Achievement Goal Theory: A Preliminary Study Examining Educators' Motivational Beliefs And Practices

Marc Groen

University of Northern Iowa

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ACHIEVEMENT GOAL THEORY: A PRELIMINARY STUDY EXAMINING
EDUCATORS' MOTIVATIONAL BELIEFS AND PRACTICES

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements of the Degree
Specialist in Education

Marc Groen
University of Northern Iowa
May 2005
ABSTRACT

Achievement goal theory has become one of the most promising motivational theories examining both student motivation and achievement. The purpose of this study was to expand the current body of research on achievement goal theory by exploring educators' motivational beliefs and instructional practices. Data was collected from two Eastern Iowa school districts using an online survey. Results from this preliminary study provide important information about the practical nature of motivational problems from the perspective of elementary and middle school educators. The author explores the implications of the findings for educators, school psychologists, and future research.
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EXAMINING EDUCATORS' MOTIVATIONAL BELIEFS AND PRACTICES

Has been approved as meeting the thesis requirement for the
Degree of Specialist in Education

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DEDICATION

To Kara, I owe you more than I can ever repay in terms of your love, patience, and support. Thank you for the music you bring into my life each day. Your melody inspires me to renew myself and dedicate my life to helping others.
ACKNOWLEDGEMENTS

I would like to acknowledge everyone who made the ideas behind this project a reality. Specifically, I would like to acknowledge the members of my research committee Dr. Radhi Al-Mabuk, Dr. Tony Gabriele, and Dr. Charlotte Haselhuhn whose help in this process was invaluable. Your years of research experience, driving sense of excellence, and dedication to your students has shown me how fortunate I was to have such a talented group of professors on my committee. I would also like to acknowledge Sarah Galloway for her sharp research abilities, wonderful sense of humor, and helping me have faith that I could accomplish my goals. I am indebted to all of you for the time and effort you placed in this project above and beyond the scope of your work.
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CHAPTER 1
INTRODUCTION

Statement of the Problem

Motivating students to achieve in is a primary goal for educators (Braden, DiMarino-Linnen, & Good, 2001). Previous research examining motivational problems suggests that achievement goal theory may offer educators a means to reduce and prevent motivational problems (Kaplan, Gheen, & Midgley, 2002). In brief, achievement goal theory focuses on the underlying purposes and goals students pursue in achievement situations as a basis for explaining adaptive and maladaptive behavior (Kaplan, Middleton, Urdan, & Midgley, 2002).

Although motivational research examining achievement goals shows promise for application in schools and classrooms, few studies have attempted to practically apply instructional practices based on achievement goal theory (Maehr & Midgley, 1996). Researchers that have attempted to modify the classroom environment have encountered difficulties with helping educators apply the conceptual model of achievement goal theory to daily classroom practice (Maehr & Midgley, 1996). One step in this direction is developing a more comprehensive understanding
educators' motivational beliefs and instructional practices. Further research in this area could help researchers understand how to best adapt motivational strategies to educators and the needs of their classroom environment.

Importance of the Study

Within educational research achievement goal theory is considered to be the preeminent approach to understanding motivation and achievement (Midgley, Middleton, Kaplan, 2001; Midgley, Kaplan, Middleton et. al, 1998; Pintrich & Schunk, 1996). Experts in the field of motivation (e.g. Ames, 1992; Maehr, & Midgley, 1996; Pintrich, & Schunk, 1996) believe that achievement goal theory holds promise to be one of the most applicable theories in educational practice, and have been attempting to adapt the theory into current classroom structures. Furthermore, the application of achievement goal theory could be used to help improve student a number of student outcomes (Ames, 1992). Studies suggest that the use of instructional practices based on achievement goal theory can increase students' retention of material, persistence on difficult academic tasks, and increase the amount of effort students put forth on academic tasks (Ames, 1992).
While research on applying achievement goal theory is promising, most research in the area of achievement goal theory has often been descriptive, with few studies attempting to implement achievement goal theory (e.g. Maher & Midgley, 1996). Researchers who have attempted to apply achievement goal theory have encountered a number of difficulties when adapting motivational strategies to classroom instruction (Maher & Midgley, 1996).

Further research is needed to understand the barriers educators encounter when adapting achievement goal theory into practice. Preliminary research examining educators' motivational beliefs and instructional practices may help us better understand these barriers. Understanding this relationship may also be useful in designing new teacher training programs and in-services focused on implementing motivational strategies. By understanding the barriers educators perceive in their environment, we may be able to aid administrators and educators to modify these motivational strategies to best work in their school or classroom cultures.

A greater understanding of these factors may also have benefits for students. As educators continually strive to improve the motivational strategies they utilize, students
should benefit from improved instruction. Furthermore, research suggests that changes in these areas may produce a number of beneficial student outcomes (Ames, 1992).

The current study examined educators’ motivational beliefs and practices. The purpose of this study was to provide a preliminary understanding of; (1) the types of motivational problems educators encounter, (2) educators application of motivational strategies, (3) possible barriers to the implementation of motivational strategies, and (4) differences in the motivational beliefs of educators.

**Research Questions**

1. Do educators at the elementary level encounter different types of motivational problems than middle school educators?

2. Do elementary and middle school educators’ utilize different types of motivational strategies to solve motivational problems?

3. Do elementary and middle school educators’ perceive different types of barriers to implementing new motivational strategies in their classrooms?

4. Are there differences in the motivational beliefs of elementary and middle school educators?
Organization of Study

This study is organized into five chapters. The first chapter introduces the focus of our study including a review of key terms. The second chapter presents a review of motivational literature and will be organized into five parts. The first part offers definitions and historical background information. The second part provides a brief overview of the literature on achievement goal theory. The third section examines educators’ beliefs and instructional practices. The fourth section will briefly review previous attempts to implement achievement goal theory into practice. With the fifth section summarizing the research. Chapter three will review the methods used in creating the survey instrument, collecting data, and selecting participants. Chapter four will focus on the results obtained from the survey. Chapter five will discuss the findings of the study and then examine the implications for educators, school psychologists, and possibilities for future research.
Definition of Terms

Achievement goal theory identifies and focuses on the underlying purposes and goals students pursue in achievement situations as a basis for explaining adaptive and maladaptive behavior (Kaplan, Middleton, Urdan, & Midgley, 2002).

Attribution can be considered the perceived causes of success and failure (Alderman, 1999, p. 243).

Educators are defined as practicing teachers, administrators, and educational specialists (e.g. school psychologists).

Encryption is the process of converting plain text or messages into a code only decipherable by the intended recipient (dictionary.com).

Firewall is a computer (or software) specifically used for the purpose of protecting the security of users data stored on a network (dictionary.com).

Learning Goals (also known as Mastery goals, task involvement goals): Goals focused on learning or mastery of an achievement task (Alderman, 1999).

Motivation can be defined as, "...the process where by goal-directed activity is instigated and sustained." According to (Pintrich & Schunk 1996, p. 4).

Performance goals (also known as ego involvement goals): Judging ability or capacity relative to others performance, while focusing on gaining a positive appraisal of the individuals competence from others (Dweck, 1988; Nicholls, 1984).

Server is a computer that provides and stores data for a large number of computer users on a network (dictionary.com).

Self-efficacy is the perception of one's ability to complete a given task (Alderman, 1999, p. 244).
Web-Browser is a computer software program designed to allow users to view Hypertext Markup Language documents (e.g. html.). Common examples of web-browsers include Microsoft Internet Explorer, Netscape Communicator, and Mozilla (dictionary.com).
CHAPTER 2
REVIEW OF LITERATURE

This review of literature provides background information regarding teacher beliefs and instructional practices within the framework of achievement goal theory. The review will be organized into five main sections: (1) a brief review of achievement goal theory, (2) literature on educators' motivational beliefs and instructional practices, (3) a review of a previous attempt to implement achievement goal theory, (4) a critique of the research, and (5) a summary of the research.

Achievement Goal Theory

Achievement goal theory has become a prominent motivational theory over the past two decades. Achievement goal theory provides a comprehensive organizational framework for understanding student motivation in terms of the underlying purposes or goals students pursue in achievement related situations (Ames, 1992). Researchers using an achievement goal perspective seek to understand differences in the quality of student task engagement (Dweck, 1986; Nicholls, 1984). For example, why do some students put forth increased effort on a challenging task, attempting to learn from the experience? Similarly, why do
other students become easily frustrated with a challenging task attempting to avoid investing effort, and are only interested in getting the best grade possible? Achievement goal theory answers these questions by examining how student motivation and the classroom environment interact to impact student achievement.

Within achievement goal theory, researchers have found that the purposes students have for engaging in academic situations (e.g. achievement goals) can be categorized into different groups. Over the last two decades the literature on achievement goals has focused on two major goal orientations, learning and performance goals (Table 1).

Generally, students adopting learning goals seek to develop competence (Dweck, 1986). In contrast, students adopting performance goals strive to demonstrate competence or avoid the demonstration of incompetence. The contrast in terms of developing or demonstrating competence helps us understand situations in which students can obtain similar outcomes, yet the manner in which they approach and react to tasks may be very different.
Table 1
Definitions of Learning and Performance Goals

<table>
<thead>
<tr>
<th>Success defined as</th>
<th>Learning Goals</th>
<th>Performance Goals</th>
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<tbody>
<tr>
<td>Value placed on</td>
<td>Effort, attempting difficult tasks</td>
<td>Progress, mastery</td>
</tr>
<tr>
<td>Basis for satisfaction</td>
<td>Progress, mastery</td>
<td>Being the best, success relative to effort</td>
</tr>
<tr>
<td>Task, work, performance context</td>
<td>Growth of individual potential, learning</td>
<td>Establishing performance hierarchies</td>
</tr>
<tr>
<td>Reasons for effort</td>
<td>Intrinsic and personal meaning of activity</td>
<td>Demonstrating one's worth</td>
</tr>
<tr>
<td>Evaluation of criteria</td>
<td>Absolute criteria, evidence of progress</td>
<td>Norms, social comparisons</td>
</tr>
<tr>
<td>Errors viewed as</td>
<td>Part of the growth process, informational</td>
<td>Failure, evidence of lack of ability or worth</td>
</tr>
<tr>
<td>Competence viewed as</td>
<td>Developing, effort</td>
<td>Inherited and fixed</td>
</tr>
</tbody>
</table>

For example, although a student obtains a score of 85, (the top score in the class) she still seeks out additional feedback on how she can improve. In contrast, another student may also earn a score of 85, but since she receives an A, she does not ask for feedback.

