DIFFERENCES IN STUDENT AND TEACHER PERCEPTIONS OF MOTIVATING FACTORS IN THE CLASSROOM ENVIRONMENT

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Abstract

Motivation on the part of students is an important aspect of learning and effective instruction. One of the most available and least used sources of information about student wants and needs is the students themselves. This study investigated the differences between what high school students say motivates them and teachers' perceptions of what motivates students. Given a series of school variables to rank, students consistently weighted four variables as most important, but teachers' perceptions were significantly different. A second area of investigation compared school expectations of students in block scheduling and students in traditional school. The differences between the teachers' perceptions of what motivates students in the two different types of high schools were also investigated. Findings indicated that teachers in restructured schools agreed with student responses more than did teachers in more traditional schools.

Introduction

Motivation on the part of students is an important aspect of learning and effective instruction. It is the willingness to expend a certain amount of effort to achieve a particular goal (Biehler & Snowman, 1990). When students are motivated to perform competently on academic tasks, they will learn in accordance with their abilities (Good & Brophy, 1994). Students’ learning is maximized when students’ achievement motivation is enhanced, and the teacher’s job is easier when students are motivated to learn (Spaulding, 1992). As students progress through school, however, their motivation to achieve often seems to diminish. One survey reveals that 41% of fourth-grade students still retain excellent
or outstanding motivation for learning, but by the time students reach 12th grade this percentage declines to 12% (Eccles, 1993; Phillips & Zimmerman, 1990).

Schunk (1990) declared that factors in the learning environment influence the attributions of students, and the attributions affect behaviors, expectancies, and attitudes. Therefore, it would seem critical to know what students perceive as motivating or not motivating in the classroom. Researchers found several characteristics of the learning environment that impact motivation and learning, such as assessment methods, teaching strategy, and psychosocial climate. Mouton, Hawkins, McPherson, and Copley (1996) identified several indicators that degree of school attachment has profound influence on motivation, self-esteem, effort, and behavior. They contend, however, that school attachment has yet to be clearly defined so that essential comparisons across student types and environmental factors may be assured.

Student Input

One of the most available and least used sources of information about student wants and needs is the students themselves. Studies have been conducted with student input from many different cultures. Watkins (1996) used shortened versions of the Learning Process Questionnaire (LPQ) and the Social Desirability Scale. He found that secondary students in Hong Kong respond in a socially desirable way, related to their level of motivation. While the author warned that the results may not generalize across cultures, the point is made that differing levels of perceived motivation may elicit response sets, and that true learning may not be measured because of interference of socially desirable response patterns. The obvious next question is whether the classroom environment is encouraging or hindering true learning and long-term motivation if it indeed encourages such response sets.

In a similar study, also among Hong Kong students, it was reported that the use of the Mathematics Classroom Environment Scale reflected discrepancies between the preferred and actual classroom environment, with students preferring a more positive classroom environment. Girls preferred more teacher involvement and a harmonious atmosphere, with males preferring a more enjoyable atmosphere.

Israeli students and teachers were compared in their assessment of grading practices, and they were found to be similar in their assessment of the value and use of grading as purely evaluative rather than motivational. The author suggested that this reflects the cultural internalization of such values and views via acculturation.

In Singapore, students responding to the Individualized Classroom Environment Questionnaire preferred a more favorable environment than they perceived. Learning style was assessed but not found to be related to preferred environment. As might be expected, students from below average schools expressed the greatest wishes for change, including more opportunities for working at their own pace and controlling their environment.

