Alternative Assessment and the 21st Century

Educ 407 Western Colorado University

April 12, 2020

Ande Lloyd

Abstract:

How should students be educated to take their place in the 21st century? An answer to that question is rooted in how students are assessed and measured. For decades the system which we assess students has not changed. The traditional letter grade system is something that is ingrained in the culture of education. The problem with the current system is it alienates students and diminishes kids from finding a passion for learning. It tends to diminish students' interest, and it creates a preference for the easiest task possible. And it reduces the quality of students' thinking. The 21st century demands students to be critical thinkers, collaborators, solve problems in creative ways, and communicate their ideas. Today jobs in manual labor and routine tasks are being replaced by technology, and there is a demand for interactive, and nonroutine skills (Autor, Levy, & Murnane, 2003). Educators have a responsibility to take a hard look at the systems used to teach students, and ask if students are prepared for this changing world. And the way teachers grade students is a system in need for an update. In this paper, an alternative grading system is explored for the applicability and how realistic it is to implement in a classroom. This alternative grading system is focused around self-reflection and uses tools such as conferencing and portfolios to assess students. Anecdotes from educators are used to analyze this system and judge how realistic it is. Through this study the main problem found is that it can be inefficient and time consuming, and if done poorly can disrupt learning and waste time. If done right, the alternative grading system meets the demands of the 21st century by incorporating collaboration, critical thinking, communication, and creativity in how students are assessed. This research sheds light on the need to update the traditional way of grading students, and concludes that the traditional letter grade system is outdated, and needs to be redesigned to meet the demands of the 21st century.

Background

Letter grades have been a system in place for decades, and it is proven to be efficient at assessing students. From kindergarten to the day students graduate college, many students are evaluated using the traditional letter grade system. In many ways, grades provide a quick gauge on students' ability, progress, and improvement (Tomar, 2019). It has been a huge tool for administrative tasks determining the performance of schools as a whole. The purpose of grading is an assessment to help teachers get feedback on what students are learning and how well they are retaining content. It provides feedback for teachers for instructional planning, and also is used for administrative tasks.

But one of the more prevalent purposes for grades is used for student achievement. More specifically, grades are a tool used to rank students. And to this day, many believe the traditional forms of assessing students are a way to motivate students (Boaler, 2018). And there are two types of motivation widely accepted today, extrinsic and intrinsic motivation. Extrinsic motivation is the desire to do something from something outside of yourself, while intrinsic motivation comes purely from self interest in the task. The result of grades are that students' source of motivation is extrinsic, and is centered around getting a good grade, rather than being intrinsically motivated by the content they are learning (Kohn, 2011). Being motivated as a student is a powerful thing, and students' motivation for their learning is what makes a good education. When students are more motivated by getting a good grade it tends to diminish whatever they are learning (Kohn, 2011). Students are less interested in the content but rather interested in doing the easiest task possible. And because of this, it tends to reduce the quality

of students thinking (Khon, 2011). And as educators, the goal is to teach students the knowledge to be successful in the 21st century, and that ideal is centered around students being interested in the content. The motivation behind the traditional grading system is designed to order students based on achievement. And over the years, GPA and standardized tests have been the tool colleges use to accept students into their universities (Jaschik, 2018). Getting good grades and high test scores open a lot of opportunities for students, but the problem is education culture has shifted more into a culture of performance than a culture of learning. And grades do not give an accurate measure of how students are unique, and their potential.

Using grades to rank students on achievement also creates a problem with identity. The problem with grades is that they tell little about how students are unique, but students view grades as a judgment of who they are, and not how they are learning (Boaler, 2018). This is why students can often be heard describe themselves as an A student, or an F student. This constant rating of students gives a very limited sphere of who students are, but it takes such importance in students' lives. Students get a constant reminder of their worth every score they recieve, and it is damaging to both the high achieving student and the low achieving student (Boaler, 2018). High achieving students who constantly get perfect scores on everything they do may not be challenged to ask hard questions, and dive deeper into the content. While students who constantly do poorly are getting scores that may demean their confidence to do hard things. Grades more accurately tell students where they are in relation to others, than what grades are meant to do. And grades are meant to give feedback on learning, and help guide teachers to deliver content in the best way possible.