In this example, the first student wants to continue to develop her skills. Although earning an A may validate the effort she put into studying, she still desires to improve. In contrast, the second student’s goal was to demonstrate her ability. Since she obtained the top score in the class, she feels satisfied with her performance.

The Approach-Avoidance Distinction

In the past few years new research has emerged suggesting that learning and performance goals may be further sub-divided by an approach-avoidance distinction. To organize these goals, Linnenbrink and Pintrich (2001) have constructed an achievement goal framework that divides learning and performance goals into four interrelated constructs (Table 2). The framework is comprised of personal goals (learning or performance), and a student’s focus (e.g. approach or avoidance). This framework creates four specific sub-goals: learning-approach, learning-avoidance, performance-approach, and performance-avoidance.
Each sub-goal shares the same characteristics of the general construct (i.e. learning and performance goals), the difference between these goals lies in whether students approach or avoid academic related situations.

Within performance goals, students can adopt performance-approach or performance-avoidance goals (Linnenbrink & Pintrich, 2001). Students adopting performance-avoidance goals, avoid demonstrating a lack of ability or failure. In other words, these students attempt to avoid appearing incompetent in the eyes of their peers or teachers. For example, students adopting performance-avoidance goals may fear answering questions incorrectly, for fear that this would indicate they are incompetent. As a result these students may make an active effort to not answer questions. Students may try to avoid being called on by avoiding eye contact with a teacher, or attempting to look busy during class.

In contrast, students with performance-approach goals try to demonstrate ability. These students focus on proving they possess superior abilities (e.g. relative to their peers). For example, students adopting performance-approach goals would raise their hand to answer questions desiring to demonstrate their ability. Similarly, students
with a performance-approach focus strive to be the best student, attempting to establish superiority (e.g. having the highest level of ability) through obtaining the top grades on tests.

Learning goals can also be divided along an approach-avoidance focus (Linnenbrink & Pintrich, 2001). Within achievement goal literature the general construct of learning goals has typically been associated with a learning-approach focus. Learning-approach goals are characterized by a focus on mastery, understanding, and self-improvement. These students believe that by investing extra effort in tasks, they will increase their skill level in that area.

A more controversial and less established construct is learning-avoidance goals. Learning-avoidance goals lack the research base associated with the more general constructs of learning and performance goals, however, Linnenbrink and Pintrich (2001) argue that learning-avoidance goals are conceptually valid constructs. They suggest that the use of a learning-avoidance construct balances and further organizes achievement goal theory into a more coherent framework (Table 2).
Table 2

Achievement Goals Within an Approach-Avoidance Framework

<table>
<thead>
<tr>
<th>Learning Goals</th>
<th>Approach Focus</th>
<th>Avoidance Focus</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Focus on mastering tasks, learning, and understanding.</td>
<td>Focus on avoiding misunderstanding, avoiding not learning or not mastering task.</td>
</tr>
<tr>
<td></td>
<td>Uses standards of self-improvement, progress, deep understanding of task.</td>
<td>Use of standards of not being wrong, not completing tasks incorrectly, relative to the task.</td>
</tr>
<tr>
<td></td>
<td>Focus on being superior, outperforming others, being the smartest, best at task in comparison to others.</td>
<td></td>
</tr>
<tr>
<td>Performance Goals</td>
<td>Use of normative standards, getting the best grades, being the best in class.</td>
<td>Use of normative standards of not getting the worst grades, being the worst in class.</td>
</tr>
</tbody>
</table>


The distinction between learning-approach and learning-avoidance goals comes from the manner in which students evaluate their progress and errors. Students adopting an approach or avoidance focus both strive to meet self-established standards promoting learning or mastery,
however, these goals differ in their treatment of errors. In other words, students adopting learning-approach goals strive to be correct while, students with learning-avoidance goals aim to avoid being wrong according to self-established standards (Linnenbrink & Pintrich, 2001). For example learning-avoidance students may be perfectionistic (according self-established standards), and try to avoid being wrong.

The recent introduction of the approach-avoidance distinction has been helpful in determining the outcomes and behaviors associated with learning and performance goals. Current studies suggest that utilizing the approach-avoidance distinction may help explain why previous research has found contradictory results.

**Achievement Goals and Student Beliefs**

Achievement goal theory suggests that student beliefs influence student goal adoption (Ames, 1992; Ames & Archer, 1988). Beliefs concerning the relationship between effort and ability, and the significance of errors in the learning process are examples of beliefs that impact students' adoption of learning and performance goals. The following section will examine how student beliefs influence student goals and behavior.
Ability and Effort

The manner in which students perceive ability is an important factor which influences the goals students adopt. Learning goals have generally been associated with the belief that ability is malleable. Similarly, learning goals are associated with the belief that ability can be increased with effort (Dweck & Leggett, 1988). Students who adopt learning goals tend to believe that the more effort they invest in a task corresponds to improved ability. For example, a learning goal oriented student who desires to improve in mathematics will, among other things increase the amount of time they study. Such a student would believe that the more they study, the more they will improve their ability in mathematics.

In contrast, students adopting performance goals tend to believe that ability is a fixed and relatively constant characteristic (Dweck & Leggett, 1988). Performance goal oriented students may associate achievement outcomes (e.g. grades) with their ability. For example, if a student were to score high on a math test, they would be likely to attribute the high score to their ability. Similarly, students adopting performance goals are less likely to
attribute achievement outcomes to the amount of effort they invest in a task.

While closely related to beliefs about ability, achievement goal theory also suggests that the beliefs students' hold about effort influence goal adoption (Ames, 1992). Generally, students adopting learning goals believe that effort and outcome are closely related. Similarly, they have an underlying belief that the more effort they invest in accomplishing their goals, the more likely they are to be successful. For example, a student earns an A on a test, instead of attributing the high grade to her ability, she believes she earned the grade by studying hard. Furthermore, the student might put forth more effort in studying for a test, believing that the more she studies, the more likely she will do well on the test. In contrast, students adopting performance goals believe that an inverse relationship exists between ability and effort (Ames, 1984; Covington 1984). Students adopting performance goals associate investing high levels of effort with having a low level of ability. For example, if I invest considerable effort into studying and perform poorly on an exam (e.g. relative to my peers), I might conclude that I lack ability. However, if I was able to take a test
with minimal preparation (e.g. effort) and scored high, I might conclude that I have high ability. Due to this relationship, performance goal students may avoid investing effort into tasks they believe will result in unfavorable judgments of their ability.

Errors and Learning

Students adopting learning goals consider errors to be a natural aspect of learning. They believe that errors are an important step in developing personal competence (Maehr & Midgley, 1996, Meyer, Turner, & Spencer, 1997). For example, a student who makes a mistake on her multiplication assignment might try to learn why she made the mistake. This student perceives her error as an opportunity to improve. Thus, she strives to learn from her mistake by asking for feedback. Recognizing that errors are a natural aspect of learning allows students to make mistakes, without equating error with failure.

Students adopting performance goals believe errors are a sign of incompetence or failure (Maehr & Midgley, 1996). For example, a student may make five mistakes on her math worksheet, where as her peers miss two questions. Since she scored lower than her peers, the student may believe her performance is an indication of incompetence. Students
adopting performance goals perceive the classroom as a competitive environment, in which students must be, "the best" to be successful (Ames, 1992). Students who make mistakes are not likely to be the best student, therefore, students adopting performance goals place an emphasis on avoiding errors. Since most students are likely to make mistakes, the belief that errors are a sign of failure may lead to decreased motivation, and can promote the use of maladaptive behaviors (Kaplan, Gheen, & Midgley, 2002).

Educators' Beliefs and Instructional Practices

Understanding how educators' beliefs affect classroom instructional practices is an important aspect of continuing to improve instruction and student outcomes (Pajares, 1992; Isenberg, 1990). According to Pajares (1992) educators' beliefs have an important impact on the classroom learning environment. The beliefs educators' hold may influence student instruction, classroom practices, and student outcomes (Isenberg, 1990, Midgley, Feldlaufer, & Eccles, 1989). Although there is limited research connecting achievement goals and educators' beliefs, one area that has been examined is the relationship between achievement goals and educators' sense of teaching efficacy (Midgley, Feldlaufer, & Eccles, 1989).
Teaching efficacy can be defined as, an educators' perception of their ability to be effective in the classroom (Alderman, 1999).

While further research is needed directly examining educators motivational beliefs within the framework of achievement goal theory, research examining teaching efficacy and instructional practices is helpful. Research in this area helps us to understand the impact educators' beliefs can have on their instructional practices and student outcomes. This section will briefly review studies examining the effect of teacher beliefs, instructional practices, and student outcomes.

A study by Midgley, Feldlaufer, and Eccles (1988) studied 107 elementary and middle school mathematics teachers from twelve different school districts. The districts were located in middle-income communities within a fifty-mile range of Detroit Michigan. Using an original questionnaire they examined the role of teacher beliefs with a number of other variables. The questionnaire used a Likert-scale format to assess the degree to which educators agreed or disagreed with different statements.

Results of the study provided further information regarding educators' beliefs and their impact on student
instruction. The study found differences between elementary and middle school educators sense of teaching efficacy. The results suggest that elementary school teachers have a greater sense of teaching efficacy than middle school educators.

