Narrative Review Article

Meritocracy and Other Obstructions to Gradeless Learning

Sophie Chan

The Winsor School, 103 Pilgrim Road, Boston, MA 02215, United States

ABSTRACT

While recent attention has often been directed at criticizing the current prevalent forms of grading, much less attention has been directed toward the proposed alternative: gradeless learning. The champions of this new approach argue for its ability to promote student wellbeing and good learning habits, all while ensuring the academic rigor of the material students are taught. However, such promises have not always been fulfilled, and gradeless learning remains a method of education largely uncommon in schools. This study aims to investigate the difficulties of utilizing the new approach, or barriers to its success. This narrative review consists of 13 empirical studies and 6 conceptual sources from 1973-2025, spanning 8 countries and 12 schools. The results found suggest the existence of barriers not only in the implementation of such a method of learning, but also within societal constructs like the proposed meritocracy. Students perceived barriers in the implementation processes as negative effects of variation, citing too much variation in communication, teacher understanding and commitment, and scoring as issues that compromised their view of the approach. It was also found that outside pressures had an impact on the effectiveness of gradeless learning achieving its goals. Social constructs like meritocracy instill in students and parents alike the idea that hard work means good grades, and in turn, a good future. The addition of gradeless learning interrupts such a construct as it introduces a novel method of communicating merit, leading students to doubt its ability to properly communicate to institutions like colleges.

Keywords: Education; Gradeless Learning; Standards-Based Grading; Competency-Based Evaluation; Meritocracy; grades; school

INTRODUCTION

Since grades were first introduced in the late 18th and 19th century, the extent of their worth and accuracy in measuring student performance has been continuously proven to be unreliable and inadequate (1). Multiple studies have shown that traditional grading systems cause stress for students, unhealthy competition, and also, a possible negative cycle of low self-efficacy (2, 3, 4). In addition, research has shown that traditional grading systems are not always effective ways to evaluate student progress, as these systems combine various knowledge and skills into a single grade, making it difficult for the student to identify specific areas of improvement (5). Furthermore, traditional grading systems have also been linked to students becoming increasingly uninterested in learning, as they become more motivated by receiving good grades. Grades have also been shown to create student preference for easy tasks, thus reducing the quality of student thinking. As students strive to earn

better grades, they are less likely to take unnecessary but intellectually stimulating risks when completing assignments. Additionally, simpler tasks also reduce quality of thinking and learning, as students study only for what they are required to know rather than pursuing broader ideas or questions that they might have (6). Costa *et al* highlights the contradictions within grading quite well: "Learning is the primary purpose of school education but from a student's perspective the goal is often reduced to one thing: the grade" (2).

Traditional grading systems, which can find their origins in the late 18th and early 19th century, were originally designed for use by American institutions like Harvard and Yale. These systems are point-based systems (i.e., 0-100 scale) which can be translated into letter grades (like F, D, C, B, A) for transcripts, report cards, and other forms of official reports on a student's progress. Unlike traditional grades, gradeless learning uses alternate methods of grading, often focused on competency, or learning standards to judge student learning. Gradeless learning can be narrowed down into two subcategories: Standards-Based grading (SBG), and Competency-Based evaluation (CBE). SBG is a type of grading centered on viewing student progress through proficiency levels for certain standards. For example, rather than saying that a student has an A in English, SBG would consider that student advanced in analytical writing, advanced in creative writing, advanced in classroom discussion, etc. Instead of students simply being handed a C, they are handed comprehensive standards, so that they know exactly what standard they need to work on. Students are also graded by multiple learning standards rather than one single grade for an assessment (5). CBE evaluates students in a similar way to SBG, evaluating based on mastery of skills. CBE uses comments to communicate student progress. Comments are more elaborate than standards, but comments are still provided in respect to competency standards (2, 7). The hope of reformers implementing this approach is that under gradeless circumstances, students can learn to take agency for their work, grow to learn for the sake of interest in the material rather than the grade, and lessen anxiety and stress around grades (4, 2). Gradeless learning has been known to reduce stress and increase student wellbeing. Studies have noted a strong correlation between gradeless learning and deep learning, with students being 10% less likely to engage in surface learning (8). Yet, contrary to hopes of what gradeless learning might be able to accomplish, some studies conducted on gradeless learning have produced mixed or negative results. For example, McDuff *et al* and E. Smith *et al* have found that gradeless learning has negative effects on student learning, with decreased performance and a lack of support from students (9, 10). McMorran and Ragupathi found that students were wellbeing improved but also reported decreased motivation from students (4, 11).