Analysis

The purpose of this study is to evaluate the effectiveness of an alternative assessment and assess how to implement this alternative system in a classroom. A study from the British Psychology Society showed that students who received comments alone on an assignment without an accompanying score demonstrated the greatest improvement (Butler, 1988). The idea behind this finding is that feedback that is not accompanied by scores promotes better learning. This example of an alternative way to access students uses student reflection and portfolio to assess learning.

Arthur Chiaravalli is a high school english teacher and math teacher in Michigan and he uses a portfolio system that allows students to independently document their learning by uploading assignments and artifacts to folders. For each of the assignments uploaded to the portfolio, the students comment, self-assess their work, make references to general criteria and prior feedback, and how what they did meets their goals. The main thing that makes this unique is how he involves students in the grading process. Through this process, the teacher will respond to the students and provide strengths and areas for growth. The important aspect of this is the absence of a score until later in the unit. This provides students with incentive for a growth mindset and allows for students to worry less on their score but rather focus on their learning by continually developing their work. When submitting new work, students comment on how they demonstrated growth based on that earlier feedback.

Feedback is central to what Chiaravalli does with his assessment of the student. The way he organizes it is by using the descriptive grading criteria (See Figure 1). The way the descriptive

grading criteria works is students read over and listen to the feedback they receive and then identify examples of where they met and where they did not meet learning targets. This system is designed to not punish students, but provide a formative assessment for not just the teacher but the student as well. The final piece to this system is students meet and conference with the teacher and explain the grade they believe they deserve.

Figure 1: Formative system that Arthur Chiavalli uses where students use this rubric to self-assess their work then it is later looked over by the teacher.

A Outstanding	❏ Demonstrates a high level of understanding of concepts/mastery of skills on quizzes (A's) ❏ Exhibits novel, insightful, and/or creative ways to show learning ❏ Meets all learning targets fully, frequently, and/or consistently ❏ Shows frequent evidence of growth, turning weaknesses to strengths
B Good	❏ Demonstrates a good grasp of concepts and skills on quizzes (B's) ❏ Exhibits a combination of standard and novel/insightful/creative ways to show learning ❏ Meets almost all learning targets fully, frequently, and/or consistently ❏ Shows some evidence of growth
C Satisfactory	❏ Demonstrates a satisfactory acquisition of concepts and skills on quizzes (C's) ❏ Exhibits standard ways to show learning ❏ Demonstrates all learning targets at least once ❏ Shows little evidence of growth
Incomplete	❏ Does not show satisfactory acquisition of skills and concepts on quizzes (< C) ❏ Does not meet one or more learning targets ❏ Provides too little evidence of learning to make a determination ❏ Shows no evidence of growth

Arthur Chiaravalli, P. (2017) [Descriptive Grading Criteria] [Photograph]. *Medium*
https://medium.com/@iamchiaravalli/how-to-make-feedback-the-focus-fb664c050ef2

As an educator, implementing this system requires the teacher to articulate the process and rationale, and also how the system works. Many schools require reporting on school performance, and with few to no grades in the gradebook reporting progress needs to take another form. Having students develop a portfolio for the class aims to get schools, families, or colleges evidence of learning. This provides one accessible place students can record evidence of achievement.

Another aspect of going gradeless is conferencing with students. Conferencing with students provides an opportunity for the teacher to get an accurate formative assessment on where

students are at. The process of conferencing is beneficial for students because it helps students to look back on what they did and ask the crucial question, "How can I make this better?" 90% of people retain information best when they teach concepts to someone else (Kåre 2012). The main part of the job as a teacher is reviewing student work and constantly evaluating what students do right, and finding ways for students to improve. The question that should be asked is, if the research proves that teaching is the best way to learn why not use that idea of teaching but have students do it? What conferencing and self assessment does for students is put the job of evaluating work on themselves rather than the teacher. The teacher is still involved and the student is involved with the process as well. Assessing students comes from collaborating with the student and arriving at a summative score based on self reflection and refinement from the student.