Furthermore, differences were also found in the instructional style of educators. The study examined two variables affecting student instruction educators’ beliefs about trusting students and student discipline. Overall, the study suggests that middle school educators were found to be less trusting of students and believed in utilizing more strict discipline practices. The results of this study demonstrate the importance of understanding how educators’ beliefs can influence instructional practices.

Another study by Midgley, Anderman, and Hicks (1995) examined 50 elementary and 108 middle school educators. In addition to studying educators, the study also examined the students. The students in the study consisted of 291 elementary and 678 middle school students from a middle class community. Two separate surveys were administered to both teachers and students. The teacher survey contained a number of items assessing teacher efficacy, teacher beliefs, and items assessing instructional practices. The
student survey consisted of items adapted from the Patterns of Adaptive Learning Survey (PALS; Midgley et. al., 2000). Although the results do not establish a direct relationship between teacher efficacy and instructional practices the data suggests that further research is needed. In general, the study found that teacher self-efficacy for elementary teachers was higher than that of their middle school colleagues. Furthermore, elementary educators were more likely to utilized mastery focused approaches to instruction than middle school educators. Similarly, the research suggests that teaching efficacy may be related to the types of achievement goals emphasized by teachers. The results found that elementary educators were more likely to emphasize mastery goals where as middle school educators were more likely to emphasize performance goals. While the authors suggest that the school culture may have had a mediating effect on this outcome future research may be able to delineate between the effects of these variables.
The Influence of Educators Instructional Practices on the Learning Environment

While research in the area of achievement goal theory has largely focused on student goals and outcomes, it is also important to consider how these goals are influenced by the educational environment (i.e. classroom and school). Research suggests that educators can influence student goal adoption by changing instructional practices and the classroom environment (Ames, 1992). Achievement goal theory suggests that educators send messages to students concerning what is valued within the classroom (Turner, et al., 2002). For example, does the classroom emphasize student competition or collaborative student learning? This research is important in that it highlights the ability of educators to create environments that promote the adoption of learning goals, thus producing more adaptive patterns of learning.

The following section will examine the role of educators' instructional practices in influencing student achievement goals and the classroom environment. This section will provide an overview of research on educators' instructional practices within the framework of achievement goal theory. Specifically, this section will examine
research on how educators' instructional practices affect student self-handicapping, help avoidance, and disruptive behavior.

**Self-Handicapping**

Recent research suggests that self-handicapping is related to educators' instructional practices and classroom goal structures (Midgley & Urdan, 2001). Self-handicapping can be defined as a process in which students actively attempt to undermine their performance (Urdan, Ryan, Anderman, Gheen, 2002). This section will briefly review literature concerning student self-handicapping, educators' instructional practices and classroom goal structures.

A study by Midgley and Urdan (2001) examined the relationship between achievement goals and self-handicapping. The study included 484 seventh-grade students from nine middle schools in Michigan. Fifty-five percent of the sample consisted of African American Students, while the remaining forty-five percent were classified as European American. Using the Patterns of Adaptive Learning Survey (Midgley et. al., 2000), Midgley and Urdan (2001) found that the classroom achievement goals students perceived were related to students' use of self-handicapping. Their study suggests that classrooms where
students perceived an emphasis on performance goals were positively related to self-handicapping. For example, classrooms promoting student achievement rather than understanding may promote performance goals, and likely increase student self-handicapping.

Similarly, Midgley and Urdan (2001) found that classroom goal structures promoting learning goals negatively predicted self-handicapping. Midgley and Urdan concluded that the degree to which students adopt performance goals is a major factor in self-handicapping. However, the use of learning goal instructional practices in classrooms can help decrease self-handicapping when the emphasis on performance goals is low.

The Avoidance of Help-Seeking

Research suggests there is a relationship between the levels of help seeking in a classroom and classroom goal structures. Help seeking can be defined as avoiding help when an individual recognizes that they require help but refuse to ask for assistance (Ryan, Gheen & Midgley, 1998). For example, a student may recognize that they are unable to complete their math assignment without assistance yet they refuse to seek assistance. In general, studies propose that classrooms stressing performance goals
discourage students from asking for help, whereas classrooms emphasizing learning goals are positively related to help seeking (Urdan, Ryan, Anderman, & Gheen, 2002).

Arguably one of the best studies on student help seeking was conducted by Ryan, Gheen, and Midgley (1998). This study examined the relationship of help seeking with student and classroom characteristics. The study consisted of 516 sixth grade students from 63 math classrooms. Students and teachers were asked to complete a survey on a Likert-scale format. The survey data was analyzed using hierarchical linear modeling (HLM) to distinguish between classroom and student characteristics. Ryan, Gheen, and Midgley's (1998) research suggests there is a relationship between the levels of help seeking in a classroom and the achievement goals emphasized by educators. In general, the findings suggest that the differences found in classrooms were associated with differences in the educators' achievement goals. For example, classrooms where students perceived an emphasis on performance goals were associated with higher levels of help avoidance. Classrooms emphasizing learning goals were associated with lower levels of help avoidance. Ryan, Gheen, and Midgley (1998)
concluded that educators' achievement goals are an important component in promoting student help seeking. Specifically, educators emphasizing the use of learning goal structures appear to promote the most adaptive patterns of student help seeking.

**Disruptive Behavior**

Recently researchers have begun examining the relationship between disruptive behavior and motivation. Disruptive behavior can be defined as teasing, talking out of turn, getting out of one's seat, disrespecting others, violence or vandalism (Kaplan, Gheen, & Midgley, 2002). For example, a student who repeatedly speaks during lessons can be very disruptive to the classroom environment.

A study by Kaplan, Gheen, and Midgley (2002) examined the relationship between disruptive behavior and educators instructional practices. The study included a sample of 507 ninth-grade students from 113 math classrooms. The researchers constructed an original survey based on a Likert scale format, and analyzed the data using hierarchical linear modeling (HLM) to distinguish between student, teacher, and classroom characteristics.

Kaplan, Gheen, and Midgley's (2002) results suggest that educators' instructional practices influence both the
students' perception of the classroom motivational environment and the level of student disruptive behavior. First, Kaplan, Gheen, and Midgley examined the relationship between educators' self-reported instructional practices and student perceptions of the classroom environment. This research suggests a relationship between educators' instructional practices and student perceptions of the classroom environment. In general, students agreed with teacher self-reported use of instructional strategies. In classrooms where teachers reported using learning-focused instructional practices, students perceived the classroom to be learning goal focused. In contrast, students perceived an emphasis on performance goals in classrooms when educators reported utilizing more performance-focused instructional practices. This research further suggests that educators' instructional practices influence students perceptions of the environment.

Kaplan, Gheen, and Midgley also examined the relationship between students' perception of the classroom environment and student disruptive behavior. A negative relationship was found between disruptive behavior and students with personal learning goals who also perceived an emphasis on learning goal structures in the classroom.
other words, when students adopted learning goals and believed that their teacher supported learning goals, they were less likely to engage in disruptive behavior. In contrast, when students adopted performance goals in classrooms where educators promoted performance goals, there was a positive relationship with disruptive behavior. In general, the results suggest that when educators utilize instructional practices emphasizing learning goals there tends to be less disruptive behavior however, when educators encourage performance goals it is more likely that students will engage in disruptive behavior.

Implementing Achievement Goal Theory

The most ambitious and extensive example of incorporating achievement goal theory into classrooms and schools can be seen in Maehr and Midgley's, Transforming School Cultures (1996). This text provides detailed information concerning a long-term study attempting to transform two Midwestern school districts. This section will briefly review the process and outcomes of this project. Specifically, the author will examine some of the barriers encountered in this process and the successful aspects of the completed project.
One of the relevant aspects of Maehr and Midgley’s research to this study is that they recognized the importance of transforming school cultures by beginning at the classroom level. To begin the process of transforming school cultures Maehr and Midgley worked directly with a group of educators. The process was fairly extensive involving a series of informational, brainstorming, and question and answer sessions. The goal of this approach was to give educators an understanding of the current research on motivational strategies and help them adapt the best of these practices into their own classroom.

During the process of helping educators implement and adapt these practices into classrooms Maehr and Midgley encountered a number of difficulties. Notably, the first year\(^1\) of the project was spent collaborating with educators helping them to understand the different aspects of achievement goal theory and building relationships. In particular, Maehr and Midgley had difficulty helping educators adapt the theoretical aspects of achievement goal theory into instructional practices. While this was not the case for all educators, it is important to note the

\(^1\)Maehr and Midgley noted that in some schools the process was still continuing after two years.
extent of time and effort Maehr and Midgley expended to help educators through this process. Furthermore, educators would often come to meetings with questions on how this information related to concrete problems they were facing in their classrooms. Issues such as student behavior, instructional concerns, and grading policies were frequently interjected into the conversation. While Maher and Midgley addressed these issues using them to interject theory into the conversation they noted that this often side tracked the conversation and may have confused some educators.

Another area of difficulty for Maehr and Midgley was their role as an educational consultant. In this role Maehr and Midgley offered the educators feedback and help, but did not explicitly state how they should implement these policies in their classroom. While this approach appeared to build more trust among educators it also caused some difficulties. First, some educators were unmotivated to implement these ideas without further guidance. Although this issue was resolved in some schools, others continued to struggle throughout the two year time period. Secondly, within some schools where there was a lack of clear guidelines little was accomplished while some educators
became frustrated with the overall process. In general, this delay also complicated and slowed down the implementation process.

While Maehr and Midgley encountered a number of difficulties during their research, a number of beneficial outcomes were also found. In general, follow-up studies found differences between the schools climate after an extended period of time. In particular, Maehr and Midgley noted that over time some school cultures had changed. Educators in these schools reported having more mastery-oriented beliefs regarding instruction. Similarly, these educators also reported using more mastery-oriented instructional practices. Examples of these practices include changes in the grading, instructional practices, and the manner in which they used discourse.