According to studies conducted on the effects of gradeless learning, the approach is able to encourage deeper learning while maintaining high academic achievement among students and should be an excellent alternative to traditional grading systems (8). Even so, the amount of schools currently utilizing some form of gradeless learning systems is still marginally small, even though research on gradeless learning was first conducted as early as the 1960s, and select schools have experimented with its implementation since the 2010s. Currently, there exists no solid data regarding the amount of schools using a gradeless learning approach, but the amount of schools mentioned in research on the subject provides an estimate. In 2021, FutureEd Director Thomas Toch and Senior Fellow Alina Tugend studied 400 public and private high schools utilizing gradeless learning, and in the same year, 400 schools were part of the non-profit Mastery Transcript Consortium, an organization supporting schools using gradeless learning (12). 400 schools is a small fraction of the number of schools in the United States, which number above a hundred thousand. With only a few countries having gradeless learning programs, it can be expected that the fraction is even smaller internationally.

So, given the widely acknowledged flaws with traditional grading, why do the vast majority of schools still rely on an approach that has been all but proven to be harmful to learning? Insofar, there have been plenty of articles and studies conducted on the various approaches of gradeless learning, but none exclusively on the challenges that those systems experience. The challenges faced by gradeless learning are many and deserve to be explored in depth. This analysis aims to synthesize findings from empirical research on gradeless learning to understand the difficulties faced by schools trying to implement this approach and analyze the underlying root causes of such difficulties (Table 1). As such, the difficulties faced by schools utilizing gradeless learning are often caused by either the negative consequences of the approach having too much variation or the use of grades as a quantitative measurement utilized heavily in meritocratic systems like college admissions and the workplace.

Table 1. Summary of Empirical Studies included in this review

Reference	Location	Age Group	Design	Outcome
14, 15	Germany	Secondary (ages 10-20)	NR	Students believe that grades make them better, organize society, and help to achieve a good life. Students defend grades despite their low performance and also tie them to their identity.
2	Italy	High school	Qualitative, thematic analysis, cross sectional, longitudinal	Gradeless learning presented itself as another challenge that replaced grades, with students still looking for ways of positioning and comparison despite being gradeless.
4	Singapore	Undergraduate First-year	Qualitative, thematic analysis, cross sectional	Responses from 1207 participants. Student feedback showed reduction in stress, more academic risks, smoother adaption to university life, but also poor learning attitudes and confusion.
5, 13	United States	High school	Qualitative, interviews and thematic analysis	Results found student concern with implementation, grading, preparation for college and the future, social issues, and issues related to teaching, learning and motivation.
8, 11	Denmark	Bachelors	8: Quantitative, quasi-experimental, longitudinal 11: Mixed methods, case study, thematic analysis, longitudinal	Students in the gradeless program are more intrinsically motivated and more likely to practice deep learning. No effect found on long term performance and student wellbeing.
9	United States, California	Medical School	Quantitative, observational pre-post, Longitudinal	Students who were graded pass/fail had a small decline in overall performance.
18	Hong Kong	Education masters and academics	Qualitative with interviews, thematic analysis	Students involved recognized the need for gradeless but also expressed concerns about credentials, implementation, communication, and viability.
16	United States, Midwest	High School	Mixed methods, quasi-experimental, longitudinal	Traditional grading practices were found to be inaccurate, and gradeless learning allowed for improved student wellbeing and motivation.
10	UK, Wales	Secondary School	Mixed methods, quasi-experimental, longitudinal	It was found that a gradeless intervention was ineffective and unpopular among the students.
19	Chile 2019	1st Grade	Qualitative, case study, cross sectional	Students were found to believe that grades are necessary for future success. Grades were also shown to a cause of stress and anxiety for both students and parents, with going gradeless having positive effects on students.

ISSUES WITH IMPLEMENTATION

Gradeless learning is considered advantageous to student learning partially because of its customizability to each student, teacher, and school. There are various forms of the approach to choose from, and the use of comments most gradeless methods utilize allow for great specificity and detail in student feedback. Nonetheless, the freedom of structure gradeless learning can provide might not be beneficial in practice, especially in a field otherwise filled with standards and methodology. Research has found that variability in teaching interferes with gradeless learning in the following ways: varied communication from teachers compromised students' ability to understand

comments, variations between teachers' understanding and commitment to gradeless learning hindered and confused students, and variations in gradeless scoring used by schools made classes more difficult.