Torrey Baldwin is a 9th grade math teacher at Animas High School and has used an alternate system for this past year. During this past year, she used a grading system focused on self-reflection, with the purpose of students assessing their own learning on a regular basis. Torrey also uses a system the Descriptive Grading Criteria developed by Arthur Chiaravalli but the key difference is that Torrey did an activity at the start of the year where her students developed the criteria of what an "A student" looks like. She had her students write on four different whiteboards and list the qualities of what makes a successful student. Based on what her students wrote, Torrey customized the Descriptive Learning Criteria for her classroom. At the end of each unit students use the descriptive grading system and give reasons why they should receive their grade. Her students also have a portfolio that goes with it that provides evidence for their learning. The way she utilizes it is by looking through the portfolio and if there is anything that does not match or is drastically different she conferences with the student. In

the end Torrey gives the final grade, but through the process her students are more involved in grading that otherwise would solely come from the teacher.

The key with her process is that the students are involved with the grading process and the major benefit of having students reflect on their work is it can tell the teacher information that just giving a student a score lacks. It gives the teacher a deeper formative assessment of what students understand, but also it allows the student to identify what they do not understand and the steps they should take to understand it.

Discussion

Many people hear the term "going gradeless" and think that that means abolishing the system that is set in place already. The system widely used today gives an idea of student achievement and allows for students, parents, schools, etc. to track the progress of learners. The grading system is set in place in society and communicates achievement across the country and even the world. These are valid reasons for being hesitant to abandon them, but does the system widely used today serve the needs of the 21st century? In the rapidly changing world today, doing well in school no longer guarantees a lifelong job or career, but today people can expect to have multiple jobs in multiple fields (Kay 2010). This era demands proficiency in communication, critical thinking, creativity, and collaboration. And with that, the traditional system which students are graded does not foster these skills so crucial to navigate the modern world.

The alternative assessment system that is most popular combines the use of portfolios as a summative assessment, and uses conferencing with the student and teacher throughout the learning process as a use of formative assessment. This is a wonderful system that does

wonders for students but like any other form of assessment, this system has its problems. Things to consider about implementing this system is time management. The bottom line is that there is only a finite number of school days in a year, and the time it takes to make portfolios and conference with every student during the semester is not realistic. Torrey Baldwin wrote this about her experience implementing this system in her classroom,

> "I would love to have individual conferences with students, but I'm not finding the time. The 9th grade students need substantial support and redirection and I have a ton of curriculum to move through. I know these are important. Collecting and grading all the portfolios at the same time and running after students who didn't turn them in (and so didn't have a grade) almost killed me (Baldwin 2020)."

The problem with this system comes from having required material set to get through in a semester, and have these in-depth conferences and portfolio creation at the same time. Problems could arise where the focus could be on the conferencing and portfolios. If that is not done efficiently, then students don't get through content and time is wasted. From the educators that have done these types of systems, it requires a level of mastery to pull it off and maintain a rich learning environment for students.

Teachers who are keen on implementing the alternative ways of grading could get push back from their school and parents. Communicating the progress of learning to both parents and the school is much more convenient with the traditional methods of grading. The online gradebook has been a tool that has set the norm for parents and administration. And many like the convenience of being able to check grades on a smartphone or laptop and see how well students do without having to wait for the teacher to hand back the assignment. This system provides a clear and measurable method to track progress for learning and this is valued highly.

The problem with the alternative grading system is that the frequency of grades being put into the gradebook is less, and that results in less data that parents and schools can use to track learning. With the portfolio system, the results are more qualitative than looking at a gradebook and seeing an A, B, C, D, or F. People like to have a tangible way of tracking learning and the alternative system is less clear on the performance of students.

