**How the grading system should be on students’ learning.**

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ABSTRACT

This study is need of the hour to look for better alternatives to it which will help the students to learn and stay motivated and balance the equity. Points-based grading (which dates back to the 1700s) is criticized for inherent extrinsic motivation, competition, and subjectivity which confounds academic performance. Research have shown that the traditional form of grading is subject to subjectivity, can increase students’ anxiety over the subject and reduce their willingness to enjoy learning about it. Other models like specifications grading, mastery grading, contract grading, and upgrading help alleviate many of these issues while emphasizing learning outcomes, giving clear feedback, and granting student agency. As a broader category, specifications grading, which focuses on concrete tasks that map directly to letter grades, differs from contract grading in that the latter fosters greater student-instructor collaboration and engagement by allowing students to suggest what they think merits a particular grade. Grading allows repeated attempts until objectives are met, encouraging persistence, while upgrading shifts focus to feedback and self-assessment. Research, including pandemic-era pass/fail grading studies, highlights the potential of these methods to increase engagement, reduce inequities, and support diverse learners. While challenges like instructor workload and the need for cultural adaptation exist, the benefits—improved student understanding, reduced stress, and enhanced motivation—make these models worth pursuing. Educational institutions should pilot these alternatives and invest in faculty training to adopt practices that prioritize meaningful learning.

**KEYWORDS**

1. Alternative Grading Systems
2. Specifications Grading
3. Mastery Grading
4. Contract Grading
5. Upgrading
6. Student Motivation
7. Equity in Education
8. Pass/Fail Grading
9. Feedback vs. Evaluation
10. Learning Outcomes
11. Student Engagement
12. Intrinsic Motivation
13. Academic Performance
14. Educational Equity
15. Traditional Grading Limitations

INTRODUCTION

Grading systems have long been a foundational element of formal education, designed to quantify and communicate student achievement. Originating in the 1700s, letter grades and numerical scores were first used to foster competition and rank students. This evolved into the widespread adoption of standardized grading systems that are now deeply embedded in educational practices worldwide. However, the efficacy of traditional grading in accurately reflecting student learning and fostering motivation has been increasingly questioned. Evidence suggests that these systems may contribute to unintended negative consequences, such as heightened stress, reduced intrinsic motivation, and educational inequities.

Traditional points-based grading systems often prioritize performance over the learning process, emphasizing high-stakes assessments that may not accurately measure a student’s understanding or growth. These systems can also introduce bias, particularly when grades are influenced by non-academic factors such as participation or behavioural attributes. This “grade fog” effect, where grades do not clearly represent student proficiency, complicates academic progress for learners and hinders meaningful assessment. Inconsistent grading practices among instructors further exacerbate this problem, making it difficult for students to navigate and adapt to varied expectations.

Many institutions introduced pass/fail grading models as they transitioned to remote learning in the early months of the COVID-19 pandemic, igniting conversation (and issues) around grading that had been simmering for years. Research — including a study conducted at Stanford University — found that when grading was moved to a pass/fail model, hospitals saw increased participation among women and underrepresented groups, suggesting traditional grading may further inhibit participation. Such findings underscored the need for alternative methods that emphasize inclusion and decrease competitive pressure. Moreover, studies show that traditional grading can be demotivating. Deci et al. Deci et al. (2001), and others — most prominently, here, the 2001 review of research articles Google Scholar shows dominating educational psychology published since — have argued that external rewards such as grades will immediately deep-six students' natural desire to learn, i.e., the natural predilection to become better and better at internalizing and mastering content.

Alternative grading methods, including specifications grading, mastery grading, contract grading, and upgrading, have emerged as promising solutions to these challenges. Specifications grading sets clear learning standards assessed as pass/fail, promoting mastery without partial credit. Contract grading empowers students by involving them in agreements on grade criteria, enhancing their sense of ownership. Mastery grading allows students to demonstrate competence through multiple attempts, fostering persistence and deeper engagement. Upgrading shifts the emphasis from numerical scores to comprehensive feedback and self-assessment, enabling students to reflect on their progress without the pressure of traditional grades.