Negative Consequences of Variation

As crucial to the adoption of any new thing, clear communication between instructors and students proved to be a significant issue, with students often finding difficulty in understanding teachers' comments. Students complained that forms of gradeless learning didn't provide clear instructions on how to improve, or that comments were often vague, leading to misunderstandings. As a student from the Italian High School described it: "sometimes with the comments you can be wrong and…you're not sure…I had a few surprises…grades that I didn't expect" (2). Yet more variability lay in the way that teachers communicated with their students. Communication standards, clarity, and helpfulness varied from teacher to teacher, resulting in "'no standardization'" (13). The degree of confusion varied throughout schools, for example at the Italian high school, some students felt confused understanding if they had achieved adequate scores from just comments alone (2, 11). At other schools like Sojourn and the National University of Singapore, students said that they felt that teachers were often confused about the mechanics or details of gradeless learning, claiming that communication differed from teacher to teacher, making it confusing for the student (13, 4). Although gradeless learning was still a fairly new approach to education, any difficulties regarding the approach, how to utilize it, and its mechanics still led to confusion from both students and teachers. The confusion generated by a lack of understanding, or a lack of standardization only worked to lower students' confidence in the system's ability to function and their teachers' reliability in giving out fair and reliable scores. Other students also commented on a disconnect between teachers, saying that oftentimes the teachers were unable to coordinate or didn't have a firm understanding of gradeless learning itself. Students from Sojourn seemed to be particularly familiar with this, saying that "some teachers do not implement the rules," or that communication was "not consistent among all classes." In fact, some students reported that "not all teachers are on board [with the change], and it makes it hard for the students when they know that" (13). Similarly, many students at NUS also claimed that they felt that their teachers didn't understand gradeless learning completely, upheld by a faculty survey which showed that

61% of faculty did not understand the system well or still had questions its operation (4). In another study, students reported a lack of detail in comments from teachers (10). One of the advantages of gradeless learning is its ability to provide specificity in areas for students' improvement. But the lack of commitment displayed by teachers severely undermines that advantage and the effectiveness of gradeless learning. If any gradeless approach is to work, teachers must support the method wholeheartedly, or students will be left feeling confused and unsupported. Additionally, difficulties to the adoption of gradeless learning can be found in the types and details of what kind of gradeless learning a school decides to adopt and how they choose to utilize it. Unlike traditional grades, which could usually be inferred to be one variation or another of the 100-point scale with varying corresponding letter grades, gradeless learning has much more variation, both within the grading scale and with the form of utilization. For example, Sojourn High was noted to use a smaller point system. Rather than utilizing a 0–100-point scale often seen in traditional grading systems, Sojourn only used a 4-point scale with their standards, meaning that the difference between each 'grade' was larger. This change was met with plenty of backlash from students, who thought that the difference between each 'grade level' was too far, and that there should've been a 6–7-point scale, just so that it was easier to pass. As a result, many students felt discouraged by Sojourn High School's utilization of such a small point system, adopting negative views of SBG (13). Schools utilizing gradeless learning also varied to the extent to which they wanted to be 'gradeless.' Some schools went completely gradeless like the Italian high school, while others opted for gradeless comments or standards with individual assignments but brought back in letter grades for final grades or report cards (4, 13, 2). The amount of variety even within forms of gradeless learning suggests that complete cohesivity between schools using the approach is difficult to conceive, which could lead to further inconsistencies. Finally, the institutional inertia and varying staff commitment displayed by the schools analyzed suggested deeper systemic opposition to the widespread adoption of gradeless learning.

GRADES IN SOCIETY

In addition to the challenges faced during the process of implementation, gradeless learning is also deeply impacted by features of society like the meritocracy. This section explores the correlation between grades and

measurement, and how the quantification of grades is rooted in and powers the meritocracy.

