachers had the goal of encouraging students' broad intellectual development. Trice suggested that this gap was widening. A study by Negron-Morales (1996) reported that practices rated by faculty as frequently used were consistently those rated by students as least-used. Moreover, the expectations most mentioned by students in that study were those least mentioned by faculty. Such differences in perceptions illustrated the mismatch between students' and teachers' expectations.

These differences might be related to contrasts in learning and teaching styles. Gailbraith and Sanders (1987) reported that instructors tended to teach the way they preferred to learn, a practice which would not benefit students with learning styles differing from their teachers'. If the needs of these students were not met, such situations could result in a loss of motivation.

Result of Lack of Motivation

When college students are not motivated in a particular class, a common outcome is a lost desire to attend class, followed by frequent absences and plummeting grades. Launius (1997) suggested that class attendance at colleges was positively correlated with academic achievement. Van-Blerkom (1996), like Launius, found a significant correlation between class attendance and final grades. Davenport (1990) found that students classified as having good attendance in a class received final grades of at least A, B, or C. For students with poor attendance, there were several grades of D or F. Although college teachers could enact strict attendance policies and penalize students who failed to attend, this study was concerned with exploring what intrinsically motivates college students to continue attending class; what brings them to class because of a desire to be there, not because of external factors such as a mandated attendance policy. This study also looked at how college teachers' classroom performance can influence that motivation.

To understand how a college teacher motivates students within a class, a deeper understanding of the following questions is necessary: What is motivation? Which type of motivation is more valuable to the student: intrinsic or extrinsic motivation? Who is responsible for motivating students to continue coming to class to learn? And how does a college teacher motivate students to continue coming to class to learn?

Related Review of Literature

What is Motivation?

Wlodkowski (1986) suggested that motivation describes processes that (a) arouse a desire to investigate behavior, (b) give direction and purpose to behavior, (c) continue to allow behavior to persist, or (d) lead to choosing or preferring a particular behavior. In relation to learning, Crump (1995) stated that the act of motivating could be defined as exciting the mind of the student to receive instruction. She also found that excitement, interest, and enthusiasm towards learning were the primary components of motivation. Lumsden (1994) claimed that student motivation dealt with the students' desire to participate in the learning process and the reasons or goals underlying involvement or non-involvement in academic activities. She discussed three types of motivation: intrinsic motivation, extrinsic motivation, and motivation to learn. Intrinsically motivated students participate in an activity for enjoyment, the learning it permits, and/or the sense of accomplishment it brings. Extrinsically motivated students, on the other hand, participate in an activity only to receive a reward or to avoid punishment external to the activity itself. Grades are a prominent example of an extrinsic reward. Spaulding (1992) suggested that in extrinsic motivation it was "the goal" (i.e., high grades) not the "doing" that explained performance, whereas it was the actual "doing" that explained the primary reason for intrinsic motivation. According to Marshall (1987), motivation to learn referred to the meaningfulness, value, and benefits of academic tasks to the learner regardless of whether or not the tasks were intrinsically interesting. Therefore, student motivation to learn might come from intrinsic or from extrinsic sources.

Incentive Motivation Psychology

According to Brewer, Hollingsworth, and Campbell (1995), incentive motivation psychology (IMP), a term selected to describe the overt relationship between "incentive" and "motivating," involved a deliberate instructional plan to elicit specific learner outcomes through a system of intrinsic and extrinsic rewards. Brewer and his associates noted that the first and most prominent form of IMP was intrinsic incentive motivation (IIM—a motivational strategy that derived its reward system from the learners themselves). The extrinsic incentive motivation (EIM) of IMP stressed the important link between learning and an external motivational reward system. The authors concluded that,

Although there will probably always remain some doubt as to the utility of IMP, the value of IIM and EIM, is obvious in their implications for improved student performance and as a consequence, for improved motivation to learn. Planning and development of incentive programs is relatively simple once educators determine which type is appropriate for student needs (p. 50).

Intrinsic Verses Extrinsic Motivation

Both learning for the joy of learning and learning to gain an external reward are prevalent. The question that might be asked is, "Which of these sources of motivation is more valuable for student learning?" Condry and Chambers (1978) found that when confronted with complex intellectual tasks, students with greater intrinsic orientation used more logical informationgathering and decision-making strategies than did those students with an extrinsic orientation. Lepper (1988) found that extrinsically oriented students were likely to expend minimal effort for maximal reward. Research also supported the idea that when intrinsically motivated students were given extrinsic rewards for their efforts, a reduction in their level of intrinsic motivation resulted (Deci, 1971, 1972a, 1972b; Lepper & Green, 1975; Lepper, Green, & Nisbett, 1973). Spaulding (1992) concurred with this finding and suggested that when students' perceptions of self-determination (intrinsic motivation) were

undermined by teachers' use of extrinsic rewards, the initial level of intrinsic motivation decreased. Spaulding also stated that even though a student's rewarded behaviors might increase, when the extrinsic rewards were taken away, the level of intrinsic motivation was lower than it had been initially. However, Brewer, Dunn, and Olszewski (1988) noted that several variables influenced intrinsic motivation including self-determination, feelings of competence, feedback, task challenge or difficulty. They further concluded that any factor that influenced these determinants affected, in turn, intrinsic motivation, although only indirectly. Brewer and his colleagues stated that, "While the extrinsic reward may decrease a determinant of intrinsic motivation, such as self-determination, it does not directly decrease intrinsic motivation" (p. 162). In contrast, Wlodkowski (1986) criticized extrinsic motivation based on the moral contention that "bribing" students was inherently wrong. His concern was that students would become reinforcement junkies.