Middleton (1995) compared math teachers and their students in defining what it means to be intrinsically motivated in mathematics. Even though students and teachers agreed on several factors, teachers readily admitted that they usually had no idea of the motivational levels of their students. In a different study related to mathematics (Valas & Sovik, 1993), students were asked to assess the amount of control the math teacher exerted, and to indicate perceptions of their own subsequent effects. Students confirmed that the level and type of control exerted by math teachers affected intrinsic interest for math, performance in math, and mathematical self-concept. While such information is necessary at differing levels, it does not reflect the individual classroom atmosphere in which the student is challenged to learn day-by-day. The sense of belonging was assessed among middle school students in English classes. The findings showed that teacher support was the most consistent variable named, and was related to grades, effort, and motivation.
Students have also been asked to assess programs. One example is an alternative program for at-risk African American males. Students reported higher levels of support from parents and teachers through the program, as well as influential change on importance of hard work, achievement, and post-secondary education.

Surveys of student attitudes have been used to investigate sexism in single sex versus coeducational schools (Lee, Marks, & Byrd, 1994). The surveys, from more than 3,000 high school students in single-sex and co-educational schools, showed that gender inequity depended more on the subject (higher level sciences) and the gender of the teacher than on the type of school attended.

Thorkildenson, Nolen, and Fournier (1994) interviewed students to obtain their perceptions of what is “fair practice” by teachers when attempting to motivate students. Valued practices fell into the categories of promoting understanding, enforcing dutiful commitment, and extrinsic rewards (some said for effort, and some said for performance).

Kilgore and Pendleton (1993) conducted a study related to student learning to investigate possible system and organizational factors. Students were asked about teacher inducements to learn, such as homework, control, and rewards. They were also questioned about communication flow from teachers to students, teachers to teachers, and counselors to students and to teachers, relative to students’ progress and educational aspirations. The results indicated that teacher inducements, communication patterns, and available resources do influence students’ motivation, choices, and investment in learning opportunities.

Several studies used Ramsden’s Course Perception Questionnaire (CPQ) to measure departmental learning factors, such as workload, good teaching and freedom in learning. However, students were asked to rate the degree of presence or absence of characteristics, rather than to express the degree to which any factors were more or less important or useful to them in the context of learning.

Meyer (1988) and Meyer and Muller (1990) conducted extensive statistical analyses of the CPQ and other instruments, and contended there exist “empirical associations at an individual level between perceptions of learning context and approaches to study” (p. 135). Also, they asserted that differing levels and stages of meaningful study exist, which in turn affect progress and successful performance such as tests, grades, as well as “deep perceptions of learning context . . . and context stimuli” (p. 137). The authors affirmed that students are indeed affected by the physical events in the classroom, such as teachers, peers, books, resources, as well as the relationships and communication patterns related to the physical factors.

Researchers found seven dimensions of interest in the school environment: external physical characteristics, aesthetics and functional elements, students’ bathrooms, cafeteria, staff rooms, functional elements of the school as a whole, and sanitation. As is evidenced, students have strong perceptions about variables related to the learning environment, and their motivation to achieve is affected by their reactions to these variables.

Student Motivation

Extrinsic and intrinsic motivation are two types of human motivation identified by psychologists and theorists (Deci, 1975; Malone & Lepper, 1987). Extrinsic motivation depends on observable rewards. Intrinsic motivation can be defined as activity undertaken for its own sake. School systems in the U.S. are designed to promote extrinsic motivational orientations almost exclusively (Connell & Deci, 1985; Spaulding, 1992). Although both extrinsic and intrinsic motivators have their uses, a growing body of research suggests that extrinsic rewards decrease intrinsic motivation (Biehler & Snowman, 1990; Deci, 1975; Dweck, 1986). Intrinsic motivation appears to be the by-product of two self-perceptions. Individuals tend to be intrinsically motivated in situations in which they feel both competent and in control, or
self-determining (Deci, 1975; Dweck, 1986; Good & Brophy, 1994). Teachers who want to increase their students’ intrinsic motivation for academic endeavors must learn how to create academic environments that promote students’ perceptions of both competence and control.

Although students are usually motivated in some way and in varying degrees, the challenge for teachers is to find out which factors are most motivating. A logical source of information regarding what is motivating to the students should be the students themselves. As teachers learn what factors students perceive as motivating, they will be better able to develop a classroom environment that increases motivation.