The Quantification of Grades

The variance of implementation is complicated with the student perception of grades as tool of measurement. Despite the fact that grades are known to cause stress, competition, and anxiety amongst students, many students from across the globe voice opinions that they prefer traditional grades to forms of gradeless learning (2, 14). As Rohde found in her study with low performing students from Germany, many students preferred to explain their low grades as a product of their behavior, rather than a product of their intelligence. "To endorse the belief that one is "stupid" would arguably amount…in the loss of hope for any future (educational) success," Rohde explains, highlighting the association between grades and intelligence, and therefore future success (15). In his study, Sanders found that many students viewed grades as a gauge for their performance, especially in comparison to their classmates (16). Students from the Italian high school exemplified Sander's findings, commenting that "someone with a level of 10 may become a director, while someone with a level of 6 might become a laborer" (2). Rather than perceiving grades as a tool for learning, students view grades as a tool of measurement and thus quantify it. Here, an important distinction must be drawn. Grades are meant to be a tool of measurement, the issue is of what. Grades were created to measure student performance, or academic excellence, not for measuring potential or future opportunities (14, 15, 17). The quantification of grades means that the introduction of gradeless forms of education come with unique problems. Across the globe, students shared fears on the impact of gradeless learning on their future (13, 18). One of the primary reasons for utilizing gradeless learning is to relieve students from the stress of having traditional grades. Yet, it appears that detaching the student from grades does not detach them from the anxiety surrounding grades, nor toxic grade culture. The pressure of grades seems to be a more ubiquitous phenomenon, an issue that gradeless learning fails to address. In fact, gradeless learning seems to leave students with a new problem - how will this new system integrate or translate to the old system, which is still being used for evaluation? In comparison with traditional grading methods, the standards of gradeless learning were not as clear. Students felt the need to 'translate' their comments into grades so that they could properly tell if they have done well enough, completely negating the positive effects gradeless learning has on comparison and stress. Such behavior was further exemplified by parents (2, 10, 18, 19). A student in the Italian high school reported that sometimes "my parents see the comment, maybe they ask 'so…how much is it? Would it be enough or not enough?'" (2). Even though a parent might only ask a student's grade out of concern for their future, asking to translate a comment imbues something meant to be gradeless with grades, effectively counteracting the purpose of going gradeless. Further, the use of comments rather than grades led to a sense of alienation, contributing to more anxiety trying to translate comments (10, 18). "We are different from the rest because they have their marks," a student said, with another commenting that they felt "left out" (10). Not only does the absence of grades alienate students, but it also provides disadvantages in communication. Students claim that the impact of grades is stronger than comments, and that they are easily understood (2). These responses seem to suggest that students perceived grades to be better than gradeless not because grades encouraged learning, but because grades provided a better means of communication. Gradeless learning lacks the standard value provided by graded systems, which will cause students utilizing the approach to feel isolated until a critical mass of schools adopt gradeless learning as well. This can explain why not all schools utilizing gradeless learning have been successful, but also means that it is extremely difficult to establish a school successfully using gradeless learning when the majority of schools are not and contributes to the reason why only a few schools are currently using this method.

Grades in Society: Meritocracy

The prevalence of the quantification of grades is a result of its usage in meritocracy (14). A meritocracy is a society "in which influence (of some sort) is possessed on the basis of merit" (20). Credited with coining the term, Michael Young understood merit as a combination of talent and effort. Although meritocracy is often referred to as a myth, the idea still has many believers, especially within the realm of higher education. In a meritocratic society where everybody is supposed to have an equality of opportunity, hard work should be enough to ensure entry into an esteemed institution (21). Yet, reality shows otherwise, as meritocracy often advantages those already advantaged. Regardless of the meritocracy's ability to actually promote equal opportunity, its ability to function relies on merit, and how that merit can be measured. For students in, and going into higher education, measures of merit like SAT

scores, grades and GPAs, and competition scores are all elements critical to any students' application. Despite the fact that students from privileged families can easily hire SAT tutors or pay people to do their homework and take their exams, this commonality and importance of these measures between all applicants provides room for the myth of meritocratic opportunity (21, 17). According to Rohde, the implications of meritocracy on grades works like this: students pursue and prefer grades because it allows them to better themselves, to organize society, and because grades allow students to have a good life (14). In a meritocracy, having merit is imperative to future success in a society dependent on the amount of one's merit. Somebody with high merit obtains more influence, jobs, and in turn, more money than someone who has less merit. The quantification of grades allows for it to be a measure of merit. In the eyes of many of the students which Rohde worked with, grades would ensure that the right people get the right jobs (14). Thus, the connection between quantification and meritocracy is almost like a cycle: the quantification of grades creates and upholds meritocracy, while the existence of meritocracy fuels the necessity for the quantification of grades. As such, the prevalence of meritocracy in society explains why many students prefer grades over other approaches to grading even if they receive bad grades (14, 13, 15).