Who Is Responsible for Motivating Students?

If the most valuable learning occurs when a student is intrinsically motivated, the next consideration should be to determine who is responsible for motivating students to come to class and learn for the love of learning. In a classroom environment, the teacher and the student represent two of the forces that may promote motivation to attend class and to learn for intrinsic reasons. Unfortunately, researchers have not agreed on who carries the burden of this responsibility. Tollefson (1988) reported that teachers typically attributed students' low achievement to low effort. Moreover, teachers viewed student characteristics such as poor work habits as being more important than either classroom or teacher variables. In some instances, students agreed that it was their responsibility to motivate themselves. Higbee (1996) found that most students attributed failures and successes on assignments to their own actions. Dickens and Perry (1982) reported that questionnaire results indicated a majority of students believed they had control of their academic performance, as compared to only 10% who believed they had little or no control.

Other studies have suggested that teachers have primary responsibility for motivating students to learn. Brophy (1987) suggested that teachers viewed themselves as active socialization agents who were capable of stimulating students' motivation to learn. Wilkenson (1992) stated that a dictionary definition for "teach" was "to cause to know a subject." Wilkenson believed that whereas students were responsible for learning material in a class, the teacher was responsible for causing the student to know the material. In addition, Wilkenson believed that teachers should judge their success by the success of their students and that the purpose for teachers was to serve students. Additional studies have supported Wilkenson's strong views on the responsibility of the teacher to motivate students to learn. One of the major findings in a study by Small (1996) was that instructors were perceived by students as having the prime responsibility for learners' interest or boredom. McCutcheon (1986) further reported that a survey indicated students believed that out of 51 possible choices, the main reason they missed a class was their negative perceptions of the professor and the course.

How to Motivate Students?

If teachers have a responsibility to motivate students to attend class and to learn, it is important for teachers to understand specifically how to motivate students. Brewer and Marmon (2000) and Wilson and Cameron (1996) identified three general areas teachers in training used to evaluate themselves: instruction, relationships, and management. Instruction involved teacher skills and competencies. Relationships concerned the attitudes teachers had toward their students. Management dealt with classroom organization and planning. These three categories also represented the major areas under a college teacher's control. Likewise, each of these areas provided the teacher with three ways to motivate students to learn.

This current study explored each of these areas and the effect each one had on motivating college students to choose to come to class to learn. In this study, instruction was referred to as "teaching methods," relationships as "personal qualities," and management was termed "classroom management." Following is a discussion of each of these categories.

Teaching methods. Historically, the lecture has served as the primary college teaching method. However, this method of instruction could be on the decline. Bonwell and Sutherland (1997) claimed that evidence of the effectiveness of active learning approaches as a way to facilitate learning was too compelling to ignore. Brewer (1997) confirmed this, stating that lectures could be too long, could fail to encourage reflective thinking, provided limited feedback, and were not appropriate for hands-on training. Small (1996) reported that color instruction that incorporated a variety of attention-gaining and maintaining strategies appeared to be the best way to promote interest and prevent boredom.

One way to offer variety in the classroom is to use cooperative learning groups. With this approach, the teacher facilitates groups or teams of students working together to solve practical problems. One study found that achievement and motivational gains were significantly higher for students in a cooperative learning classroom in comparison with a traditional lecture classroom (Nichols & Miller, 1993). McGonigal (1994) reported that cooperative groups and a varied teaching approach aimed at maintaining student interest helped increase student motivation and performance in a Spanish class. Richardson, Kring, and Davis (1997) found that students with the highest grade point averages preferred professor-assisted discussions over lectures. Based on these findings, it appeared that offering a variety of creative activities, including cooperative groups, instead of teaching solely by lecture, could motivate students. Brewer (1997) offered the following 12 teaching methods in addition to the lecture: small-group discussions, role-playing, case studies, demonstrations, panels, inquiry methods, buzz groups, programmed instruction, directed study, experiments, brainstorming, and questioning.

This study investigated some of these alternative methods of teaching and also explored the following teaching techniques: (a) allowing students to share experiences with each other, (b) employing visual aids using modern technology, and (c) incorporating a variety of activities during one class period.