**Purpose of Study**

This study investigated the differences between what high school students from different settings say motivates them, as well as teachers’ perceptions of what motivates students. The closer teachers’ perceptions of motivation are to the reality of what students view as motivating, the more effective teachers may become in working with students.

This study also investigated the differences between what students in two restructured schools say they want from school and what students in traditional schools say they want. Restructured schools use extended time block of 90 to 110 minutes and have three to four periods a day rather than the traditional six or seven periods per day. The difference between the teachers’ perceptions of what motivates students in the two different types of high schools was also investigated.

The research questions asked in the study were as follows:

1. Is there a difference between what students in traditional high schools say they want in school and what teachers in traditional schools perceive the students want in school?
2. Is there a difference between what students in restructured high schools say they want in school and what teachers in restructured schools perceive the students want in school?
3. Is there a difference between what students from the traditional schools and students from the restructured schools say they want in school?
4. Is there a difference between traditional high school teachers’ perceptions and restructured high school teachers’ perceptions about what they thing the students want from school?

**Method**

**Participants**

Four hundred and twenty-three high school students in 10th, 11th, and 12th grades, and 211 high school teacher participated in the study. The students were divided into two groups. Group 1 was made up of 230 students (81 males, 149 females) attending traditional high schools in Mobile, Alabama. The mean age of this group was 16.03 years. Students in Group 2 consisted of 193 students (61 males, 132 females) attending restructured high schools in Moss Point, Mississippi and Pensacola, Florida. The mean age of this group was 16.05 years.

The subjects in both student groups were from remedial, regular, and advanced level classes. In Group 1, 76% of the subjects (174/230) said they planned to attend college, 12% (27/230) said they were going to work, and 12% (27/230) did not know what they would do after graduation. In Group 2, 78% (150/193) of the students indicated they planned to attend
college, 12% (23/193) planned to work and 10% (19/193) did not know what they would do after graduation.

The teachers in the study were also divided into two groups, traditional (n = 154) and restructured (n = 57). The mean number of years teaching for the traditional and restructured teacher was 15 and 9.5 years respectively.

**Instrument**

Dr. Brenda Litchfield (See Appendix A) developed the survey instrument used in this study. The instrument was modeled after a survey instrument used in business research to investigate what the employee wants from a job and the employer’s perception of what the employee wants. The survey consisted of items that reflected both intrinsic and extrinsic types of reinforcement. Each item had a brief explanation to clarify its meaning to the students.

**Procedures**

The subjects in the two student groups were asked to rank order 10 statements (See Table 1) that indicated what they wanted most from school or the most important thing in school to them (1 = most important, 10 = least important).

<table>
<thead>
<tr>
<th>Choices</th>
<th>Traditional Schools</th>
<th>Restructured Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students</td>
<td>Teachers</td>
</tr>
<tr>
<td>1. Good grades</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2. Teachers that are friendly</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3. Good learning conditions</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4. Full appreciation of work done</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5. Fair and consistent disciplining</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>6. Working in teams</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>7. Recognition and privileges</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>8. Sympathetic understanding of personal problems</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>9. Feeling “in” on things</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>10. Challenging work and activities</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>

The teachers in the both groups were asked to put themselves in the students’ shoes by ranking in order of importance the items that described things they thought students found motivating in school. It was emphasized that in ranking the items the teachers should not think in terms of what they felt, but what they thought the students want.
Results

The students in both groups ranked all items in the same order. They ranked good grades as most important to them. Sixty-two percent of the subjects in both groups ranked good grades as their number one choice. Friendly teachers, good learning condition, and full appreciation of work done were ranked respectively as the second, third, and fourth choices. Feeling "in" on things and challenging work and activities were ranked 9th and 10th, respectively.