The meritocracy can also explain the reason why competition happens in high schools. Studies conducted amongst students in higher education like undergraduates and medical students have reported decreased competitiveness in gradeless environments, but these same results do not seem to apply to high schoolers (4, 2, 11). As such, it seems reasonable that college is a key deciding factor on the extent of which gradeless systems can improve student wellbeing. For students who have yet to be accepted into college, grades are seen readily as a measurement of a student's future, and thus competition for higher grades can equate to competition for a better future. While students in higher education are also likely to perceive grades the same way, they might still report decreased competition as a result of other factors like decreased stress overall (22). Young defines merit as talent + effort, but Stanford University argues that there isn't a clear definition on what merit exactly is. We only know that merit includes worth, excellence, quality, etc, and is heavily based in context (20). In a high school setting, grades are the form of merit that students can most readily earn, and so competition occurs to see which student can earn the most merit and gain the best future. Thus, it can

be reasonable to conclude that students feel the need to compete between themselves for grades because better grades result in attending a better and more selective college, which have been shown to improve one's success (at least monetarily speaking) in the future (23). It is also likely that the beginnings of this meritocracy stem from the current economic standpoint of today. The National Center for Education Statistics (NCES) says that there were around 2,725,000 high school graduates in the academic year of 1980-1981. Comparably, NCES projects that 3,443,000 or so students will graduate in the 2024-2025 school season. Additionally, another 4 or so million students will graduate from colleges in the US. To compare, the class of 1981 had only 1.76 million college graduates (24). This data can be used to explain the state of the job market today and the anxiety that students hold towards finding a job. As more people are pursuing higher education, the standard of education and experience is also raised. Not considering inflation, pandemics, and a variety of other factors, the sheer increase in highly educated graduates puts stress on the job market as students have to work harder and harder for their resumes to stand out. Additionally, the introduction of a new method into a system already used to another unit of measurement, will face considerable resistance. As it stands, gradeless learning lacks the immediate legibility and numerical clarity that grades provide. In a world where college admission officers only spend a few minutes on each application, reading numerous comments rather than seeing a single summarized grade can be predicted to be a change higher education does not want to embrace (25). The utilization of grades in college applications and most post-secondary opportunities only strengthens the need to have good grades in current day society. Competition is not exclusive to just grades, as students still experience it in gradeless forms of education (2). Rather, the quantification of grades drives the necessity of competition, so that the existence of competition is not reliant on the existence of grades, but rather on the existence of a meritocracy and the need to quantify grades. Students are incentivized to outperform their peers, regardless of whether their performance is measured by a letter, a number, or a comment. Gradeless learning aspires to foster intrinsic motivation, and a healthier academic culture, but it often fails to deliver on these promises because it works within an unchanged competitive framework shaped by forces outside of the field of education. As long as grades mean the future, whoever has the best grades would have the best future. Grades or gradeless.