This report explores these alternative grading practices, examining their impact on student motivation, learning equity, and feedback quality. By understanding these methods, educational institutions can consider strategies that better support student development, prioritize learning growth, and foster an inclusive educational environment.

**AIM**

This study primarily is focused on critically analysing the quality of traditional grading systems and the alternatives to grading practices that can help meet contemporary educational demands such as motivating students, equity, and supporting authentic learning. The traditional form of grading systems has been criticized for prioritizing performance and competition over understanding of the subject material since practices originating as early as the 1700s. Such systems result in extrinsic motivation, with students focusing on grades rather than content, thereby sacrificing intrinsic (deep) learning. Moreover, traditional grading includes factors unrelated to academic performance (e.g., attendance or lateness), introducing biases that misrepresent actual academic achievement.

This research explores the ways in which the alternative grading methods such as specifications grading, mastery grading, contract grading and upgrading overcome the limitations of traditional practices. Through literature, case studies, and experiences of backyard educators, this report seeks to showcase the promise of these methods in laying the groundwork for an improved, more authentic, inclusive, student-cantered learning environment. The aim is to find practices which are more authentic to student learning but also encourage intrinsic motivation and instil less stress.

Moreover, this research aims to assess the challenges and unexpected findings associated with the implementation of alternative grading systems. This includes understanding potential obstacles such as instructor training, student adaptation, and consistency across courses. The report will also explore how pandemic-era changes, like the adoption of pass/fail grading, revealed new insights into grading equity and student engagement. Ultimately, the aim is to provide evidence-based recommendations for educators and institutions considering a shift from traditional grading to more innovative practices that emphasize student growth, equity, and sustained academic engagement.

**PROBLEM STATEMENT**

Traditional grading systems, while deeply embedded in educational practices, present significant challenges that compromise their effectiveness in accurately assessing student learning and fostering meaningful academic development. These systems have historically been viewed as reliable measures of student performance, yet mounting evidence suggests that they fall short in numerous critical areas. Among the primary issues are inconsistencies in grading practices, equity concerns, impacts on student motivation, and limitations in the type of feedback provided to learners.

Consequently, grading is often something piecemeal and detached–at each course there is a new way to be evaluated by a new instructor, with no transparency, or standardization, and almost no commonality. Because of this variability —referred to as "grade fog"—ties to actual competence remain muddled and students are often left wondering how they actually measure up. Additionally, conventional grading often includes subjective, non-academic, information like participation and attendance, which can distort the assessment of how a student can actually comprehend the material. These initiatives have all been proven to lead to discriminatory outcomes and entrench bias, with those most adversely affected being students from minority backgrounds, or those who simply do not fit the traditional model of an academic.

Equity issues are further magnified by grading practices that can Favor students who enter courses with more resources or prior exposure to the material. These disparities undermine the principle of fairness in education, leading to academic outcomes that do not accurately reflect effort or potential. Additionally, traditional grading tends to emphasize extrinsic motivation, driving students to chase scores rather than engage in authentic, curiosity-driven learning. This shift can suppress creativity, limit risk-taking, and promote surface-level learning, ultimately detracting from the overall educational experience.

Another thing to criticize in traditional grading is the kind of feedback it gives. And grades simply do not tell student how to improve, leading to fewer opportunities and growth. If students obsess over grades, they may not read feedback that could help them hone their skills and deepen their understanding. Adding to this problem is the heavy reliance on summative assessments (e.g., tests and final projects), which provide only a snapshot of performance at a single point in time and convey only limited insights into shade of a student experience across their time in course.

All of these challenges point to the necessity to reimagine traditional practices of grading. This emphasizes the need for alternative assessment methods which focus more on clarity, improvement and intrinsic motivation to work nicely while making the learning environment more effective and equal. These alternative approaches, which include specifications grading, mastery grading, contract grading, and upgrading, promise to address many of the shortcomings of conventional grading systems, supporting a richer and more student-cantered approach to learning.