The traditional teacher group ranked fair and consistent disciplining, full appreciation of work done, good grades, and friendly teachers as the four top factors they thought students considered most important in school. The restructured teacher group ranked the same items as the top four choices, but ranked good grades first, and fair and consistent discipline third. Their choices for second and fourth were the same as the traditional teacher group. Both teacher groups ranked challenging work and activities as ninth and working in teams as 10th in importance for students.

Boxplots (see Figure 1) were used to compare each variable between traditional student and teacher groups, between restructured students and teacher groups, between student groups, and between teacher groups. Boxplots in Data Desk indicate a 95% confidence interval, and these are shaded in each boxplot. Based on this analysis, a significant difference was
indicated in the ranking of four items between students and teachers in both the traditional and restructured groups.

There was a significant difference between the ranking of student groups and teacher groups on fair and consistent disciplining, full appreciation of work done, good grades, and working in teams. Teachers ranked discipline and appreciation of work as more important than the students ranked them. Students in both groups ranked working in teams more important than what teachers indicated would be important to the students. Although students and teachers in all groups ranked good grades as important, there was a significant difference between the student groups’ rankings and the teacher groups’ rankings of this variable. There was little variability between student groups on this variable.

Comparison of the ranking of items between the two student groups showed no significant differences. Nor were there any differences between the two teacher groups.

Discussion

The sample of students in the two different school settings showed no significant differences in what they considered most important in school. In fact, they were almost identically matched on the percentage of rankings for every variable. This may indicate that how classes are structured makes little difference in motivation of students—at least in the factors measured in this study.

One interesting result of the study was the way teachers in both groups ranked how they thought students felt about wanting to work in teams. Working in teams was ranked sixth in importance by students, while both groups of teachers ranked working in teams as 10th. The teachers’ low ranking of team work may be a reflection of their own feelings about team work or cooperative learning and control in the classroom. Many secondary teachers have not received sufficient or in-depth training in how to implement cooperative learning and plan group activities. This lack of training may cause teachers to resist this method of instruction. More research is needed in this area.

The students’ high ranking of grades and low ranking of wanting challenging work may be supportive of the research findings concerning intrinsic and extrinsic motivation. This empirical evidence suggested that extrinsic rewards decrease intrinsic motivation (Dweck, 1986). Students will often sacrifice learning more challenging material in order to obtain a higher grade.

Further study would be indicated to explore differences below the top four items chosen here by students. In addition, further pilot testing of the instrument would provide measures of internal consistency, would corroborate findings, and would test possible interaction of variables.

References


Appendix A

NO NAME

DIRECTIONS: Rank order (1-10) the choices below about the things you want in school. The most important thing to you or the thing you want most would be rated 1. The least important thing to you or the one you do not really care about would be rated 10.

- GOOD LEARNING CONDITIONS – Nice classroom, comfortable, decorations.
- FEELING “IN” ON THINGS – Being able to make some decisions about what and how you learn.
- FAIR AND CONSISTENT DISCIPLINING – All students get equal treatment, no special exceptions when rules are broken.
- FULL APPRECIATION OF WORK DONE – Recognition of effort and abilities, encouragement and praise when you do well.
- GOOD GRADES – Getting high grades in your classes.
- RECOGNITION AND PRIVILEGES – Special treatment when you have done well, being able to have your name or photograph posted, getting certificates, rewards.
- SYMPATHETIC UNDERSTANDING OF PERSONAL PROBLEMS – A kind word when things are not going well, extra time to “get it together.”
- CHALLENGING WORK AND ACTIVITIES - Things that make you think, solve problems, and make decisions. Being able to show what you have learned.
- WORK IN TEAMS - Work with other students to do classwork, projects, study, homework, or computer programs.
- TEACHERS WHO ARE FRIENDLY – Teachers who take time with students and treat them well.

Grade ________ Age ________

Put a check in a blank for the remaining information

Male _____ Female _____

After graduation do you plan to: work _____ go to college _____ don’t know _____

Do you live with: both parents _____ one parent _____ other family member _____
no family member _____