With time management and communicating learning being accounted for, the alternative way of assessing students does a better job assessing students for the skills for the 21st century. And the traditional way of grading is only good for ranking students and summative assessments. The importance of detailed feedback is especially clear for tasks that are loosely framed and do not have a clear right or wrong answer (Bangert-Drowns et al., 1991; Roos & Hamilton, 2005). What assessing students based on self-reflection through the use of portfolios and conferencing does is build a growth mindset. Instead of punishing students for making mistakes, this system welcomes mistakes, but more importantly encourages students to reflect on their mistakes. The power of having a growth mindset develops students to have a problem solving attitude, and students go about their lives with a drive to do hard things and not be afraid to fail. Failing is crucial to success and the way we assess students should promote that growth attitude. The values of the 21st century focus on critical thinking, collaboration, communication, and creativity. Critical thinking can be looked at as analyzing the world and finding ways to improve it. Having students reflect on their own work is critical thinking because students are improving their own work. Collaboration is another aspect valued in the 21st century, and with an alternative assessment system that incorporates regular conferencing with students this deepens learning. By conferencing, students take ownership of their learning and instead of a grade being an identity, a grade is something developed and refined over time. The alternative way of

assessing students focuses on learning through collaboration instead of ranking students, and identifying students by their grade.

Communication is another aspect of the 21st century that the alternative way of assessing students fosters. Not only are students communicating with the teacher about their learning, but through the use of portfolios, students are presenting their work to a wider audience. Some people worry that grades are needed for students to get into colleges, but at Stanford only 81% of incoming students have a GPA. Other students come from schools that give diagnostic comments and no summative grades or tests (Boaler 2018). Colleges want students that can communicate what makes them unique, and the portfolio system creates a platform of communication a GPA is incapable of doing. Along with the 21st century skills listed above, the last aspect of the 21st century that the alternative method of grading does is it allows students to be creative. The portfolio system is designed entirely by the student and that creates an opportunity for students to make their work their own and present it in a creative way.

All in all, the alternative grading system is a better way of assessing students for the 21st century, and the problems with the traditional grading system are extensive. Not only is the traditional system outdated, but it is designed purely as a summative way of assessing students. The goal is to track students and the traditional system does a poor job of that, but instead ranks students. The focus of the traditional system is on performance and not on learning. And a huge problem with the traditional system is that it tends to create an identity for students to be viewed as an A, B, C, or D student, while learning should not punish students for making mistakes. Learning should encourage mistakes, and foster students to reflect on their mistakes. There are many ways to assess students and the alternative system explored in this paper is far

from perfect. The aspects of the alternative system are using portfolios as summative assessments and use conferences with students throughout the semester as formative assessments. The problem with time management is a proponent of this system that must be considered. Also, this system is not as efficient as the traditional way of grading students. This system requires more work, and also if this is not done right, it can disrupt learning and waste time. With all this being considered, the traditional way of grading students does not fulfill the demands of the 21st century, thus the way we assess students must be refined. The alternative grading system has its drawbacks, but if educators master and refine it then it will serve students for the 21st century.

Works Cited

Bellanca, James. 21st Century Skills: Rethinking How Students Learn (Leading Edge Book 5) .

Solution Tree Press. Kindle Edition.

Boaler, J. (2018). From Performance to Learning: Assessing to Encourage Growth Mindsets. *YouCubed*.

Chiaravalli, A. (2017, July 7). How to Make Feedback the Focus. Retrieved from https://medium.com/@iamchiaravalli/how-to-make-feedback-the-focus-fb664c050ef2

Double, K. S., McGrane, J. A., & Hopfenbeck, T. N. (2018). The Impact of Peer Assessment on Academic Performance: A Meta-analysis of (Quasi) Experimental Studies. *Department of Education University of Oxford*.

Jaschik, S. (2018, April 27). Making the Case for Test Optional. Retrieved April 5, 2020, from https://www.insidehighered.com/news/2018/04/27/large-study-finds-colleges-go-test-optional-become-more-diverse-and-maintain

Khon, A. (2011). The Case Against Grades. *Educational Leadership*.

Lamb-Sinclair, A. (2019, April 9). Why Grades are not Paramount to Achievement. *The Atlantic*.

Lipnevich, A. A., & Smith, J. K. (2008). Response to Assessment Feedback: The Effects of Grades, Praise, and Source of Information. *Educational Testing Service*.

Tomar, D. (2019, December 12). Eliminating the Grading System in College: The Pros and Cons. Retrieved April 5, 2020, from

Torrey Baldwin, personal communication, April 15, 2020