

A is for Abstract and Unclear

A Short Study on the Effect of Grading Systems on Marginalized Groups

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Personal Introduction

My educational journey always saw grades in a positive light. I had an extremely strong memory and strong support systems at home, so my grades were rarely even thought about. When I entered the teaching force, my first contract was at a school with an extremely high low income population. Grades were nearly meaningless to many of these students and abilities within one classroom ranged from pre-kindergarten to grade nine. Over a number of years, attempting to use the systems in place, I found myself unable to accurately assess students or engage them in the feedback process

This building is what sparked my personal interest in grading systems. I saw a flaw in the current systems as they were not providing what I wanted: a system to provide feedback and goals for students to strive for, as well as provide efficient recording and data for myself. Students in my building had struggled immensely with caring about grades. A short survey in my own class revealed one third of my room did not care about grades at all.

With these experiences in mind, and the philosophies of Noddings (1992) as my background, to I began this literature review in order to delve deeper into the issues surrounding how grades and their use affects students from northern communities like the one I work in.

What do Grades Mean

Brookhart et al. (2016) found that the connection between intelligence testing and grading did not correlate to one another. This lack of connection implies that grading systems are not an adequate means of showing student skills. Pattison et al. also speak to the idea of grades being a nebulous concept, like a stock market. Standards for them change with the times and even between individuals, which in turns makes it a challenge to use them as a mark of skill rather than a teacher or district's personal preferences.

Kunath et al. (2018) delve deeply into the concept of the purpose of grades as rewards and punishments. This view of the purpose of grades pushes students towards the path of least resistance to achieve the greatest reward, rather than focusing on the goal of building skills and creating complex thougghts. This argument is echoed in Kohn (2993) who points out that high grades tend to be awarded to those who are skilled at memorization rather than actual skills themselves

Impact of Grades on Marginlzied Students

Grades act as a force multiplier and motivator for higher achieving students, however studies have shown that economically marginalized students do not receive the same positive effects.

Affect of Grading Standards on Struggling Students

Bett's & Grogger (2003) provide a clear and defined look at what happens to struggling students when faced with increasing grading standards. Looking at schools where attempts were made to increase scores by increasing standards, higher achieving students were positively affected by the changes, while the lower 25% of grades were either unaffected by the change or negatively affected. This is echoed in Arnp et al. (2004) where they found that changes in grading standards caused students to be less interested in extracurricular activities and caused more late arrivals (

Thoughts on Student Ability

Kohn's (1993) discussions about who benefits from grading systems point to those who are skilled at the art of memorization rather than specific skills. He sees grading systems as beneficial to those who are already succeeding rather than as a push to provide students who are struggling with extra motivation to work harder on their schoolwork

Affect of Economic Background on Student Apathy

Arnp et al. (2024) focused on the effect on economic surroundings on the emotional investment students had in their grades, as well as on their academic success. They found that students who were surrounded by low GDP growth were far less interested in achievements and cared little about grades. It can be implied that they are looking at the circumstances around them, seeing that other grades are not providing a better experience, and therefore, they should not strive to achieve these points. The students' lifelong goals are directly affected at this point in their life by these attitudes (Arnp et al. 2024).

Table 3
Linear probability estimates of the effects of grading standards on educational attainment^a

Variable	(1)	(2) ^b	(3) ^c
<i>A. High school graduation</i>			
Math grading method	0.0047 (0.0014)	0.0011 (0.0014)	-0.0023 (0.0015)
Student's 10th-grade math score		0.0007 (0.0005)	0.0009 (0.0005)
School's average 10th-grade math score			0.0072 (0.0115)
R-squared	0.003	0.13	0.14
<i>B. College attendance</i>			
Math grading method	0.0008 (0.0018)	0.0008 (0.0017)	-0.0013 (0.0018)
Student's 10th-grade math score		0.019 (0.0006)	0.018 (0.0006)
School's average 10th-grade math score			0.0004 (0.0013)
R-squared	0.10	0.26	0.26

^a Sample size is 10,124 in panel A and 9811 in panel B. Figures in parentheses are standard errors.
^b In addition to the variables shown, all regressions include year dummies, a set of dummies for race and rural/urban, parental occupation dummies, parental education dummies, family income dummies, a two-parent family dummy, and dummies for the number of siblings in the household.
^c Specifications (2) and (3) include a dummy indicating whether the student's 10th-grade test score was missing.

Betts & Grogger, 2003

Limitations & Recommendations

The limitations of this study lie heavily in the type of data and the location of the data collected. Some of the only data available for the area was from a Ministry of Education survey (2017), where parents were asked what they wanted from future grading systems. Sadly, out of 5,531 forms for the entire province only ten responses were gathered from the entire Prince George school district, and out of these, only 5% identified as Indigenous (Ministry of Education, 2017).

These data points clearly show the issues of gathering data from marginalized groups. Potnis et al. looked into the issues surrounding working with marginalized groups for data collection surveys and some of the points brought up in this study provide great solutions for future study. Milne & Witherspoon (look at how schools and the issues surrounding them can be a place of fear for Indigneo

Moving forward with this research, more one on one interviews, paper surveys and phone calls would hopefully provide a greater response from some of the more marginalized groups in the area.

Non-Traditional Grading Methods

A popular concept being brought forward to replace grades is the idea of ungrading. The concept of ungrading is based on the idea of utilizing only feedback on assignments instead of any numerical or letter system. (Kenyon, 2022)

When looking at marginalized groups, ungrading does not solve the issue of grades. Students and parents who struggle with literacy skills are likely to find written feedback just as, if not more confusing than the letter grade systems. Frager (2024) did a small scale study on feedback systems not based on reading or writing and saw positive results in terms of how students and parents engaged with ideas.

Examples of Ungrading

Written Feedback
Student Surveys
Check-in Check-Out Meetings

The Future of Grading

Currently, the future of how grading will be completed is in question. With the advent of AI and Large Language Models that are able to generate feedback are creating questions around who should complete marking and whether efficiency or personal touch should be the main focus. Miao et al. and Williamson (2021; 2024) both studied the issues surrounding the overuse of AI feedback and the concerns around its effect on grading standards and how students and teachers engage with feedback and grades. The major concerns surround how AI is building its standards for grading and how this can create standards based on a majority concept rather than the truth that good papers and essays can have many different forms.

The final goal of this study and future research into this area would be to find a means of grading that is accessible and meaningful to both teachers and students of all ability levels. This new system would avoid subjective adaptations and long strings of text that make it unapproachable for some parents and students. It would parallel common intelligence tests so that skills would show across different areas and with different assessors. The entire purpose of grades, in that they are meant to be a clear show of skill and ability and for these marginalized populations, this purpose is not being achieved

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