Personal qualities. The personal qualities a college teacher possesses may also impact students' motivation to learn. Teven and McCrosky (1996) reported that levels of learning were

positively influenced when students perceived their teachers to be caring. Brewer (1997) stated that numerous surveys have shown that the most effective educators have been perceived as caring, enthusiastic, consistent, and impartial when dealing with students. He also referred to the adage, "They won't care what you know 'til they know that you care." Wilkenson (1992) expressed similar views, suggesting that teachers impacted students more by their character and commitment than by their verbal communication. Darr (1996) found that teacher behavior appeared to be the factor that most strongly influenced students' evaluation of instruction. Thayer-Bacon and Bacon (1996) argued that teacher-caring encouraged student growth and learning and created a safe environment for risk-taking. Sass (1989) reported his findings on eight characteristics that encouraged high classroom motivation. The number one characteristic was enthusiasm. Rapport with students was also listed among the top eight characteristics. It appeared that motivation was sometimes related to instructors' personal characteristics, rather than what he or she actually taught. Arnett (2002) found that teachers' outof-classroom rapport with students was also an important factor in motivating students. Through outside contact with instructors, students may feel that the instructor cares about building a relationship with them on an informal level, which may motivate them to perform better in class.

In this study, the researchers examined the following personal qualities a college teacher might possess: humor, knowledge of a subject, patience, enthusiasm, friendliness, respect toward students, participation with students in activities, knowing students' names and interests, professionalism, and openness to feedback.

Classroom Management. Effective classroom management might also affect a student's motivation to learn in the college classroom. Brewer, DeJonge, and Stout (2001) and Karsenti and Thilbert (1994) suggested that highly structured, well-organized, and outcomes-oriented teachers seemed to maintain student motivation. Though class structure and organization were important, balancing the classroom environment with flexibility and student empowerment could be just as important. Friday (1990) believed that an authoritarian teaching style was less satisfying for students than was a democratic teaching style. Luechauer and Shulman (1992) argued that college business classes that were bureaucratic and teacher-focused created feelings of powerlessness among students. Instead, he recommended a class environment that empowered students to form an open and creative team environment. Hancock (2001) concurs that students achieve more poorly in highly evaluative situations, in which instructors exert significant control over classroom procedures and competition among students is emphasized. Students who are test anxious are particularly more sensitive to situations that they perceive to be highly evaluative.

High cognitive-level students (those who employ more complex cognitive structures and think more abstractly) also seem to benefit from teaching methods that are less rigid and more flexible, according to another study by Hancock (2002). However, students with low conceptual levels (those with few cognitive structures who avoid ambiguity and process information concretely) tend to benefit from highly organized environments, he states. Individualized instruction tailored to different types of students may not always be possible, but "knowledge of how most students characteristically respond to direct or indirect instruction may enable the professor to maximize effectiveness for the majority" (p. 66).

Jenkins, Breen, Lindsay, and Brew (2003) found that although students' needs and motivational stimulants are diverse, there are some commonalities among them. They include (a) the need to please others (teachers, parents, etc.); (b) the need to enhance their employability; (c) the desire to belong to a group (such as the university or the department); (d) the desire to play a role (student, mathematician, etc.); and (e) the motivation to enhance their self-efficacy through the acquisition of skills and knowledge. They define self-efficacy as students' "beliefs about their own competence in the task domain" (p. 39).

Instructors can aid in enhancing students' self-efficacy by providing accurate feedback that is specific to the task (Linnenbrink & Pintrich, 2003). For instance, instead of general statements such as "good paper," teachers can point out specific details of the paper that were effective, such as "well-thought-out introduction," or "smooth transitions between paragraphs." Instructors should not provide positive feedback or insincere praise to students when it is not deserved; instead, they should point out areas that need improvement to help students maintain accurate efficacy judgments, according to Linnenbrink and Pintrich. Providing students with challenging tasks that require some extra effort, they suggest, can also boost motivation and help students build skills and develop expertise.

This study incorporated the following classroom management practices that involved both structure and flexibility: presenting clear course objectives, beginning and ending class on time, ensuring productive use of class time, maintaining classroom control, providing organized lessons, maintaining a relaxed environment, meeting the needs of all students, offering flexibility in planning and course goals, allowing student involvement in the direction of the class, and providing straightforward directions.

Methodology of the Study

In this study the researchers strove to answer the following questions about the role a college teacher had in motivating students to come to class to learn:

- 1. What are the significant differences in teaching methods, teacher personal qualities, and classroom management practices between classes college students are motivated to continue attending versus classes they are not motivated to continue attending?
- 2. In relation to the teacher, which of the following do college students perceive to have most influence over their motivation to continue attending classes: teaching methods, teacher personal qualities, or classroom management practices?
- 3. What do college students perceive to be the specific teaching methods, personal qualities, or classroom management practices that most motivate or fail to motivate them to continue attending class?
- Are there significant differences between motivation and nonmotivation to continue attending college classes for the following variables: (a) graduate verses undergraduate students, (b) Human Resource Development (HRD) students verses Information

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Sciences (IS) students, (c) student's gender, (d) student's age, (e) instructor's gender, (f) whether the course was required or an elective, and (g) working status of the student?

Selection of Subjects

There were 156 graduate and undergraduate students enrolled in HRD and IS who participated in this study. Of the total, 56 were HRD graduate students, 59 were HRD undergraduate students, 33 were IS graduate students, and 8 were IS undergraduate students. The researchers tried to select adequate samples from the total HRD and IS students enrolled. Due to time and availability constraints, it was determined that the most feasible method would be to select HRD and IS students enrolled in all of the required classes. It was assumed that students in these required classes would represent an adequate portion of the total number of students enrolled in each department. Students in each of the classrooms were randomly placed into one of two groups by either using a random table of numbers (Gay & Airasian, 2003) or by flipping a coin.