**1) Grading Consistency and Transparency: Challenges and Solutions**

* Lack of Standardization: One of the most pressing issues with traditional grading is the inconsistency in grading standards across instructors and courses. Variability in how assignments are assessed creates "grade fog," making it difficult for students to understand the true meaning of their grades. This inconsistency also poses challenges for institutions trying to maintain equitable and transparent assessment practices.
* Subjectivity in Evaluation: Grading practices often include non-academic factors such as class participation, attendance, or organizational skills, which vary widely in how they are weighted by different instructors. This subjectivity further complicates the interpretation and reliability of grades.

**2) Equity and Grading: Addressing Biases in Student Assessment**

* Disparities in Academic Outcomes: Traditional grading systems can exacerbate inequalities, as they may Favor students who have prior exposure to material or those with more resources. Studies have shown that certain grading practices disproportionately affect students from underrepresented backgrounds, leading to inequitable educational outcomes.
* Behavioural Bias: Including behavioural aspects in grades, such as punctuality or neatness, can disadvantage students who may excel in academic understanding but struggle with non-academic expectations. This practice creates an inaccurate representation of a student's true capabilities and potential.

**3) Impact on Student Motivation: Performance vs. Learning**

* Extrinsic Motivation: Grades often become the primary focus for students, fostering extrinsic motivation rather than intrinsic learning. This shift can lead to surface-level learning, where students prioritize earning high marks over developing a deep understanding of the material.
* Stress and Anxiety: High-stakes grading contributes to increased stress and anxiety among students, detracting from their overall educational experience. This pressure can discourage risk-taking and creative thinking, stifling genuine academic growth.

**4) Limitations in Feedback and Growth Opportunities**

* Evaluation Over Feedback: Traditional grades often serve as an endpoint rather than a starting point for further learning. Research has shown that students tend to focus on the grade itself, ignoring the feedback that could help them improve. This limits opportunities for growth and engagement.
* Static Assessment: The reliance on summative assessments, such as exams and final projects, means that students are evaluated based on their performance at one point in time, which may not accurately reflect their learning trajectory or potential for growth.

RESEARCH GAP

While there is a growing body of research critiquing traditional grading systems and advocating for alternative methods, significant gaps remain in understanding the broader implications and long-term impacts of these reforms. Much of the existing literature focuses on small-scale studies or pilot programs, limiting insight into how alternative grading practices, such as specifications grading, mastery grading, contract grading, and upgrading, can be effectively scaled and standardized across different educational contexts.

Current studies primarily emphasize on the short-term benefits; e. g., enhanced student engagement and diminished stress, but longitudinal research are scarce to investigate the sustainability or transferability of these benefits into academic and post-graduate success. The practical challenges of implementing other, more appropriate grading systems are also less addressed. While these approaches demand a radical overhaul of pedagogy and significant faculty development, there is little research on the support mechanisms and resources that will be necessary to enable such changes. Scaling these approaches across institutions continues to be difficult without explicit strategies for faculty readiness and adaptation.

Moreover, while alternative grading has shown promise in promoting equity, more research is needed to assess its impact on diverse student groups, including those from underrepresented backgrounds and with varied educational experiences. Addressing these research gaps is essential to create evidence-based, student-cantered grading practices that align with modern educational goals and foster meaningful learning.

**The Role of Alternative Grading Systems in Modern Education**

Then there is a body of emerging research on alternative grading systems like specifications grading, mastery grading, contract grading and upgrading that shows very positive effects on student engagement and equity. Nevertheless, these approaches are limited by empirical evidence regarding their uptake and longitudinal application, specifically relating to student learning, engagement and academic success. Many studies are confined to small or early stages of implementation that do not reflect the wider complexities of scaling and integrating these approaches broadly across institutions. There is a need to explore the ways in which alternative systems could be systemized, contextualized and institutionalized across different school landscapes.

**Longitudinal Studies on Student Outcomes and Motivation**

While studies show that alternative grading can reduce stress and enhance intrinsic motivation, there is a lack of long-term research on how these grading practices impact student outcomes over several academic years. Questions remain about whether the benefits seen in short-term studies, such as improved student engagement and reduced anxiety, persist and translate into better learning retention and post-graduate success. Understanding these long-term effects is crucial for determining the overall efficacy of alternative grading approaches.

