

STUDENTS' PERCEPTIONS OF GRADING PRACTICES AND IMPACTS ON MINDSET DEVELOPMENT

Julie Thiele
Kansas State University
College of Education

Abstract

This study examined the impact grading policies have on students' mindsets in urban Midwestern middle schools. The components of this quasi-experimental, causal comparative survey research relied on the grading policies in place at the school level and the students' reporting of their mindset. The findings demonstrated no statistically significant differences between the mindset levels of students from schools with different grading policies. Further analysis revealed inconsistencies between student perceptions of the grading practices and the schools' stated grading policies. These findings begin to explore the impact grading practices have on students, during the transition from traditional to standards based grading.

Introduction

When was the last time you were “graded” for your work? Do you remember the rush of anticipation, fear, excitement? Receiving a grade can cause students to feel a variety of emotions. As students progress through school, they are often exposed to a myriad of grading practices that influence their lives. Many students sit in classrooms and receive grades that are permanently recorded in a grade book that claim to show what the student knows. These types of traditional grading policies are common in educational settings, but may effect students' mindsets and willingness to learn new information.

Theoretical Framework

A permanent letter grade makes a statement about a student's ability level in a class and compared to

peers. This type of grading practice aligns closely with a fixed mindset. As Dweck (2006) states, “in the fixed mindset, it’s so crucial to be perfect right now. It’s because one test – or one evaluation – can measure you forever” (p. 26). Students complete the work, they get a score, and it goes directly into their final grade for the course. Every single answer must be correct, right now, because that is a final grade, fixed both in their minds and the grade book.

In a standards based graded classroom, growth mindset should be a key part of the policy. Dweck (2006) describes growth mindset “as the belief that your basic qualities are things you can cultivate through your efforts...everyone can change and grow through application and experience” (p. 7). This belief is intertwined in standards based grading policies and illustrated when an assignment or assessment is not considered final and is not included in the grade book. Instead practices allow for retakes and highlights the importance of the learning process. These reform grading practices show exactly what students know, what they don’t know, and what they need to keep working on, indicating they are still capable of learning the material.

Mindset development revolves around the idea that knowledge is formed and can continuously be developed based on students’ experiences (Dweck, 2006); therefore, constructivism is the theoretical framework through which this study is situated. The constructivist believes “that different people may construct meaning in different ways, even in relation to the same phenomenon” (Crotty, 1998, p. 9). Lying in the constructivist approach, learning is formed in many ways and is not a permanent quality of a person; standards based grading practices allow students to see their learning and to work with those around them to continue learning.

Research Design and Methodology

Theoretically, this study was setting itself up as a comparison of two grading practices and the mindsets that develop based on these policies, however, little research has been conducted on the practical applications of grading policies, specifically, how various policies can impact students. This study hoped to examine the implications that various grading practices have on students in a real-world setting, knowing full well that students' perceptions of grading practices may confound the findings. While this research doesn't completely fill the gap in research on grading practices, it does address part of the gap related to the impacts that grades have on students and how student perception and understanding of policies is crucial to policy effectiveness.

This quasi-experimental, causal-comparative survey research study was conducted to examine the impact that grading policies have on students' mindsets in four urban Midwestern middle schools. The components of this research relied on the grading policies in place at the school level and the students own reporting of their mindset. The specific research questions for this study are:

1. Do statistically significant differences exist between the mindset level of students enrolled in a traditionally graded school and the mindset level of students enrolled in a standards based graded school?
2. Do statistically significant differences exist between the students' perceptions of the items included in the grade book (classwork, homework, assessments, extra credit, standards) and the students' mindset level?
3. How do students' perceived understandings of grading practices impact student mindset levels?

The researcher compared students' mindset levels enrolled in two traditionally graded school with the mindset levels of students enrolled in two standards based graded school, the various items student's perceive are included in the grade book and their perceptions of various components of grading practices using the causal-comparative structure as described by Gall, Gall, & Borg (2007).

Figure 1 represents the overall research design used in this study. The researcher looked for differences in the mindset levels of students regarding the various aspects of the grading practices, based on policy and student perception, as well as the alignment of policy and perception.