Survey Instrument

A survey questionnaire developed by Burgess (1998) was used in this study. Two forms were used: one referred to a class in which a student was motivated because of the teacher to continue attending class, whereas the other referred to a class in which the student was unmotivated because of the teacher to continue attending. The first portion of the survey requested the following demographic information: (a) name of a course the student was either motivated or unmotivated because of the teacher to attend, (b) student's gender, (c) student's age, (d) teacher's gender, (e) student's college major, (f) whether the course being evaluated was a required course or an elective, and (g) student's working status. Demographic information was used for classification and comparison. The second portion of the survey included three sections of 10 questions each. The three sections asked questions relating to the following categories: (a) Teaching Methods, (b) Teacher Personal Qualities, and (c) Classroom Management, For each question, a Likert scale with the following designations was used: not at all (1), rarely (2), occasionally (3), often (4), and every time (5). Each response indicated the frequency of a quality or activity under each of the three categories. The last portion of the survey contained two questions that asked the student to identify the category and the teaching activity that was most responsible for the motivation or nonmotivation to continue attending a class. The survey was used to determine the qualities or activities that were present when a student was motivated to attend a class and those qualities or activities that were present when a student was not motivated to attend a class. On a test-retest, mean scores for each of the 30 items on the first survey taken were correlated with mean scores for the same 30 items on the second survey taken for both convenience samples. The reliability coefficient for the "motivated to attend" survey was .86. The reliability coefficient for the "unmotivated to attend" survey was .89. In addition, all of the individual scores for each student on the first survey were correlated with the same individual scores on the second survey. The results were as follows: 69% of the 30 items on the "motivated to attend" survey had a correlation coefficient of .58 or higher. Forty-two percent had a correlation coefficient of .82 or higher. Seventy-seven percent of the "unmotivated to attend" survey items had a correlation coefficient of .58 or higher. Fifty-seven percent had a correlation coefficient of .82 or higher.

Procedure for the Study

A computer listing was obtained of all HRD and IS classes offered during the spring semester. From these lists, all the required classes were selected. It was assumed that these required classes would provide an adequate sample size within each department. The researchers attempted to visit each of these classes to administer surveys. However, due to time and availability constraints, not all of the required classes were visited.

Before each class visit, alternative forms of the survey were randomly assigned to two groups. The two surveys were presorted into one pile. One survey at a time was handed out to each student in each classroom. Each student received either a survey requiring the evaluation of a class he or she was very motivated to continue attending because of the teacher or a class

the student was very unmotivated to continue attending because of the teacher.

After all the surveys were completed and collected, mean scores for each of the 30 items on each form of the survey were calculated. A t-test was used to compare the means between each of the items on the "motivated to attend" and "unmotivated to attend" surveys to check for significant differences. A multivariate analysis of variance (MANOVA) was used to determine whether or not significant interactions between the following factors existed: (a) "motivated" versus unmotivated survey scores, (b) graduate versus undergraduate students, (c) students' gender, (d) evaluated teachers' gender, (e) HRD curriculum versus IS curriculum, (f) required versus elective courses, and (g) students' working status. The final two questions on the surveys were evaluated for common student responses regarding motivation or nonmotivation in the classroom. If significant differences between mean scores on the surveys existed, small-scale generalizations were made about why students were motivated (or not motivated) to continue attending college classes because of teacher attributes.

Results of the Study

After the surveys data was analyzed with the descriptive statistics, the t-test, and the MANOVA, the study findings were compiled. The following results are discussed: (a) survey characteristics, (b) "motivated" and "unmotivated" mean scores, (c) differences in mean scores between the surveys, (d) differences in motivational factors between the two surveys, and (e) interactions between factors. The data were used to address each of the four research questions.

Number of Completed Surveys

In total, 156 students completed surveys. Eighty-six (86) completed "motivated to attend" surveys; 70 completed "unmotivated to attend" surveys. Fifty-four (54) of the students were male (37.5%); 90 were female (62.5%). Twelve (12) did not respond. In terms of the characteristics of the classes that were evaluated, 117 of the subjects were taught by male teachers as compared to 34 subjects taught by female teachers. Of the courses

listed for evaluation, 114 were required courses and 40 were electives.

Summary of Research Questions

Research question one asked, "What are the significant differences in teaching methods, teacher personal qualities, and classroom management practices between classes college students are motivated to continue attending versus classes they are not motivated to continue attending?"

Every mean score on the "motivated to attend" surveys, with the exception of "lectures," was higher than were all of the same mean scores on the "unmotivated to attend" surveys. The three highest mean scores for the "motivated to attend" survey were "knowledgeable of the subject matter" (M = 4.69), "professional attitude" (M = 4.68), and "friendly and approachable" (M = 4.66). With the exceptions of "humorous" (M = 3.90) and "students involved in the direction of class" (M = 3.78), all of the items under the personal qualities and classroom management categories for the "motivated to attend" surveys had a mean score of 4.0 or greater. The three lowest mean scores on the "motivated to attend" surveys were "case studies or role plays" (M = 2.73), "videos, computers, technology" (M = 2.92), and "brainstorming" (M = 2.98). In the teaching methods category, only "lectures" had a mean score of 4.0 or greater.