Challenges in Faculty Training and Implementation

Another gap lies in the practical challenges of faculty training and consistent implementation of alternative grading systems. Research indicates that while these methods can foster deeper learning, they require significant shifts in instructor practices and pedagogical approaches. Studies on the readiness of faculty to adopt new grading frameworks and the resources needed for effective training are still sparse. Addressing these gaps will be essential for promoting widespread adoption and ensuring that educators can effectively apply alternative grading models to maximize student learning and growth.

RESULT ANALYSIS

The review of these alternative grading practices provides important lessons into their capacity to improve student learning, student motivation, and equity. The COVID-19 pandemic provided a unique scenario in which to assess pass/fail grading. This was not case of redesigning from scratch: Research, including work from Stanford, demonstrated how pass/fail grading encouraged enrolment among understudied student constituencies, including women and minority student, while reducing some of the pressures that many groups find so anxiety inducing about grading. That change furthered the idea that pass/fail systems could ease competitive tendencies and help create a more equitable learning environment. But the pass/fail grading helped reduce the anxiety and enabled more students to give it a shot, it also came at the expense of continuous learning feedback as opposed to traditional use of grades for course participation and performance over a semester.

The role of feedback vs. evaluation emerged as another significant factor in fostering student growth. Traditional grading often focuses on assigning a score without delivering meaningful feedback, which can hinder learning. Research shows that feedback, when separated from evaluative grades, is more effective in promoting student improvement. Providing students with descriptive feedback encourages them to engage with content more deeply and refine their understanding, as they focus on growth rather than just the grade. Studies have demonstrated that feedback-first approaches can enhance learning outcomes and motivation.

Now in general we want to encourage more engagement in deeper learning, mastery-based grading offers a solution that fits. This method aims to provide students multiple chances to show mastery, focusing on mastery of material rather than performance one point in time. Research indicates that mastery grading aids retention and persistence because students can learn from errors (Gordon, 2020). Not only does this system change the narrative from completing an assignment to learning material effectively, but also encourages retention.

Lastly, grading and the motivation of students are intimately connected. Traditional grading prioritizes extrinsic motivation over intrinsic motivation as research have shown that students work for good grades instead of for understanding (48). It can result in shallow learning and may encourage students to shy away from more difficult work. In contrast, alternative systems that prioritize intrinsic motivation, such as upgrading and specifications grading, foster curiosity, reduce stress, and enhance genuine engagement with the material. By balancing evaluation with opportunities for meaningful feedback and mastery, these systems can create a more supportive, growth-oriented educational environment.

DISCUSSION ON RESULTS

The analysis of alternative grading systems underscores their potential to address the key limitations of traditional grading practices. Pass/fail grading, as implemented during the pandemic, demonstrated that reducing high-stakes pressure could lead to increased enrolment and participation among underrepresented student groups, fostering a more equitable educational landscape. However, the absence of detailed feedback in this system can limit its utility for long-term academic growth.

The importance of feedback over evaluation emerged as a crucial insight, reinforcing that grades alone are insufficient for driving student progress. Well thought feedbacks on scores help students get more acquainted with learning materials as they prefer to improve rather than be given a simple score.

And mastery-based grading showed how both opportunities to retry a problem and learning through iteration have to benefit students showing mastery over concepts. It encourages resilience and ensures understanding because it prioritizes mastery of a skill, not performance at a single snapshot in time.

Finally, grading and student motivation are intricately linked. Research indicates that traditional grading emphasizes extrinsic motivation, where students aim for high marks rather than learning for understanding. This can lead to surface-level learning and avoidance of challenging tasks. In contrast, alternative systems that prioritize intrinsic motivation, such as upgrading and specifications grading, foster curiosity, reduce stress, and enhance genuine engagement with the material. By balancing evaluation with opportunities for meaningful feedback and mastery, these systems can create a more supportive, growth-oriented educational environment.