In their text Maehr and Midgley suggest that more research is needed in practically applying motivational research into real world conditions. While the study was preliminary in nature, it provides an excellent example of how difficult it can be to anticipate different outcomes and barriers to applied research. Furthermore, this study is important in that it provides a framework for future research. Research on this scale is not often attempted
and as such educational researchers and practitioners should continue to look to Maehr and Midgley's work an excellent example of applied motivational research.

Limitations of Current Research on Achievement Goal Theory

Over the past two decades research on achievement goal theory has made considerable progress in understanding student motivation. Although great strides have been made in understanding student outcomes and achievement goals further research would be helpful. The following section will briefly examine some of the limitations to current research on achievement goal theory. Specifically, the section will address the methodology of studies, sample characteristics, and educators' beliefs and instructional practices.

The methodology adopted to measure student goals has heavily relied upon the use of surveys (Anderman, Patrick, Hruda, & Linnenbrink, 2002). Many studies on achievement goals have relied upon finding statistically significant correlations using large samples of students. Most of this research has focused on student’s personal goals by examining the associations between students’ academic goals and their reported academic behavior. Classroom goal structures have typically been measured by examining
student perceptions of the classroom environment and educators' instructional practices (Anderman, Patrick, Hruda, & Linnenbrink, 2002). While these instruments have been helpful in identifying groups of students and associations between these groups with student behavior, the data from these studies may not be particularly useful to educators. Further research describing how to use specific instructional practices, or detailing how educators can adapt these motivational strategies to influence student behavior and goal adoption would be beneficial.

Another area of achievement goal theory that requires further examination is the relationship between sample characteristics and achievement goals. Although limited research has examined student characteristics such as age and gender, some empirical research has examined differences in the adoption of achievement goals and student ethnicity.

Most research on achievement goals has centered on samples using white, middle-class students (Kaplan, Middleton, Urdan, & Midgley, 2002). Limited research has specifically examined achievement goals with students from different ethnic and cultural backgrounds (Kaplan & Maehr,
1999; Midgley, Arunkumar, & Urdan, 1996). Some authors suggest there is a need for further research examining achievement goals with students from different cultural and ethnic backgrounds (Kaplan, Middleton, Urdan, & Midgley, 2002). Specifically, they argue that when students adopt performance goals, they are concerned with how their performance appears to others. Since student perceptions of performance may vary across cultural and ethnic backgrounds, there may be differences in students' adoption of performance goals. For example, some ethnic groups may emphasize student competition and performance, whereas other groups may value a collaborative student learning process. Similarly, there may be differences in the meaning goals have among different ethnic groups. For example, do African-American students interpret achievement outcomes (e.g. grades) in the same way as Euro-American students?

One example of research examining differences in student ethnicity and achievement goals, found differences among African-American students and Euro-American students. This study by Midgley, Arunkumar, and Urdan (1996) suggests that African-American students who adopt performance goals were more likely to use self-handicapping strategies than
Euro-American students. While limited research has examined the relationship between ethnic and minority students and achievement goals, most studies have found limited differences. Further research in this area is needed before further conclusions can be drawn (Kaplan, Middleton, Urdan, & Midgley, 2002).

Another limitation of the current research on achievement goal theory is a lack of empirical data on educators' motivational beliefs (Marachi, Gheen, & Midgley, 2000). No published research has specifically addressed educators' motivational beliefs in relation to achievement goal theory. Furthermore, research has not specifically examined the effect of educators' motivational beliefs on their instructional practices within an achievement goal framework.

In addition to a lack of research on educators' beliefs, studies have often avoided direct empirical research examining teacher practices and behavior. Little research has empirically measured how specific teacher practices impact student goal adoption (Anderman, Patrick, Hruda, & Linnenbrink, 2002). Most of the current literature has relied on self-reported data or surveys administered to students. For example, Ames (1992)
examined the relationship between reported classroom practices and student motivational patterns, while this research has been helpful it does not identify how specific instructional practices can influence student goal adoption (Anderman, Patrick, Hruda, & Linnenbrink, 2002). This lack of empirical research is problematic, as achievement goal theory considers how educators' instructional practices interact with the classroom environment to impact student motivation (Ames, 1992). Thus, researchers may be missing important information concerning the impact of educators' instructional practices on student motivation.

Attempts have been made to circumvent some of these methodological difficulties by supplementing survey research with an observational component (i.e. Marshall, 1994; Meece, 1991; Patrick, Anderman, Ryan, Edelin, & Midgley, 2001). These studies have focused on gathering data from surveys and classroom observations. The goal of these studies is to balance survey data with classroom observations, creating a more comprehensive picture of the complex interactions between personal and environmental influences.
Summary of Research

Motivating students to achieve in is a primary goal for educators (Braden, DiMarino-Linnen, & Good, 2001). Research suggests that achievement goal theory may offer educators a means to understanding student outcomes and explore preventative approaches to reducing motivational problems (Kaplan, Gheen, & Midgley, 2002). Although motivational research examining achievement goals shows promise for application in schools and classrooms, few studies have attempted to practically apply instructional practices based on achievement goal theory (Maehr & Midgley, 1996). Researchers that have attempted to modify the classroom environment have encountered difficulties with helping educators apply the conceptual model of achievement goal theory to daily classroom practice (Maehr & Midgley, 1996). One step in this direction is developing a more comprehensive understanding educators' motivational beliefs and instructional practices.

While further research is needed directly examining educators motivational beliefs within the framework of achievement goal theory, research examining teaching efficacy and instructional practices is helpful. Research in this area helps us to understand the impact educators'
beliefs can have on their instructional practices and student outcomes.

Motivational research also suggests that educators' instructional practices and classroom goal structures have an effect on student outcomes. Furthermore, this research has specifically examined student self-handicapping, help-seeking, and disruptive behavior within the framework of achievement goal theory. These studies suggest that further research in the area of may have a number of benefits for educators and students. Continued research examining educators' instructional practices may lead to a more detailed understanding of how to help educators continue to improve student outcomes through instruction.

In conclusion, the literature on achievement goal theory has made significant contribution to motivational research. While this research is promising a further examination of the complex interactions between students, educators, and motivational structures is needed. Future research in this area will continue to help educators develop new approaches to improving student outcomes and modifying the classroom motivational environment.
Chapter 3
METHODOLOGY

Participants

Due to the exploratory nature of this study, school districts were selected based on their willingness to participate and their proximity to the university. The participants were elementary and middle school educators from two school districts within Eastern Iowa, District A and District B. District A is located in a city of approximately 58,000 people. The K-12 student enrollment in District A is 9,900 students. There are 450 elementary and middle school educators in District A, 19 (4%) chose to participate. District B is located in a city of approximately 60,000 people and a large state university. The K-12 enrollment in District B is 11,000 students. There are approximately 570 elementary and middle school educators in District B, 105 (18%) chose to participate. In all, one hundred and twenty four educators agreed to participate in this study (27 males, 96 females). For their participation, districts were offered district level data without any identifying information. Individual educators were offered an online annotated bibliography
with current information on motivational strategies that may be useful to practicing educators.

**Procedures**

The principal investigators personally contacted each school district and obtained permission to contact educators. The participants were then invited to participate by electronic-mail (e-mail). The invitation e-mail (Appendix A, Appendix B) contained a brief explanation of the study and a direct link to the survey web site. The first page of the survey allowed educators to review the survey and confidentiality information. Educators who consented to participation then clicked on another direct link to the survey itself.

Participants were informed that the data they submitted would not be encrypted during transmission. To promote the maximum security of the participants' data, the educators were encouraged to use an updated version of either Netscape Explorer (e.g. 6.0 or newer) or Microsoft Internet Explorer (e.g. 5.0 or newer) to complete the survey. The primary investigators encouraged the use of these updated browsers to help minimize any formatting issues and maximize participants' data security. Most of the participants followed these recommendations with (85%)
using a version of Microsoft Internet Explorer 5.0 or newer. While the remaining fifteen percent of participants used versions of Netscape and Mozilla all of these versions were updated with the exception of two participants.

Prior to the commencement of the study, the university’s human research committee reviewed the study’s proposed procedure and the online survey instrument. Participants were also treated in accordance with the University of Northern Iowa’s guidelines for protecting human participants in research and the American Psychological Association’s Ethical Principals of Psychologists and Code of Conduct (American Psychological Association, 1992).

**Materials**

A team of researchers consisting of three University of Northern Iowa professors and two graduate students developed and piloted a new survey over a six-month period. The purpose of the survey was to assess educators’ motivational beliefs, knowledge, and practices at the school and classroom level. The survey consisted of a combination of original items, as well as items from the Patterns of Adaptive Learning Scale (PALS; Midgley et. al.,
2000), some of which were modified for the purpose of this study.

The survey contained a total of 62 questions divided by subject into eight sections. The first section (Appendix C) consisted of four questions that addressed educators' perceptions on the prevalence of motivational problems in their schools and classrooms. In this section, participants were asked to choose from one of four possible responses with each response representing a possible motivational problem. For example, question one asks educators to choose from a list of four motivational problems to answer the question, "Of the following, which is the most prevalent student motivation problem you face in your classroom/school?"

The second section of the survey consisted of two questions addressing student motivation on difficult and routine tasks. Participants were asked to respond by selecting one of five statements that best reflected their approach to motivating students who are not self-motivated to do well.

The survey's third section consisted of four questions that addressed educators' beliefs about motivation. The section consisted of two questions addressing educators'
beliefs and two questions assessing educators' perception of student beliefs. Participants were asked to select one of three responses indicating which of the responses best match their motivational beliefs.