The three highest mean scores on the "unmotivated to attend" surveys were "lectures" (M = 4.43), "the class began and ended on time" (M = 4.07), and "knowledgeable of subject matter" (M = 3.99). "Class began and ended on time" and "lectures" were the only "unmotivated to attend" mean scores that were 4.0 or greater. All of the lowest mean scores for the "unmotivated to attend" surveys were in the teaching methods category: "brainstorming" (M = 1.73), "experiments and hands on activities" (M = 1.91), and "case studies or role plays" (M = 1.91). The teaching methods category as a whole had the lowest mean scores on the "unmotivated to attend" surveys. Other than "lectures," all items in the teaching methods category had a mean score of 2.5 or lower. The mean scores for "motivated to attend" and "unmotivated to attend" surveys are shown in Table 1.

Table 1

Mean Scores, Mean Differences, and Standard Deviations for "Motivated" and "Unmotivated" Surveys.

Unmor Activity or Quality	tivated Mean	Motivated Mean	Difference in Mean	Unmotivated SD	Motivated SD
Teaching Methods					
Lectures	4.43	4.08	0.35	1.03	1.12
Small group discussions	2.36	3.24	0.87	1.34	1.20
Case studies or role plays	1.91	2.73	0.81	1.03	1.21
Demonstrations	2.15	3.11	0.96	1.21	1.32
Students shared experiences	2.46	3.59	1.13	1.35	1.05
A variety of learning activities	2.10	3.48	1.38	1.11	1.21
Effective visual aids	2.29	3.51	1.23	1.09	1.28
Experiments or "hands on activities"	<u>1.91</u>	3.24	1.32	1.08	1.29
Brainstorming	<u>1.73</u>	2.98	1.25	0.96	1.17
Videos, computer, technology	2.09	<u>2.92</u>	0.83	1.29	1.42
Personal Qualities					
Humorous	2.59	3.90	1.31	1.25	0.87
Knowledgeable of the subject matter	3.99	4.69	0.70	1.12	0.60
Patient with students	3.16	4.56	1.40	1.29	0.70
Enthusiastic	2.94	4.62	1.68	1.39	0.60
Friendly and approachable	2.86	4.66	1.81	1.32	0.64
Respect toward students	3.04	4.65	1.60	1.27	0.63
Participated in activities w/ students	2.39	4.04	1.64	1.39	1.15
Called students by name/ interests	2.66	4.41	1.76	1.51	0.82
Professional attitude	3.34	4.68	1.34	1.38	0.58
Open to feedback and criticism	2.55	4.53	1.98	1.40	0.77
Classroom Management					
Course objectives were clear	3.20	4.35	1.15	1.28	0.85
The class began and ended on time	4.07	4.40	0.32	1.08	0.76
Class time was well spent	2.96	4.42	1.47	1.16	0.73
Control over the classroom	3.97	4.61	0.64	1.01	0.60
Lessons were organized/well planned		4.45	0.98	1.13	0.66
Relaxed environment maintained	2.93	4.60	1.67	1.33	0.68
The needs of the students were met	2.39	4.32	1.93	1.25	0.78
Flexibility in planning/ course goals	2.38	4.21	1.84	1.19	0.87
Students involved in direction of class		3.78	1.74	1.19	1.19
Directions were straightforward	2.04 3.09	4.32	1.74	1.12	0.83

Note(s): For the first three columns, the three highest scores are "boxed" and the three lowest are underlined.

A t-test indicated that significant differences (p < .005) were found between mean scores on "motivated to attend" and "unmotivated to attend" surveys for all items except "lectures" (p = .046) and "the class began and ended on time" (p = .036). The three largest differences in mean scores between the two survey forms were "open to feedback and criticism" (1.98), "the needs of all levels of students were met" (1.926), and "flexibility in planning and course goals" (1.84). Six of the ten largest differences in mean scores between the two surveys were in the personal qualities category. The three lowest differences in mean scores were for "the class began and ended on time" (.324), "lectures" (.347), and "control over the classroom" (.641). These results are displayed in Table 2.

Research question two asked, "In relation to the teacher, which of the following do college students perceive to have most influence over their motivation to continue attending classes: teaching methods, teacher personal qualities, or classroom management practices?"

Of the students who completed the "unmotivated to attend" surveys, most indicated that teaching methods (50%) was the largest factor in determining their lack of motivation to continue attending a class. Teaching methods was followed by personal qualities (31.3%) and classroom management (18.8%). Of the students who completed the "motivated to attend" surveys, most indicated that the category personal qualities (62%) was the largest factor in determining their motivation to continue attending a class. Personal qualities was followed by classroom management (20.3%) and teaching methods (17.7%).

Research question three asked, "What do college students perceive to be the specific teaching methods, personal qualities, or classroom management practices that motivate or fail to motivate them to continue attending class?"