Before collecting data from the participants the study was approved by the Institutional Review Board at the researcher's university and a consent and parent assent form were signed and collected either through email or paper/pencil. Survey research in the form of a questionnaire, with closed-ended questions was given directly to students. To analyze the responses from the survey, reverse coding of the negatively aimed responses and total calculations for each participant were used determine the overall level of their mindset ranging from a low score of 8, indicating a strong fixed mindset to a high score of 48, indicating a strong growth mindset, 29 being the cut-off score.

Findings

Theoretically, traditional grading practices aligned with a fixed mindset orientation and standards based grading practices with a growth mindset orientation, however, the initial findings of this research study showed little to no differences in the mindset levels of students based on their schools' written grading policy. Upon analyzing descriptive statistics, the researcher noted there were no significant differences in the mean score responses of students in standard based graded and traditionally graded classrooms. While analyzing the students' responses to each of the questions on the mindset survey, the researcher also totaled the responses to produce a total mindset level. Independent samples t-test further clarified these initial findings, showing that no statistically significant differences were found between the mindset levels of the students enrolled in the schools with the two different grading policies. These findings however, do not show that reporting practices do not impact students, but in this specific case, no impact was made on the students' mindset levels. It was also noted that the average total mindset levels of all students, regardless of the schools' grading policy, fell in the growth mindset classification.

It was also evident in the insignificant findings that students' perceptions of whether or not items, such as homework, in-class work, assessments, extra credit and standards/learning targets, were included in the gradebook or the students' perceptions of the item with the most impact on their grade did not influence their mindset levels, which further establishes the thought that grading practices may not impact students' mindset levels in the practical setting, as was established in the theoretical sense. The remainder of the findings further explains how the misalignment and inconsistency of students' perceptions of the policy may confound these findings, at this time in the districts' transition to reform grading practices.

The researcher then ran descriptive statistics on the items included in the gradebook, both in the standards based graded schools and the traditionally graded classrooms, and found that there were very little differences in the items students perceived as being included in their gradebook between the two types of grading policies. Over half of the students from the traditionally graded classrooms stated that standards/learning targets were included in their grade and over half of students in standards based graded settings stated that extra credit was included in their grade. Both of these findings, show a misalignment of students' perceptions of the grading practices with the schools' written grading policy. This finding confirms the notions of Cross & Frary (1999) that students were confused about practices and ideals of their teachers. When attempting to interpret their grades, students can become frustrated and confused by inconsistent measures (Iamarino, 2014), and although this study did not aim to gauge students' frustration or confusion levels, their inconsistent responses to the mindset survey and their lack of cohesive perceptions of the schools grading policy or their teachers' grading practices could lead to this type of confusion.

With the multitude of mixed messages being received from students about their grades, this study confirms the work of many researchers, that the first step in implementing effective grading

practices is to define a set purpose (Guskey, 2015, Marzano, 2000, O'Connor & Wormeli, 2013, and Brookhart 2011). Only when schools' policy, teachers' practices, and students' perceptions align and there is a set purpose for grading, could true impacts be made on students' mindset levels.