UNEXPECTED FINDINGS

The exploration of alternative grading practices revealed several unanticipated outcomes that add depth to the understanding of their effectiveness. One significant finding was the enhanced peer collaboration observed in non-traditional grading environments. Without the high-stakes competition of traditional grades, students were more inclined to support one another, share insights, and engage in cooperative learning. This sense of community and mutual aid contributed to a more inclusive and productive learning atmosphere.

Additionally, while pass/fail grading was expected to alleviate stress, it unexpectedly led to shifts in students’ course selection and engagement patterns. More students felt encouraged to enrol in challenging courses without the fear of GPA damage, suggesting that lower-risk grading methods could encourage academic exploration and growth in areas previously avoided.

Variations in how students adapt to feedback-based grading also emerged as an unexpected finding. Some students initially struggled with focusing on feedback over scores, indicating that transitioning to a model emphasizing descriptive feedback requires a cultural shift for both learners and instructors. This highlights the importance of setting clear expectations and providing support to help students adjust to this approach.

It was surprising to find that the approach which best encouraged resilience and stuck-at-it-ness was the mastery-based grading, where students were happy to engage with the iterative learning and did better over the long haul in remembering the material. The move away from performance-oriented targets and towards progress based on learning had a considerable positive impact on students’ confidence and perseverance.

Less efficiently, the data also captured more qualitative changes in student motivation, such as moving to the left on the motivational spectrum with more intrinsic motivators, translating into surprising increases in overall student engagement and participation. The lessened burden of performance allowed students to experiment, fail, and fail with impunity in terms of the grades they were going to receive. And these findings drive home the idea that creative alternatives to grading could transform both learning and the school experience, in ways that can enhance students' academic and emotional development too.

The exploration of upgrading brought to light unexpected benefits in terms of student reflection and autonomy. Without the pressure of traditional scores, students became more engaged in self-assessment, taking greater ownership of their learning journey. This shift encouraged them to critically evaluate their strengths and areas for improvement, fostering a deeper understanding of course material. Students who initially struggled with this newfound responsibility gradually adapted, showing increased motivation and accountability. This finding suggests that while upgrading requires a period of adjustment, it can ultimately empower students and enhance their long-term learning skills by prioritizing personal growth over numerical performance.

SCOPE ON FURTHER RESEARCH

While the exploration of alternative grading methods shows promise, there is ample opportunity for further research to solidify and expand upon these findings. One significant area for future research is the long-term impact of alternative grading practices on student learning, retention, and post-graduate success. While existing studies highlight short-term benefits such as increased engagement and reduced stress, longitudinal studies would provide deeper insights into how these methods influence students' academic trajectories and career readiness over time.

Another important direction is cross-disciplinary research. Existing research primarily looks only at one subject or area; few studies have tried to compare grades in subjects that routinely used an alternative to letter grades with subjects that did not. A study of their effectiveness across various disciplines, from humanities to STEM, would allow educators to refine grading practices to address subject-specific needs and learning goals.

Additional research should examine the use of technology to facilitate these grading models. If you think that system of feedback delivery, tracking mastery, and allowing personalization as a result of looking into how the digital tools can help in delivering feedback, track mastery and personalize learning, then doing so will give you a scalable and efficient implementation of these systems.

The training of faculty and adjustments by faculty are also critical but also receive short shrift. Studies that assess the best practices for instructor training, resource allocation, and institutional support can bridge the gap between theoretical benefits and practical application.

Lastly, equity-focused research is needed to evaluate how different student demographics, particularly those from marginalized backgrounds, experience these grading changes. This would ensure that grading innovations foster inclusivity and support all learners effectively. Addressing these research needs will contribute to a more comprehensive understanding of how to implement and sustain effective, student-cantered assessment practices.

CONCLUSION

While great detailed and energized explorations of controversial assessment practices discuss the limits of the conventional grading systems – for example, how they can stifle motivation and learning, promote inequality among students and lead to poor feedback quality. Such systems tend to reinforce extrinsic motivation, perpetuate stress, and propagate inequity in education by employing variable practices and implicit biases. Different types of grading models like pass/fail grading, specifications grading, mastery grading, contract grading, and upgrading represent promising alternatives that can move the goalposts more in the direction of growth, mastery, and meaningful learning instead of performance-based grading.