The specific activities and qualities that students indicated failed to motivate them were "lectures," "lack of respect," and "lack of friendliness." In contrast, the specific activities and qualities most frequently mentioned as motivating factors were "knowledge of subject matter," "enthusiasm," "respect," and "organized lessons."

Table 2

T-test for Equality of Mean between "Motivated" and Unmotivated" Surveys

Activity or Quality	t	df	Significance (2-tailed)	Mean Difference
Teaching Methods				
Lectures	2.014	151.660	0.046	0.347
Small group discussion	-4.211	138.163	0.000	0.873
Case studies or role plays	-4.502	151.883	0.000	0.812
Demonstrations	-4.674	148.043	0.000	0.959
Students shared experiences	-5.733	128.765	0.000	1.131
A variety of learning activities	-7.358	149.624	0.000	1.381
Effective visual aids	-6.451	153.653	0.000	1.226
Experiments or "hands on activities"	-6.926	151.815	0.000	1.322
Brainstorming	-7.306	152.997	0.000	1.248
Videos, computers, technology	-3.817	151.322	0.000	0.832
Personal Qualities				
Humorous	-7.449	119.245	0.000	1.310
Knowledgeable of the subject matter	-4.702	100.327	0.000	0.700
Patient with students	-8.156	100.878	0.000	1.401
Enthusiastic	-9.411	89.794	0.000	1.681
Friendly and approachable	-10.463	95.324	0.000	1.806
Respect toward students	-9.650	96.699	0.000	1.604
Participated in activities with students	-7.892	131.791	0.000	1.644
Called students by name/ interests	-8.709	101.631	0.000	1.755
Professional attitude	-7.576	89.048	0.000	1.340
Open to feedback and criticism	-10.539	100.251	0.000	1.979
Classroom Management				
Course objectives were clear	-6.437	115.384	0.000	1.149
The class began and ended on time	-2.120	119.474	0.036	0.324
Class time was well spent	-9.184	111.578	0.000	1.466
Control over the classroom	-4.632	105.194	0.000	0.641
Lessons were organized/well planned	-6.393	106.967	0.000	0.976
Relaxed environment maintained	-9.513	98.578	0.000	1.674
The needs of all students were met	-11.169	108.423	0.000	1.926
Flexibility in planning/course goals	-10.713	121.206	0.000	1.838
	-9.346	150.743	0.000	1.736
Students involved in direction of class	-9 146	150 /43	()()())	

Note(s): Equal variances not assumed. p < .005.

Research question four asked, "Are there significant differences between motivation and nonmotivation to continue attending college classes for the following variables: (a) graduate versus undergraduate students, (b) HRD students versus IS students, (c) student's gender, (d) student's age, (e) instructor's gender, (f) whether the course was required or an elective, and (g) the working status of the student?"

A MANOVA indicated that the only significant correlation in the study was between the scores on "motivated to attend" and "unmotivated to attend" surveys (F[30,91] = 4.86, p = .00005).

Conclusion

The results of this study suggest that major differences exist between college teachers who motivate students to continue attending class and those college teachers who fail to motivate students to continue attending class. Moreover, specific teaching methods, personal qualities, and classroom management practices were identified as motivating or unmotivating factors.

Teaching methods

One of the two items that showed no significant difference in mean scores between the "motivated to attend" and "unmotivated to attend" surveys under "Teaching Methods" was lectures. However, the fact that lectures represented the highest mean score on the "unmotivated to attend" surveys and was also the number one unmotivating item cited by students suggested that the use of lecture was not an effective way to motivate college students to keep coming to class. Perhaps if the item had been phrased "lectures for most of the class period," the mean score would have been lower for all students. Nevertheless, the fact that "knowledgeable of subject matter" was the number one reason students were motivated to continue attending class suggested that lectures may be satisfactory so long as the teacher demonstrated knowledge of the subject matter.

Besides lectures the other nine teaching method items represented creative ways to teach. These items were alternative methods to lecturing. They offered variety, innovation, hands-on work, and sometimes teamwork. These alternative teaching

methods were used significantly more often in classes that students reported they were motivated to attend than in those in which students said they were unmotivated to attend. It is also important to note that eight of the lowest nine mean scores on the "unmotivated to attend" surveys belonged to these alternative teaching methods. In addition to the observation that lectures was the largest unmotivating item, all mean scores for the alternative teaching methods were low for the "unmotivated to attend" students. Furthermore, the fact that "Teaching Methods" was listed as the largest unmotivating category suggested that teachers who failed to use creative, alternative methods of instruction might have contributed to students' loss of motivation to continue attending class.

Personal Qualities

Results of this study suggest that a teacher's personal qualities more than any other factor could motivate students to continue attending a class. The fact that the three highest mean scores and six out of the ten highest mean scores were all within the personal qualities category coupled with students in the study listing personal qualities as the largest motivating category, suggested that a teacher's positive attitude and personal behavior in the classroom were consequential. The largest mean score difference in the entire study was the teacher personal quality of being "open to feedback and criticism."

The fact that "respect toward students" and "friendly and approachable" were listed as top choices for both motivational and unmotivational items, suggests that the absence of these traits in a teacher was likely to result in a student's loss of motivation, whereas their presence could lead to a student's motivation.