CONCLUSION

Gradeless learning faces the tall task of fighting against a system that has existed for hundreds of years and is rooted in the values of today's meritocratic society. It's hard to say what can happen to lessen the prevalence of grades. After all, the meritocratic systems dominate in most workplaces and institutions requires grades as a part of their assessment of a person. Therefore, the shift away from grades can only be a gradual one. If the majority of schools choose to utilize gradeless learning over traditional grading systems, then culture will have to change as well. When traditional grades are no longer the standard, opinions of gradeless learning will naturally shift as well. To make such a change, schools, teachers, parents, and students must have ample support. Currently, no such support exists. The scaffolding, or support, that is required to implement and disseminate gradeless learning is spread out. Implementation methods and structures need to be consolidated. Although the various kinds of gradeless learning can certainly be seen as an advantage due to its customization by each school, too much variance can present itself as more problematic than beneficial. Gradeless learning needs standards. Like an 'industry standard,' this system would standardize aspects of education such as teacher training, curriculum, and student evaluation. Especially in the case of gradeless learning, the establishment of an 'industry standard' would be helpful for a few reasons. First, teachers would be able to receive uniform training, reducing not only variability between teachers within schools, but also between different schools. Teachers having undergone the same training would be able to easily consult one another, without having to worry about any differences in their approach to teaching gradeless. A standardized curriculum and teaching style would also greatly reduce the sense of alienation reported by students. By creating a standard, students in various schools utilizing gradeless learning would be able to connect with and lean on each other for support, which could reduce the need students felt to translate from gradeless to grades. Finally, having a standard could greatly benefit future research on gradeless learning. With guidelines, it would be considerably easier to apply conclusions of studies on gradeless learning uniformly across all schools without needing to worry about whether a finding would only apply to schools utilizing SBG schools and not schools utilizing CBE or needing to conduct several studies on each type of gradeless learning. In addition to providing more support for schools using gradeless learning, concrete and positive evidence on the ability of gradeless learning to perform as an assessment of student performance is needed. If schools can show that students educated through gradeless learning can achieve the same or more as students educated through traditional grading systems, it would show that success isn't actually dependent on utilizing grades and that gradeless methods of communicating progress work as well. If students are able to see that gradeless learning does not give them a disadvantage, then they would be more likely to accept the concept. Like any approach to education, the goals of gradeless learning include encouraging students to learn. However, to effectively use gradeless learning, the limitations that grade culture places on this new learning method must be stopped. As Hiner suggests in his *Grading as a Cultural Function,* being graded has been recognized to be an essential part in the experience of education, drilled into every child so many times that it eventually becomes a ritual (26). But students deserve better, they deserve to be free of the stress and anxiety that comes along with grades, but they also deserve an alternative that works effectively. The development of gradeless learning is clearly not over, and more research should certainly be devoted to this critical aspect of education.

CONFLICT OF INTEREST

The author declares no conflicts of interest related to this work.

REFERENCES

1. Brookhart SM, Guskey TR, Bowers AJ, *et al.* A Century of Grading Research: Meaning and Value in the Most Common Educational Measure. *Rev Educ Res.* 2016; 86 (4): 803-48. https://doi.org/10.3102/0034654316672069.

2. Costa S, Norton LS, Pirchio S. Discourses about grades and competency-based evaluation: Exploring communicative and situated meanings at an Italian high school. *Soc Psychol Educ*. 2024; 1-22. https://doi.org/10.1007/s11218-024-09911-5.

3. Bandura A. Self-Efficacy. In: Ramachaudran VS, editor. Encyclopedia of human behavior. New York: Academic Press; 1994; 4: 71-81. Reprinted in: Friedman H, editor. Encyclopedia of mental health. San Diego: Academic Press. 1998. Available from: http://www.des.emory.edu/mfp/BanEncy.html (accessed on 2024-07-16).

4. McMorran C, Ragupathi K. The promise and pitfalls of gradeless learning: Responses to an alternative approach to grading. *J Further High Educ*. 2020; 44 (7): 925-938. https://doi.org/10.1080/0309877X.2019.1619073.

5. Peters R, Buckmiller T. Our Grades Were Broken: Overcoming Barriers and Challenges to Implementing Standards-Based Grading. *J Educ Leadersh*. 2011; 2 (2). https://doi.org/10.62608/2164-1102.1070.

6. Kohn A. The Case Against GRADES. Educ leadersh. 2011; 69: 28-33. https://doi.org/10.5005/jp/books/11434_132

7. Howard Community College. Assessment 3.0: The learning progression model. Available from: from https://pressbooks.howardcc.edu/ungrading/chapter/assessment-3-0-the-learning-progression-model (accessed on 2025-6-24).

8. Kjærgaard A, Buhl-Wiggers J, Mikkelsen EN. Does Gradeless Learning Affect Students' Academic Performance? A Study of Effects over Time. *Stud High Educ*. 2023; 49 (2): 336-50. https://doi.org/10.1080/03075079.2023.2233007.

9. McDuff SG, McDuff D, Farace JA, Kelly CJ, Savoia MC, Mandel J. Evaluating a grading change at UCSD school of medicine: pass/fail grading is associated with decreased performance on preclinical exams but unchanged performance on USMLE step 1 scores. *BMC med educ*. 2014; 14 (1): 127. https://doi.org/10.1186/1472-6920-14-127

10. Smith E, Gorard S. 'They Don't Give Us Our Marks': The Role of Formative Feedback in Student Progress. *Assess Education*. 2005; 12 (1): 21-38. https://doi.org/10.1080/0969594042000333896.