The forth section consisted of twenty questions. The questions were grouped into five central topics each addressing classroom practices related to student motivation and achievement in the classroom. Within each central topic there were four questions. Each section asked participants to respond by using a Likert scale ranging from 1, (low agreement or frequency) to 8, (high agreement or frequency). The questions were formatted such that the first two questions addressed the frequency with which the educators verbalized and demonstrated the practice to their students. The third question addressed the extent to which educators' feel it is feasible to implement this practice. The fourth question addresses the extent to which educators feel their school is supportive of the practice.

The survey's fifth section consisted of six questions addressing educators' daily classroom practices. For each practice they were asked to rate the feasibility of the practice and how much they felt their school supported the practice. Participants responded by using a Likert scale
ranging from 1 (low agreement or frequency) to 8 (high agreement or frequency).

The sixth section consisted of ten questions addressing educators' beliefs about motivational practices within their school. Participants responded by selecting from a Likert scale range of, 1 (not true at all) to 5 (very true.) These items were taken directly from the Patterns of Adaptive Learning Scale (PALS; Midgley et. al., 2000).

The seventh section consisted of five questions addressing educators' knowledge of motivational approaches. On the first four questions participants were asked to rate their level of familiarity with four major approaches to motivation (e.g. behavioral, cognitive, psychodynamic, and humanistic) on a Likert scale, ranging from 1 (not familiar) to 8 (very familiar). The fifth question in this section asked participants to select the approach that most influences their educational practice.

The eight section of the survey addressed individual participant information. Specifically, this section asked for participant demographic information, interest in learning more about the topic of student motivation, and
the participant’s willingness to participate in a future study.

After the paper survey was constructed, the survey content was adapted to a web-based format. The survey underwent a two-week pilot study examining the survey’s ease of use and formatting concerns with educators from a local school. Based on the responses the survey format and content was modified and updated. After these changes were completed the survey was placed on a secure server provided by the university. The server was protected by a firewall and was password protected to insure participant confidentiality. Only the primary investigators had access to the participants’ information. Following the completion of the study, all participant data was deleted from the university server.
CHAPTER 4

RESULTS

This chapter will present data collected from an online survey of educators' motivational beliefs and practices. First, the chapter will briefly review the analytic method used for data analysis. Second, the researcher's questions will be restated and related data will be presented.

Analytic Method

The purpose of this study was to provide a preliminary understanding of (1) the types of motivational problems educators encounter, (2) educators' application of motivational strategies, (3) possible barriers to the implementation of motivational strategies, and (4) differences in the motivational beliefs of educators.

Statistical analyses were used to determine whether there were significant differences between elementary and middle school educators' responses. Data relevant to the researcher's questions was analyzed using either an independent-samples chi-square test or an independent samples t-test.
Question #1 - Types of Motivational Problems Reported

The first research question addressed the differences in motivational problems reported by elementary and middle school teachers.

Motivational Problems Reported

An independent-samples chi-square test was conducted to determine whether there was a significant difference in the prevalence of motivational problems reported by elementary and middle school educators. Results are reported in Table 3.

Table 3

Types of Motivational Problems by Level

<table>
<thead>
<tr>
<th>Motivational Problems</th>
<th>Cheating</th>
<th>Procrastination</th>
<th>Effort</th>
<th>Boredom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Elementary</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Middle</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>63</td>
</tr>
</tbody>
</table>

p > .05
There were no significant differences found between elementary and middle school educators' responses ($\chi^2 = 2.62(3), p > .05$). The most common motivational problems reported were procrastination (e.g., excuse making) and a lack of effort on difficult tasks. Generally, educators reported that cheating and boredom were not common motivation problems in their classrooms.

**Motivational Problems Reported for Low Achieving Students**

An independent-samples chi-square test was conducted to determine whether there was a significant difference in the prevalence of motivational problems reported by educators for low achieving students. Results are reported in Table 4.
Table 4

Types of Motivational Problems for Low Achievers by Level

<table>
<thead>
<tr>
<th>Motivational Problems</th>
<th>Cheating</th>
<th>Procrastination</th>
<th>Effort</th>
<th>Boredom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Elementary</td>
<td>1</td>
<td>2</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>4</td>
<td>19</td>
<td>70</td>
</tr>
</tbody>
</table>

**p < .01

A statistically significant difference was found for elementary and middle school educators concerning the most prevalent motivational problem they face for low achieving students ($\chi^2 = 11.74(3)$, p < .01). A standard residual was computed to determine if any values made significant contributions to the chi-square. The significance of the chi square appeared to be primarily due to more middle school educators feeling that student procrastination is the most common motivational problem with low achievers.

It is important to note that two cells of the analysis had fewer than five responses. This low number of responses may create an inflated chi-square value.
Therefore, any generalization of these results should be considered with caution.

Motivational Problems Reported for High Achieving Students

An independent-samples chi-square test was conducted to determine whether there was a significant difference in the prevalence of motivational problems reported by educators for high achieving students. Results are reported in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Motivational Problems</th>
<th>Cheating</th>
<th>Procrastination</th>
<th>Effort</th>
<th>Boredom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Elementary</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Middle</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

p > .05

No statistically significant difference was found between elementary and middle school educators concerning the most prevalent motivational problem they face for high
achieving students ($\chi^2 = 3.02(3)$, $p > .05$). The reported percentages suggest that both elementary and middle school educators feel that a lack of effort is the most prevalent motivational problem they face for high achievers. Similarly, educators agreed that cheating is not a concern.

**Question #2-Teacher Use of Motivational Strategies**

The second question considered whether elementary and middle school teachers utilize different types of motivational strategies for student motivational problems. Teachers were asked to rate the extent to which they verbalized particular motivational strategies to students and the extent to which they modeled the same strategies.

**Verbal Strategies Used by Teachers**

Independent-samples t-tests were conducted to determine whether there was a significant difference in the frequency with which elementary and middle school educators use different verbal motivational strategies. Results are presented in Table 6.
### Table 6

**Types of Verbal Motivational Strategies by Level**

<table>
<thead>
<tr>
<th>Strategy Used</th>
<th>Elementary</th>
<th>Middle</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Learn from Mistakes</td>
<td>6.01</td>
<td>1.85</td>
<td>5.57</td>
</tr>
<tr>
<td>Compare Performance with Others</td>
<td>2.42</td>
<td>1.19</td>
<td>3.11</td>
</tr>
<tr>
<td>Compare with Past Performance</td>
<td>6.14</td>
<td>1.62</td>
<td>5.11</td>
</tr>
<tr>
<td>Increase Effort</td>
<td>5.93</td>
<td>2.03</td>
<td>6.43</td>
</tr>
<tr>
<td>Focus on Understanding</td>
<td>6.55</td>
<td>1.78</td>
<td>6.29</td>
</tr>
</tbody>
</table>

No significant differences were found in the frequency with which elementary and middle school educators verbalize motivational strategies. The means for each strategy suggest that educators use most of the strategies that were presented with the exception of telling students how their performance compared to others (see question 15). Compared to the other strategies presented the mean values for this question were lower for both elementary and middle school educators.
Strategies Modeled by Teachers

Independent-samples t-tests were conducted to determine whether there was a significant difference in the frequency with which elementary and middle school educators' model motivational strategies. Results are presented in Table 7.

Table 7

<table>
<thead>
<tr>
<th>Types of Motivational Strategies Modeled by Level</th>
<th>Elementary</th>
<th>M</th>
<th>SD</th>
<th>Middle</th>
<th>M</th>
<th>SD</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn from Mistakes</td>
<td>6.22</td>
<td>1.56</td>
<td>6.18</td>
<td>2.33</td>
<td>0.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare Performance with Others</td>
<td>2.17</td>
<td>1.43</td>
<td>3.61</td>
<td>2.39</td>
<td>-2.96**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare with Past Performance</td>
<td>5.48</td>
<td>1.85</td>
<td>5.11</td>
<td>2.30</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Effort</td>
<td>5.59</td>
<td>1.97</td>
<td>5.68</td>
<td>2.02</td>
<td>-0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on Understanding</td>
<td>6.58</td>
<td>1.62</td>
<td>6.04</td>
<td>1.97</td>
<td>1.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p<.01
A statistically significant difference between elementary (M = 2.17, SD = 1.43) and middle school (M = 3.61, SD = 2.39, t(35) = -2.96, p<.01) responses was found for the frequency with which educators show how a student's performance compares to others. Middle school educators had a significantly higher mean suggesting that they more frequently showed students how their performance compares to others. The reported means for each strategy were similar to those reported for low achieving students. Generally, educators reported frequent use of all strategies with the exception of telling students how their performance compared to others (see question 15). The reported mean values for this question were lower for both elementary and middle school educators.

Question #3-Barriers or Supports for Use of Motivational Strategies

The third question considered educators' perceptions of barriers or supports to implementing new motivational strategies. Educators were asked to rate the extent to which they felt it was feasible to implement strategies in their classrooms and to what extent they felt their school was supportive of the practice.
An independent-samples t-test was conducted to

determine whether there were significant differences in the

perceptions of elementary and middle school educators.

Educators were asked to rate the degree to which they felt

it was feasible to implement the presented motivational

strategies in their classroom. Results are reported in

Table 8.

Table 8

Feasibility of Implementing Motivational Strategies by

Level

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Elementary M</th>
<th>SD</th>
<th>Middle M</th>
<th>SD</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn from Mistakes</td>
<td>7.03</td>
<td>1.53</td>
<td>7.14</td>
<td>1.51</td>
<td>-0.33</td>
</tr>
<tr>
<td>Compare Performance with Others</td>
<td>4.01</td>
<td>2.63</td>
<td>5.14</td>
<td>2.90</td>
<td>-1.86</td>
</tr>
<tr>
<td>Compare with Past Performance</td>
<td>6.36</td>
<td>1.62</td>
<td>6.14</td>
<td>2.01</td>
<td>0.56</td>
</tr>
<tr>
<td>Increase Effort</td>
<td>6.20</td>
<td>1.94</td>
<td>7.07</td>
<td>1.22</td>
<td>-2.65**</td>
</tr>
<tr>
<td>Focus on Understanding</td>
<td>6.57</td>
<td>1.58</td>
<td>6.36</td>
<td>1.75</td>
<td>0.57</td>
</tr>
</tbody>
</table>

**p<.01
A statistically significant difference between elementary (M = 6.20, SD = 1.94) and middle school (M = 7.07, SD = 1.22, t(78) = -2.65, p<.01) responses was found for the degree to which educators felt it was feasible to teach (i.e. verbalize and model) students that the more effort they put forth the more they will learn. While the reported means for this question were generally high, elementary educators reported a statistically significantly lower score than middle school educators. Therefore, while elementary educators felt that this was a feasible strategy they reported that it was less feasible to use this strategy at the elementary level.