Classroom Management

Two of the classroom management mean score differences were not significant. These were "the class began and ended on time" and "control over the classroom." Mean scores for these items were relatively high for both the "motivated to attend" and "unmotivated to attend" surveys. Thus they could be ruled out as motivational factors that differed according to motivation or lack of motivation in the classroom. These practices tended to be present in classrooms in which students reported they were motivated as well as in those in which they reported they were unmotivated.

Two of the three largest differences in mean scores fell within the classroom management category. These were "the needs of all students were met" and "flexibility in planning and course goals." Also included in the top 10 differences in mean scores were "students involved in the direction of class" and "relaxed environment maintained." This suggested that the class management items that involved flexibility and student empowerment were important motivational factors. Although "lessons were organized/well planned" was ranked as the third largest motivating item, the mean score differences for class management items involving a "flexible" and "comfortable" environment were greater than every single one of the "structure," "control," and "organized" items. This finding suggested that college teachers who hope to motivate students to continue attending classes should consider loosening the reins a bit.

Recommendations

Based on the findings of the current study, several recommendations can be made to the college teacher who desires to motivate students to continue attending a class. First of all, college teachers should not rely on lecturing as the primary method of teaching. Instead, they should use a variety of alternative teaching methods to capture students' attention and curiosity. Using case studies, role plays, experiments, and buzz groups are just a few of many ways to teach students without lecturing. Nevertheless, in some situations, such as large classes, lecture may be necessary. When that is the case, the current study suggested that the college teacher should have a thorough understanding of the material since "knowledgeable of subject matter" was identified as a large motivating factor.

Another recommendation for college teachers is to maintain a positive attitude toward students. The current study found that a teacher's personal qualities were more important in motivating students to continue attending class than were teaching methods and classroom management practices. Teachers

who were open-minded, friendly, enthusiastic, and knowledgeable about students' names and interests demonstrated several of the personal qualities that motivated students the most.

Finally, college teachers might enhance students' motivation by allowing student input and by maintaining a flexible class environment. The current study suggested that students like classes with structure and organization. At the same time, students are more motivated to continue attending a class that is not too rigid. Meeting the needs of all students, offering flexibility in planning and course goals, and allowing students to be involved in the direction of a class were all perceived to be high motivational factors.

References

- Arnett, L. E. (2002). The impact of out-of-class communication between instructors and students on student motivation and learning. Unpublished master's thesis, University of Tennessee, Knoxville.
- Bonwell, C. C., & Sutherland, T. E. (1997). The active learning continuum: Choosing activities to engage students in the classroom. *New Directions for Teaching*, 67, 3-16.
- Brewer, E. W. (1997).13 proven ways to get your message across. Thousand Oaks, CA: Corwin.
- Brewer, E. W., DeJonge, J. O., & Stout, V. J. (2001). Moving to online: Make the transition from traditional instruction and communication strategies. Newbury Park, CA: Corwin Press.
- Brewer, E. W., Dunn, J., & Olszewski, P. (1988). Extrinsic reward and intrinsic motivation: The vital link between classroom management and student performance. *Journal of Education for Teaching*, 14(2), 151-170.
- Brewer, E. W., Hollingsworth, C., & Campbell, A. (1995). Incentive motivation psychology: An exploration of corrective learning behavior. Journal of the Southeastern Association of Educational Opportunity Program Personnel, 14(1), 33-56.

- Brewer, E. W., & Marmon, D. (2000). Characteristics, skills, and strategies of the ideal educator: Becoming a quality teacher, counselor, coach, principal, or superintendent. Boston, MA: Pearson.
- Brophy, J. (1987). On motivating students (Paper No. 1). East Lansing, MI: Michigan State University.
- Burgess, D. (1998). Role of professors in motivating students to attend class at The University of Tennessee. Unpublished master's thesis, University of Tennessee, Knoxville.
- Condry, J., & Chambers, J. (1978). Intrinsic motivation and the process of learning. In the hidden costs of reward. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crump, C. A. (1995, September). *Motivating students: A teacher's challenge*. Paper presented at the Sooner Communication Conference, Norman, OK.
- Darr, R. F. (1996, December). *Teacher characteristics*. Paper presented at the Eastern Educational Research Association, Clearwater, FL.
- Davenport, W. S. (1990). A study of the relationship between attendance and grades of three business law classes at Broome Community College. Ed. D. Practicum, Nova University.
- Deci, E. L. (1971). The effects of externally mediated rewards on intrinsic motivation. Journal of Personality and Social Psychology, 18(1), 105-115.
- Deci, E. L. (1972a). Effects of contingent and non-contingent rewards and controls on intrinsic motivation. Organizational Behavior and Human Performance, 8, 217-229.
- Deci, E. L. (1972b). Intrinsic motivation, extrinsic reinforcement, and inequity. *Journal of Personality and Social Psychology*, 22(1), 113-120.
- Dickens, W. J., & Perry, R. P. (1982, November). Perceived control in college classrooms: The impact of student and teacher characteristics. Paper presented at the International Congress of Applied Psychology, Edinburgh, Scotland.
- Friday, R. A. (1990). Faculty training: From group process to collaborative learning. Journal of the Freshman Year Experience, 2, 49-67.