11. Kjærgaard A, Mikkelsen EN, Buhl-Wiggers J. The Gradeless Paradox: Emancipatory Promises but Ambivalent Effects of Gradeless Learning in Business and Management Education. Manag Learn. 2022; 54 (4): 556-75. https://doi.org/10.1177/13505076221101146.

12. Toch T, Tugend A. The Movement to Replace High School Grades. Future Ed. 2021 Oct 27. Available from: https://www.future-ed.org/a-different-way-to-measure-high-school-learning/ (accessed on 2025-6-24).

13. Peters R, Kruse J, Buckmiller T, Townsley M. 'It's Just Not Fair!' Making Sense of Secondary Students' Resistance to a Standards-Based Grading. *Am Secondary Educ*. 2017; 45 (3): 9-28. http://www.jstor.org/stable/45147903.

14. Rohde N. 'To assign people their place in society': School grades and the quantification of merit. *Economy Soc*. 2023; 52 (3): 506-530. https://doi.org/10.1080/03085147.2023.2225346

15. Rohde N. It's Understandable If It Destroys You, Right? Grades, Students' Self-Images, and Quantification. *J Contemp Ethnogr*. 2023; 52 (5): 607-32. https://doi.org/10.1177/08912416231157369.

16. Sanders E. Gradeless Learning: The Effect of Eliminating Traditional Grading Practices on Student Engagement and Learning [dissertation]. Minnesota State University Moorhead; 2021. Available from: https://red.mnstate.edu/thesis/527.

17. Zwick R. El Rol De Los Exámenes De Admisión, De Las Notas De Educación Secundaria Y De La Situación Socioeconómica En La Predicción Del Desempeño Universitario. *Pensam Educ*. 2012; 49 (2): 23-30. https://doi.org/10.7764/pel.49.2.2012.3.

18. Yong XO. Perceptions of 'going Gradeless' a Case Study of a Master's Programme In the education Field. *High Educ Eval and Dev*. 2025; 19 (1): 24-37. https://doi.org/10.1108/heed-09-2024-0041.

19. Arredondo CP, Carrasco AB. Parent and Teacher Perceptions of Gradeless Assessment and Its Relationship with Education Commodification: A Case Study. *Rev Educ*. 2021; 46 (1): 351-66. https://doi.org/10.15517/revedu.v46i1.45575.

20. Mulligan T. Meritocracy. Zalta EN, Nodelman U, editor. The Stanford Encyclopedia of Philosophy (Fall 2023 Edition). NR. Avaliable from: https://plato.stanford.edu/archives/fall2023/entries/meritocracy/ (accessed on 2024-07-16).

21. Liu A. Unraveling the Myth of Meritocracy within the Context of US Higher Education. High Educ. 2011; 62 (4): 383-97. https://doi.org/10.1007/s10734-010-9394-7.

22. Zhao S, Zhang Y, Yu C, *et al*. Trajectories of Perceived Stress among Students in Transition to College: Mindset Antecedents and Adjustment Outcomes. *J Youth Adolesc*. 2023; 52 (9): 1873-86. https://doi.org/10.1007/s10964-023-01788-5.

23. Carnevale AP, Cheah B, Wenzinger E. The College Payoff: More Education Doesn't Always Mean More Earnings. Washington, DC: Georgetown University Center on Education and the Workforce;

202. Available from: cew.georgetown.edu/collegepayoff2021(accessed on 2025-6-24).

24. National Center for Educational Statistics. Table 219.20 Public high school graduates, by region, state, and jurisdiction: Selected school years 1980-81 through 2031-32. National Center for Education Statistics; 2023. Available from: https://nces.ed.gov/programs/digest/d23/tables/dt23_219.20.asp (accessed on 2025-6-24).

25. Korn M. Some Elite Colleges Review an Application in 8 Minutes (or Less). Wall Street Journal. 2018, Jan 31. Available from: https://www.wsj.com/articles/some-elite-colleges-review-an-application-in-8-minutes-or-less-1517400001 (accessed on 2025-6-24).

26. Hiner NR. An American Ritual: Grading as a Cultural Function. *Clearing House*. 1973; 47 (6): 356-61. http://www.jstor.org/stable/30184646. https://doi.org/10.1080/00098655.1973.11477761