Perceived School Support for Implementing Motivational Strategies

An independent-samples t-test was conducted to determine whether there were significant differences in the perceptions of elementary and middle school educators. Educators were asked to rate the degree to which they felt their school was supportive of implementing the presented motivational strategies. Results are reported in Table 9.
Table 9

Perceived School Support for Implementing Motivational Strategies by Level

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Level</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elementary M</td>
<td>SD</td>
<td>Middle M</td>
<td>SD</td>
<td>T</td>
</tr>
<tr>
<td>Learn from Mistakes</td>
<td>6.96</td>
<td>1.46</td>
<td>6.64</td>
<td>2.66</td>
<td>0.59</td>
</tr>
<tr>
<td>Compare Performance with Others</td>
<td>3.38</td>
<td>2.74</td>
<td>3.50</td>
<td>3.18</td>
<td>-0.19</td>
</tr>
<tr>
<td>Compare with Past Performance</td>
<td>6.28</td>
<td>2.41</td>
<td>5.96</td>
<td>3.04</td>
<td>0.53</td>
</tr>
<tr>
<td>Increase Effort</td>
<td>6.62</td>
<td>1.93</td>
<td>6.69</td>
<td>2.19</td>
<td>-0.76</td>
</tr>
<tr>
<td>Focus on Understanding</td>
<td>6.74</td>
<td>1.80</td>
<td>6.18</td>
<td>2.55</td>
<td>1.22</td>
</tr>
</tbody>
</table>

No statistically significant differences were found between elementary and middle school educators. The reported means suggest that educators generally felt their schools were supportive of all the strategies with the exception of comparing student performance with others. In this case elementary (M = 3.38, SD = 2.74) and middle school (M = 3.50, SD = 3.18) educators reported lower means suggesting that they believe their school is not as supportive of this strategy.
Question #4-Motivational Beliefs of Educators

The fourth research question considered educators' beliefs and their perception of student beliefs. First, educators were asked to report their beliefs on how mistakes and effort impact student performance. Secondly, educators were asked to report their perception of student beliefs on how mistakes and effort impact student performance.

Educators' Beliefs: Mistakes and Performance

An independent-samples chi-square test was conducted to determine whether there was a significant difference in the motivational beliefs of elementary and middle school educators. Teachers were asked to report their beliefs and their perception of student beliefs about the role of mistakes in student performance. Results are reported in Tables 10 and 11.

There were no significant differences found between elementary and middle school educators' beliefs ($\chi^2 = .66(3), p > .05$). Generally both elementary (92%) and middle school (92%) educators believed that mistakes are something to be learned from. Few educators reported that mistakes
should be minimized or that mistakes are unavoidable and should be tolerated.

Table 10

Teacher Beliefs About Mistakes and Performance by Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Minimized</th>
<th>Learn</th>
<th>Tolerated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Elementary</td>
<td>1</td>
<td>2</td>
<td>61</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>4</td>
<td>25</td>
</tr>
</tbody>
</table>

There were no significant differences found between elementary and middle school educators' perception of student beliefs on how mistakes impact performance ($\chi^2 = 6.68(3), p > .05$). Generally both elementary (59%) and middle school (67%) educators reported that students believe mistakes are something to be minimized.
Table 11

**Teacher Perceptions of Student Beliefs About Mistakes and Performance by Level**

<table>
<thead>
<tr>
<th>Level</th>
<th>Beliefs</th>
<th></th>
<th>Beliefs</th>
<th></th>
<th>Beliefs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimized</td>
<td>n</td>
<td>Learn</td>
<td>n</td>
<td>Tolerated</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Elementary</td>
<td>38</td>
<td>59</td>
<td>19</td>
<td>29</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Middle</td>
<td>18</td>
<td>67</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>26</td>
</tr>
</tbody>
</table>

*p > .05*

**Educators Beliefs: Effort and Performance**

An independent-samples chi-square test was conducted to determine whether there was a significant difference in the motivational beliefs of elementary and middle school educators. Teachers were asked to report their beliefs and their perception of student beliefs about the role of effort in student performance. Results are reported in Tables 12 and 13.
Table 12

Teacher Beliefs About Effort and Performance by Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Improve</th>
<th>Understand</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Elementary</td>
<td>3</td>
<td>5</td>
<td>62</td>
</tr>
<tr>
<td>Middle</td>
<td>1</td>
<td>4</td>
<td>26</td>
</tr>
</tbody>
</table>

p > .05

There were no significant differences found between elementary and middle school educators' beliefs about the role of effort in student performance ($\chi^2 = .24(3), p > .05$). Most educators believed that the more effort is important in improving student understanding. Generally, educators believed that even if students were already good at something, effort could help them continue to improve their performance (see question 9).
Table 13

Educators' Perceptions of Student Beliefs About Effort and Performance by Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Believe</th>
<th>n</th>
<th>%</th>
<th>Believe</th>
<th>n</th>
<th>%</th>
<th>Believe</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improve</td>
<td>n</td>
<td>%</td>
<td>Understand</td>
<td>n</td>
<td>%</td>
<td>Performance</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Elementary</td>
<td>46</td>
<td>71</td>
<td>12</td>
<td>18</td>
<td>7</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>22</td>
<td>82</td>
<td>3</td>
<td>11</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p > .05

No significant differences were found between elementary and middle school educators' perception of student beliefs on how effort impacts performance ($\chi^2 = 1.36(3), p > .05$). Generally, both elementary (71%) and middle school (82%) educators reported that students hold the belief that if they are already good at something, they don't need to put forth much effort to do well or improve their performance (see question 10).
CHAPTER 5
DISCUSSION

This chapter will discuss the implications of this study. First, a discussion of the findings will be presented. Second, implications for practicing school psychologists will be discussed. Third, the author will explore the limitations of this study and possible ways to overcome these limitations in future research. Finally, suggestions for future research will be presented.

Discussion of Findings

Types of Motivational Problems Reported

Few statistically significant differences were found in the types of motivational problems reported. Both elementary and middle school educators reported that the most common motivational problems were procrastination and a lack of effort on difficult tasks.

Some differences were reported between low and high achieving students. For low achievers there was a statistically significant difference suggesting elementary educators perceive a lack of effort as their primary motivational problem for low achievers, whereas middle school educators believe procrastination is the most common
motivational problem with low achievers. Similarly, reported percentages suggest that both elementary and middle school educators feel that while boredom is not a problem for low achievers, but is more likely to occur with high achieving students.

Use of Motivational Strategies

Participants in this study generally reported frequent use of all motivational strategies with means in the range of five to six on a scale of 8. This suggests that the participants frequently verbalize or model most of the motivational strategies presented. One exception to this pattern was found on the use of comparing student performance. A statistically significant difference was found between elementary and middle school responses for the frequency with which educators model how a student’s performance compares to others. For example, teachers may compare students’ performance by posting test results. On this performance oriented strategy middle school educators reported a significantly higher frequency than elementary educators. While the mean responses for these questions were low, this finding supports previous research (Midgley, Anderman, & Hicks, 1995) suggesting that elementary teachers are more likely to use and emphasize learning
goals in instruction approaches to instruction than middle school educators.

**Barriers or Supports for Use of Motivational Strategies**

The present study examined both the feasibility and perceived school support for implementing motivational strategies. The goal of examining the feasibility and supports provided to educators was to better understand if educators perceived barriers to using strategies. Educators reported that it was feasible to implement most of the motivational Strategies. A statistically significant difference between elementary and middle school responses was found for the degree to which educators felt it was feasible to teach students that the more effort they put forth the more they will learn. This suggests that elementary educators may feel it is more difficult to use this strategy.

Participants felt that their schools were generally supportive of the motivational practices. No significant differences were found for school support on motivational strategies. While not statistically significant, one difference was found for comparing student performance to others. In this case the reported means were lower for both elementary and middle school. This suggests that educators
did not believe their schools are as supportive of this practice.

No statistically significant differences were found between elementary and middle school educators. The reported means suggest that educators generally felt their schools were supportive of all the strategies with the exception of comparing student performance with others. In this case elementary and middle school educators reported lower means suggesting that they believe their school is not as supportive of this strategy.

Motivational Beliefs of Educators

The motivational beliefs of educators and their perception of student beliefs were examined how mistakes and effort impact student performance. No statistically significant differences were found between elementary and middle school educators for their own beliefs or their perceived student beliefs.

While no significant differences were found, some similarities were found for educators' beliefs on the relationship between mistakes and performance. Educators generally agreed that mistakes are something to be learned from. Few educators reported that mistakes should be
minimized or that mistakes are unavoidable and should be tolerated.

While not significant an interesting difference was found between educators' beliefs of and their perception of student beliefs for effort and performance. Most educators believed that the more effort is important in improving student understanding. Generally, educators believed that even if students were already good at something, effort could help them continue to improve their performance. In contrast, educators reported that students believe that if they are already good at something, they don't need to put forth much effort to do well or improve their performance.