- Gailbraith, M. W., & Sanders, R. E. (1987). Relationships between perceived learning style and teaching style of junior college education. Community Junior College Quarterly of Research and Practice, 11, 169-177.
- Gay, L. R., & Airasian, P. (2003). Educational Research: Competencies for Analysis and Application. (7th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Hancock, D. R. (2001). Effects of test anxiety and evaluative threat on students' achievement and motivation. *Journal* of Educational Research, 94, 284-290.
- Hancock, D. R. (2002). Influencing postsecondary students' motivation to learn in the classroom. College Teaching, 50, 63-66.
- Higbee, J. C. (1996). Ability, preparation, or motivation? Research and Teaching in Developmental Education, 13, 93-96.
- Jenkins, A., Breen, R., Lindsay, R., Brew, A. (2003). Reshaping teaching in higher education: Linking teaching with research. Sterlying, VA, and London: Kogan Page.
- Karsenti, T., & Thilbert, G. (1994, March). The relationship between teaching style and within-term changes in junior college student motivation. Paper presented at the American Research Association, New Orleans.
- Launius, M. (1997). College student attendance: Attitudes and academic performance. *College Student Journal*, 31, 86-92.
- Lepper, M. R. (1988). Motivational considerations in the study of instruction. *Cognition and Instruction*, *5*, 289-309.
- Lepper, M. R., & Green, D. (1975). Turning play into work: Effects of adult surveillance and extrinsic motivation. Journal of Personality and Social Psychology, 31, 479-486.
- Lepper, M. R., Green, D., & Nisbett, R. (1973). Undermining children's intrinsic interest with extrinsic rewards: A test of the overjustification hypothesis. *Journal of Personality* and Social Psychology, 28, 129-137.
- Linnenbrink, E. A., & Pintrich, P. R. (2003). The role of selfefficacy beliefs in student engagement and learning in the classroom. *Reading & Writing Quarterly*, 19, 119-137.

- Luechauer, D. L., & Shulman, G. M. (1992, May). Moving from bureaucracy to empowerment: Shifting paradigms to practice what we preach in class. Paper presented at the Midwest Academy of Management, St. Charles, IL.
- Lumsden, L. S. (1994). Student motivation to learn. *ERIC Digest*, 92.
- Marshall, H. H. (1987). Motivational strategies of three fifthgrade teachers. *The Elementary School Journal, 88*, 133-150.
- McCutcheon, L. (1986). The causes of student absenteeism in community college classes. Applied Research Project Report, Nova University.
- McGonigal, C. (1994). *Student motivation in the classroom*. Unpublished master's thesis. Saint Xavier University, IL.
- Negron-Morales, P. (1996, May). Good practices in undergraduate education from the students and faculty's view: Consensus or Disagreement. Paper presented at the Association for Institutional Research, Albequerque, NM.
- Nichols, J. D., & Miller, R. B. (1993). Cooperative learning and student motivation.
- Richardson, T. R., Kring, J. P., & Davis, S. F. (1997). Student characteristics and learning or grade orientation influence preferred teaching style. *College Student Journal*, 31, 347-351.
- Sass, E. J. (1989). Motivation in the college classroom: What students tell us. *Teaching of Psychology*, 16, 86-88.
- Sheridan, H. W. (1988). The complete professor, jr. AAHE-Bulletin, 41, 3-7.
- Small, R. V. (1996, December). Dimensions of interest and boredom in instructional situations. Paper presented at the National Convention of the Association for Educational Communication and Technology, Indianapolis, IN.
- Smilkstein, R. (1989). The natural process of learning and critical thinking. *Gamut, 38,* 26-29.
- Spaulding, C. L. (1992). *Motivation in the Classroom*. New York: McGraw-Hill.

- Teven, J. J., & McCrosky, J. C. (1996). The relationship of perceived teacher caring with student learning and teacher evaluation. *Communication Education*, 46, 1-9.
- Thayer-Bacon, B. J., & Bacon, C. S. (1996). Caring professors: A model. *Journal of General Education*, 45, 255-269.
- Tollefson, N. (1988, August). Teacher attributions for student's low achievement: A validation of Cooper and Good's attributional categories. Paper presented at the Midwest Educational Research Association, Chicago, IL.
- Trice, A. G., & Dey, E. L. (1997). Trends in faculty teaching goals: A longitudinal study of change. Journal of College Student Development, 38, 527-534.
- Van-Blerkom, M. L. (1996). Academic perseverance, class attendance, and performing in the college classroom. Paper presented at the American Psychological Association, Toronto, Ontario.
- Wilkenson, B. H. (1992, June). *The 7 laws of the learner*. Sisters, OR: Multnomah Press.
- Wilson, S., & Cameron, R. (1996). Student teacher perceptions of effective teaching: A developmental perspective. *Journal* of Education for Teaching, 22(2), 181-195.
- Wlodkowski, R. J. (1986). *Motivation and Teaching*. Washington: National Education Association.