Discussions and Implications

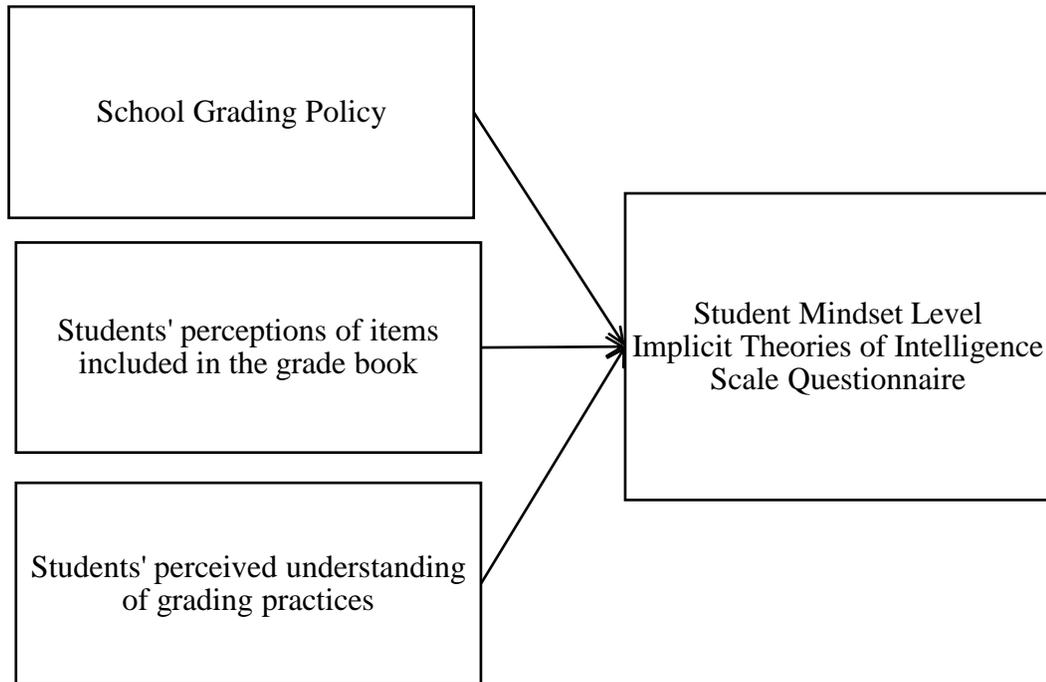
Based on the mixed responses given by students of their perceptions of the grading practices, the researcher came to the conclusion that a variety of grading policies have converged upon one another. Without clear communication of expectations and guidelines, students from schools with a single written policy have the same mindset level as students from traditionally graded schools with a myriad of policies and practices.

Although the purpose of standards based grading practices is to provide a meaningful, reliable, consistent picture of students learning, this type of product will be lacking in effectiveness until students, parents, and all stakeholders have a clear understanding. One finding of this study that was significantly impactful on students' mindset levels was the students' perception of understanding what their grade means. Although in reality, every student that marked that they understood their grade, had some missing piece of reality of the grading practices, just thinking that they understood their grade empowered them to have more of a growth mindset orientation.

The most profound implication of this study suggests that practices are not yet aligned enough to make an impact on a students' belief system, however, the changes that are needed to improve student learning, can happen, given the appropriate time and training. It is imperative for educators and researchers to continue to examine the impact that grading practices have on students, specifically on the development of a growth mindset.

This research also confirmed the notion found in preliminary studies that during the transition phases of grading practice implementation, it is important for educators and administrators to give particular focus to the mixed messages that students may receive from a variety of teachers. The transition phase, especially in districts with multiple schools and multiple buildings, may take a longer time to progress, as teachers share with one another and aspects of both traditional and reform practices may be blended together. It is important that educators do not give up on the transition phase. The initial findings of this research, although not statistically significant on many measures, coincides much with the struggle that may be felt in the school setting, that shifts to reform grading practices may come with setbacks and perceived insignificant findings, but further research is needed to examine the longitudinal impacts of reform grading practices and mindset development.

Figure 1: Research Design



References

- Brookhart, S. (2011). Starting the conversations about grading. *Educational Leadership*, 69, 10-14.
- Cross, L. H. & Frary, R. B. (1999). Hodgepodge grading: Endorsed by students and teachers alike. *Applied Measurement in Education*, 12(1), 53-72.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.
- Dweck, C. (2006). *Mindset: The new psychology of success*. New York, NY: Ballantine Books.
- Gall, M., Gall, J., & Borg, W. (2007). *Educational research: An introduction* (8th Ed.) Boston, MA: Pearson Education, Inc.
- Guskey, T. R. (2015). *On your mark: Challenging the conventions of grading and reporting*. Bloomington, IN: Solution Tree Press.

Iamarino, D. (2014). The benefits of standards-based grading: A critical evaluation of modern grading practices. *Current Issues in Education, 17*(2) 1-9.

Marzano, R. (2000). *Transforming classroom grading*. Alexandria, VA: ASCD Publications.

O'Connor, K. & Wormeli R. (2013). Reporting student learning. *Educational Leadership, 69*, 40-44.