**Implications for School Psychologists**

School psychologists work to find solutions to student achievement, behavior, and motivational problems. School psychologists also work closely with educators, parents, and other professionals in developing and implementing solutions to student problems. The research and information presented in this paper suggests that school psychologists can benefit from using the principals of achievement goal theory in developing and implementing interventions.
The research presented in this paper provides school psychologists with a preliminary understanding of the motivational problems faced by educators. Generally, educators feel that student procrastination and lack of effort are the most common problems they encounter. Furthermore, boredom was only a concern for educators with high achieving students. This information is useful to school psychologists as they consider targeted intervention options for students. School psychologist can prepare intervention ideas for teachers for problems with procrastination and effort.

This paper also considered the similarities and differences between elementary and middle school educators. Previous studies (Midgley, Anderman, & Hicks, 1995) found that elementary teachers were more likely to use and emphasize learning goals in instruction than middle school educators. The findings in this study suggest that both elementary and middle school educators hold a number of learning oriented beliefs. Furthermore, they feel that learning oriented practices are feasible and that they have school support in implementing them.

In their text, Transforming School Cultures Maehr and Midgley (1996) suggest that differences in the motivational
practices of educators influence the school motivational climate at both the elementary and middle school level. For some students this change may be particularly difficult. Maehr and Fyans (1989) suggest that minority students, white students from lower socioeconomic levels, and students with a low-motivational pattern emerging from elementary school have the most difficulty with the transition from elementary to middle school.

School psychologists may consider interventions on a system wide level as a means of easing the difficult transition from elementary to middle school (Braden, DiMarino, & Good, 2001). This type of approach can be beneficial to school psychologists as they may be able to reduce or eliminate motivational and learning problems before they occur (Kaplan, Gheen, & Midgley, 2002). This study suggests that educators share a number of mastery oriented beliefs and feel that it is feasible to implement mastery oriented practices. This information may provide school psychologists with ways to identify common practices at all educational levels and help school systems consider changes in the motivational climate at system wide level.
Limitations

As with all studies this study had a few limitations. First, the study results were based upon an original web-based survey. The survey was constructed using questions adapted from the Patterns of Adaptive Learning Survey (Midgley et. al., 2000) as well as original questions created to measure the feasibility of motivational strategies and school support. While the researchers conducted a two week pilot period, further analysis of the question content could be beneficial. More specifically, the feasibility questions could be more specific (i.e. questions 11-29, Appendix C). On the feasibility questions participants were asked to rate the level of feasibility for a particular motivational strategy. First, participants were asked to rate the frequency with which they verbalize or model the strategy. Then participants were asked how feasible they felt it was to use this practice in their classroom. The researcher speculates that this method may have limited participants responses by not allowing participants the option of responding to each question (i.e. verbalization and modeling) separately. For example, a participant may feel that it is feasible to show a student a strategy, but not feel that it is feasible to
tell a student. Allowing participants to respond to the feasibility of each question separately may help participants make a finer distinction in their responses.

Furthermore, the researcher speculates that the directions for some questions may have been difficult for readers to understand. One example is the directions (i.e. Section B, Questions 5-6), "Choose one of the statements that best reflects your approach to motivating students who do not appear to be self-motivated to do well." While participants may understand the directions, further refinement of the language may improve readability.

Similarly, the survey itself was conducted online. The researcher speculates that the web-based format of the study may have limited subject participation in a number of ways. First, the use of the web-based survey may have reduced or constrained number of participants who volunteered. Unlike paper based surveys participants may have had a number of problems with the limitations on browser compatibility, availability of the internet, or knowledge of computer technology.

Another consideration with web-based formats is that participants may have refused to participate due to concerns with data security. Although the data was stored
in a secure site and participants were told how to protect their data; they may have declined to participate due to concerns with the interception of data during transmission from their computers to the university server.

Finally, the present study was limited by the small sample size and a limited number of districts (i.e. 2) which volunteered to participate. Similarly, the sample was limited to a very specific population. Only educators in two districts from Eastern Iowa were selected. A random sample of educators as well as a larger pool of participants may have been helpful in allowing for a more in-depth statistical analysis of the data. Based on the limitations of the sample size readers should be cautious when interpreting or generalizing the findings of this study.

Overcoming Limitations in Future Research

The survey used in this study was a preliminary effort to examine educators' beliefs and educational practices. As with all initial efforts it may be beneficial to continue to develop and modify the survey in the future.

In regards to the survey scale, it may be helpful for future researchers to examine the survey questions using a more consistent quantitative approach. A Likert scale
format could be utilized to help researchers gain a deeper understanding of the responses to the belief questions (see questions 1-10). Questions could be reformatted to measure the both the frequency and degree to which educators' hold beliefs. For example, one could ask, "On a scale from 1-5, how often do you experience each of the following motivational problems in your classroom on a daily basis?" By using a Likert scale format further analysis could find not only the most common problems educators experience, but also the frequency with which they experience these motivational problems.

Another option would be for researchers to compare an educator's survey responses with direct classroom observations (Anderman, Patrick, Hruda, & Linnenbrink, 2002). With a clearly defined observational system, researchers may be able to identify the degree to which educators beliefs match their instructional practices. Future research comparing educators' practices with their beliefs may yield results that could be directly implemented in training programs or teacher in-services.

**Suggestions for Future Research**

Within the context of future research I will address three main areas. First, I suggest future research should
continue to examine the relationship between educators' motivational beliefs and practices. Secondly, research examining the implementation of achievement goal theory on a systems-wide level would be a valuable addition to the existing achievement goal literature and deserves further examination. Finally, I suggest that identifying specific student characteristics that influence goal adoption should be a priority for future research.

Future research should further examine the role of educators' motivational beliefs and practices. Continued research examining how educators' motivational beliefs can be identified and categorized would be useful. One means of furthering research in this area would be to further refine the survey tools used to understand and measure achievement goals. While this study carefully developed the instrument used, future studies may find it beneficial to create more specific definitions and questions.

Research should continue to examine the relationship of educators' beliefs and educators' instructional practices. One means of expanding upon current research is to match survey data with classroom observations. It would be interesting to see the degree to which educators' beliefs match their instructional practices. This research
may also provide researchers with a better understanding of the degree to which educators' beliefs influence their daily practices. Further research in this area may also inform other professionals such as administrators, specialists, and researchers on how to better educate and train teachers to utilize achievement goal theory in the classroom.

Another suggested area for future study is continuing research on systems level interventions using achievement goal theory (Maehr & Midgley, 1996). Currently research in this area is limited. Future research focusing on a pragmatic understanding of how to integrate learning goals into school curriculums would be beneficial to educators attempting to utilize achievement goal theory. More specifically, a further examination of the barriers and benefits of implementing learning goal structures in the classroom would be a welcome addition to the existing literature. Identifying educators' perceptions of barriers to implementing learning goal structures could prevent future difficulties when designing classroom and systems level interventions.

Finally future research should continue to examine specific student characteristics related to motivation
(Kaplan, Middleton, Urdan, & Midgley, 2002; Midgley, Arunkumar, & Urdan, 1996). For example, research focusing on developing an instrument that identifies students who are most susceptible to changes in classroom motivational environment (Maehr & Fyans, 1989). This may be helpful in the early identification of students who may be motivationally "at-risk." A more in depth understanding student characteristics and their relation to motivational patterns could help educators prevent motivational problems before they occur.
REFERENCES


APPENDIX A

INVITATION E-MAIL
Greetings District A educator,

Thank you to those of you who have filled out our survey or otherwise provided feedback for our research. For those of you who have not yet responded, we want to know your thoughts on student motivation. The goal of this research is to help you maximize your use of motivation strategies at the school and classroom level.

The survey is on-line and takes only 15 minutes to complete.

The link below will take you to the survey. To enter the survey, you will need a password. Your password will be your last name + sa + the first three letters of your school's name (i.e., if my name is Sarah Galloway and I teach at [District A] my password would be galloway + da + sch, so I would type gallowaydasch as my password).

We would appreciate your feedback by DATE.

Click on this link to begin the survey:

http://fp.uni.edu/gabriele/welcome.htm

Please contact us if you have questions.

Sincerely,

Sarah and Marc

Sarah Galloway
Marc Groen
Contact e-mails provided.
APPENDIX B

FOLLOW-UP E-MAIL
Greetings ____________________________educator,

Thank you to those of you who have filled out our survey or otherwise provided feedback for our research. For those of you who have not yet responded, we want to know your thoughts on student motivation. The goal of this research is to help you maximize your use of motivational strategies at the school and classroom level.

The survey is on-line and takes only 15 minutes to complete.

The link below will take you to our survey. To enter the survey, you will need a password. Your password will be your last name + A + the first three letters of your schools name (i.e., if my name is Jan Smith and I teach at H Elementary my password would be Smith + A + R, so I would type smithar as my password).

We would appreciate your feedback by DATE.

Please contact us if you have any questions.
Sincerely,
Sarah and Marc

Sarah Galloway
Marc Groen
Contact e-mails provided.
APPENDIX C

SURVEY
Welcome to the Survey of Educators' Motivational Beliefs and Practices

We appreciate your taking this brief survey, which examines educators' motivational beliefs and practices. Our goal is to help educators maximize their use of motivational strategies at the school and classroom levels. The survey consists of approximately 60 items and is confidential. Your responses are important in helping to develop new training programs, school improvement plans, and in-services. Thank you for your time!

To reduce web-browser errors we recommend using updated versions of Internet Explorer 5.0 or Netscape 6.0 to complete this survey.

The University requires that you give your agreement to participate in this project. The following information is provided to help you make an informed decision whether or not to participate.

Goal of study: The goal of this study is to promote increased understanding and application of research-based motivational strategies in schools and classrooms.

Benefits: Individual educators will receive an informational packet of motivational strategies which can be used in classrooms. Districts will receive district level data based on your responses. No identifying information will be included in this data.

Confidentiality: To ensure confidentiality survey data is saved on the University of Northern Iowa Microsoft Front Page server. This server is password protected and has firewall protection. Participant data will not be encrypted during transmission. Following the transmission of data, only the principal investigators will have access to individual client information.
I understand that my participation is completely voluntary. I understand that I am free to withdraw from participation at any time or to choose not to participate at all. I understand that my data will be used only if I choose to submit it to the university. I understand that by not participating I will not be penalized or lose benefits to which I am otherwise entitled.

I understand the investigators will answer any questions I have about my participation. I also understand that if I desire information in the future regarding my participation or the study generally, I can contact Marc Groen or Dr. Anthony Gabriele at [PHONE NUMBER]. I can also contact the office of the Human Participants Coordinator, University of Northern Iowa, at [PHONE NUMBER], for answers to questions about rights of research participants and the participant review process.

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have read and received a copy of this consent statement. I am 18 years of age or older.

Yes, I agree, take me to the survey!

No I do not agree. I choose to NOT take the survey.

This page was created and designed by Marc Groen. Last updated 4-07-2003.
A Survey of Educators’ Motivational Beliefs and Practices

Introduction: Thank you for participating in this survey, which examines how educators use motivation in classrooms and schools. This survey takes approximately 15 minutes to complete.

Directions: Each section will begin with a set of directions followed by an example. First, read the directions and example. Next, look in each section for blue arrows. These arrows indicate where to begin reading and where to respond. Begin each section at the "Begin Reading Here" marker, and place your response next to the blue "Response" Arrow.

1. To begin the survey please enter your unique Identification below. This is the identification that was sent to you in your invitation e-mail. For example, this may be: [your last name] + [the first 3 letters of your school], with no spaces!

2. When you have completed the survey please click on the "Submit" button. This will take you to a new page indicating you have completed the survey.

3. Please take your time in filling out our survey. If you have any questions please feel free to contact us at mgroen@uni.edu.

Thank you for your time and participation!

Before you begin, please enter your Identification Here
Section A

Directions: For each question please select the letter that best indicates your response.

1. Of the following, which is the most prevalent student motivation problem you face in your classroom/school?

   - Student cheating
   - Student procrastination or excuse-making for poor performance
   - Lack of effort on difficult tasks
   - Boredom

2. Of the following, which is the most prevalent student motivation problem you face in your classroom/school for high achieving students?

   - Student cheating
   - Student procrastination or excuse-making for poor performance
   - Lack of effort on difficult tasks
   - Boredom

3. Of the following, which is the most prevalent student motivation problem you face in your classroom/school for low achieving students?

   - Student cheating
   - Student procrastination or excuse-making for poor performance
c. Lack of effort on difficult tasks

d. Boredom

4. In my classroom, I think most students feel academically successful when...

a. They outperform other students
b. They try hard
c. They make a lot of improvement
d. They perform to the best of their ability

Section B

Directions: For each of the following situations, choose one of the statements that best reflects your approach to motivating students who do not appear to be self-motivated to do well.

5. The most effective way to motivate students to do their best on a difficult academic task is to:

a. Make student performance on the task count towards their overall grade so they have incentive to do well.
b. Help students view the task as interesting and personally relevant so that they see the value of engaging in the task.
c. Make student performance on the task public so that they have an incentive to do well relative to their peers.
d. Help students view the task as a challenge that can be overcome through efforts.
and successive revisions.

- e. Help students feel good about themselves so they will be confident enough to tackle difficult tasks.

6. The most effective way to motivate students to do their best on a routine academic task is to:

- a. Make student performance on the task count towards their overall grade so they have incentive to do well.

- b. Help students view the task as interesting and personally relevant so that they see the value of engaging in the task.

- c. Make student performance on the task public so that they have an incentive to do well relative to their peers.

- d. Help students see the task as an opportunity to refine and enhance their skill or understanding.

- e. Praise students for their success on the task so they will feel good about themselves and will continue to do their best.

---

**Section C**

**Directions:** The following questions concern beliefs that some educators and students may hold about motivation. Please select the letter that best indicates your response.

7. Which of the following best reflects your view of the relationship between mistakes and student performance:

- a. Mistakes are something to be minimized

- b. Mistakes are something to be learned from
8. Which of the following best reflects the way you think students view the relationship between mistakes and student performance:

- a. Mistakes are something to be minimized
- b. Mistakes are something to be learned from
- c. Mistakes are unavoidable and should be tolerated

9. Which of the following best reflects your view of the relationship between effort and student performance:

- a. If you are really good at something, you shouldn't have to work very hard to do well or improve
- b. If you are really good at something, working hard allows you to understand it better
- c. If you are really good at something, working hard will not have much effect on your performance one way or another

10. Which of the following best reflects the way you think students view the relationship between effort and student performance:

- a. If you are really good at something, you shouldn't have to work very hard to do well or improve
- b. If you are really good at something, working hard allows you to understand it better
- c. If you are really good at something, working hard will not have much effect on your performance one way or another
Section D

The questions in the following section are concerned with classroom practices related to student motivation and achievement in the classroom. If you are a classroom teacher please respond according to your own classroom practices. If you are not a classroom teacher please respond according to what you believe would be "best practices" in a classroom.

Directions: Each part of the section contains four questions related to a central topic. The first two questions address the frequency with which you tell this to your students and the frequency with which you show this practice to your students. The third question addresses the extent to which this practice is feasible to use in your classroom. By feasible we mean would it be possible to implement this practice in your classroom whether or not it is desirable to do so. The fourth question addresses the extent to which your school is supportive of this practice. Please select the response that best matches the extent to which you practice these items in your classroom.

Begin Reading Here

11. How often do you tell students that they can learn from their mistakes?
12. How often do you show (e.g. model how to emotionally cope with a mistake, demonstrate how to revise work, etc.) to students that they can learn from their mistakes?
13. To what extent do you think this practice is feasible in your classroom?
14. To what extent is your school supportive of this practice?
15. How often do you tell students how their performance compares to others?
<table>
<thead>
<tr>
<th>Question</th>
<th>Never Show</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Show Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. How often do you show (e.g. post test results, etc.) students how</td>
<td>1, 2, 3, 4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>their performance compares to others?</td>
</tr>
<tr>
<td>17. To what extent do you think this practice is feasible in your</td>
<td>Not at</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>Highly Supportive</td>
</tr>
<tr>
<td>classroom?</td>
<td>all Feasible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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</tr>
<tr>
<td>18. To what extent is your school supportive of this practice?</td>
<td>1, 2, 3, 4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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</table>

<table>
<thead>
<tr>
<th>Question</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Tell Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. How often do you tell students how their current performance</td>
<td>1, 2, 3, 4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
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<tr>
<td>compares to their past performance?</td>
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<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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<tr>
<td>20. How often do you show (e.g. graphing performance over time, using</td>
<td>Not at</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>Very Feasible</td>
</tr>
<tr>
<td>journals, portfolios, etc.) students how their current performance</td>
<td>all Feasible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>compares to past performance?</td>
<td>1, 2, 3, 4</td>
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<tr>
<td>21. To what extent do you think this practice is feasible in your</td>
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<td>22. To what extent is your school supportive of this practice?</td>
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<th>Question</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Tell Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. How often do you tell students that the more effort they put</td>
<td>1, 2, 3, 4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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<td>forth the more they will learn?</td>
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<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>24. How often do you show (e.g. model, demonstrate) students that the</td>
<td>Never Show</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>more effort they put forth the more they will learn?</td>
<td></td>
<td>1</td>
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<td>7</td>
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</tbody>
</table>
Section E

The questions in the following section are concerned with classroom practices related to student motivation and achievement in the classroom. If you are a classroom teacher please respond according to your own classroom practices. If you are not a classroom teacher please respond according to what you believe would be "best practices" in a classroom.

Directions: Each part of the section contains questions related to a central topic. Please select the response that best matches the extent to which you practice these items in your classroom.
Section F

Directions: For each statement about your school, please rate the truth of the statement.

Begin Reading Here ▾
<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Somewhat True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>37. In this school students hear a lot about the importance of making the honor roll or being recognized at honor assemblies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38. In this school students are encouraged to compete with each other academically.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39. In this school students hear a lot about the importance of getting high test scores.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>40. In this school students who get good grades are pointed out as an example to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>41. In this school students are frequently told that learning should be fun.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>42. In this school a lot of the work students do is boring and repetitious.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>43. In this school students are told that making mistakes is OK as long as they are learning and improving.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>44. In this school the emphasis is on really understanding schoolwork, not just memorizing it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>45. In this school the importance of trying hard is really stressed to students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>46. In this school a real effort is made to show students how the work they do in school is related to their lives outside of school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Section G
**Directions:** Most approaches to motivation fall into one of the four categories listed below. Please indicate how familiar you are with each of these categories by selecting the category that best represents your response.

*For example: I have had years of experience with behavioral approaches to motivation, therefore I select 8.*
Section H

The following section contains demographic information questions. Please select the response the best applies to you.

Begin Reading Here ▼

52. Gender: Please choose...

53. Position: What is your primary role within your school?
Please choose...

If you responded "Other" to question 53, please write your response here:
54. What grade level do you currently teach (e.g. 3rd, 4th, 5th grade)?

55. How long have you been working in the field of education?

56. How long have you been in your current building or school?

57. How many in-services or trainings have you attended within the past year?

58. How many in-services or trainings have you attended on motivation?

59. What is your highest level of formal education completed?

60. Techniques for motivating students to do their best on routine tasks is an area I would like to learn more about.

61. Techniques for motivating students to do their best on complex tasks is an area I would like to learn more about.

62. in the future, I would be willing to participate in a follow-up interview about student motivation?
Thank you for your time and participation!

-Please read the instructions below carefully-

- If you have completed the survey please hit the SUBMIT button.
- If you have reviewed this survey and decided to not participate please click on the following link:
- I choose to not participate at this time.

After you hit the submit button a confirmation page should appear. If you do not see a confirmation page, please re-submit the data.