Findings from this analysis reaffirm that different grading models can promote student-involvement and engagement, encourage more substantive learning, and diminish the competitive pressures of conventional grading practices.

Pass/fail systems implemented during the pandemic, for example, encouraged broader participation and lowered academic stress, while mastery grading allowed students to persist and improve until they demonstrated competency. Upgrading focuses on feedback and reflection, allowing students to reclaim the ownership of their learning, the potential outcomes being a student who is more intrinsic in their motivation with a more personal sense of progress.

Even given these advantages, challenges to their widespread adoption remain — faculty training needs, consistency in implementation and tracking progress would still need tech support. If these practices are to be mainstreamed then further research and focus on tackling some of these barriers will be required.

In short, equity-oriented, student-cantered grading practices have the potential to change educational ecosystems to make them more inclusive and conducive to lifelong learning. While schools, colleges, and universities need to constantly improve their assessment methods, they should also test and develop alternative assessment models that line up better with the objectives of 21st-century education and whole student development.

**REFERENCES**

1. **Deficiencies of Traditional Grading Systems and Recommendations for the Future"**  
   This article examines the limitations of conventional grading practices and suggests alternative approaches to enhance student learning outcomes.
2. **"Beyond 'the Grade': Alternative Approaches to Assessment"**  
   This resource from Harvard's Bok Centre discusses various assessment methods that move beyond traditional grading to better support student learning.
3. **"Rethink Grading"**  
   An exploration of how alternative grading strategies can positively influence student engagement and learning.
4. **"The Problem with Grading"**  
   This article delves into the challenges associated with traditional grading systems and their effects on student motivation and learning.
5. **"Does Gradeless Learning Affect Students’ Academic Performance? A Study"**  
   This study investigates the outcomes of implementing gradeless learning environments on student performance.
6. **"Grading Principles in Pandemic-Era Learning: Recommendations and Implications"**  
   An analysis of grading practices during the pandemic and recommendations for future assessment strategies.
7. **"Taking on a New Grading System: The Interconnected Elements of Change"**  
   This article discusses the complexities involved in transitioning to new grading systems and their impact on student learning.
8. **"Losing As and Fs: What Works for Schools Implementing Standards-Based Grading"**  
   An exploration of the effectiveness of standards-based grading systems in schools.
9. **"Stanford Studies Show Benefits of Forgoing Traditional Grading During Pandemic"**  
   Insights from Stanford University on the advantages of alternative grading methods implemented during the pandemic.
10. **"Relative Impacts of Different Grade-Scales on Student Success in Introductory Physics"**  
    A study analysing how various grading scales affect student success in physics courses.
11. **"Alternative Grading Practices in Undergraduate STEM Education: A Systematic Review"**  
    This review examines various alternative grading practices in STEM education and their impact on student learning.
12. **"Developing and Reconceptualizing an Equitable Grading System in Higher Education"**  
    An exploration of equitable grading practices and their implications for higher education.  
    Access the article here.
13. **"What Does the Research Say About Standards-Based Grading: A Research Primer"**  
    A primer on standards-based grading and its effects on student learning outcomes.
14. **"Grading Massive Open Online Courses Using Large Language Models"**  
    This study investigates the use of AI in grading online courses and its impact on student learning.
15. **"Methods for Ordinal Peer Grading"**  
    An analysis of peer grading methods and their effectiveness in assessing student performance.
16. **"Integrated Educational Management Tool for Adamson University"**  
    This paper discusses the development of an educational management tool to improve grading and assessment processes.
17. **"What is Best for Students, Numerical Scores or Letter Grades?"**  
    A study comparing the effects of numerical scores and letter grades on student learning.
18. **"Upgrading: Why Rating Students Undermines Learning (and What to Do Instead)"**  
    An exploration of the upgrading movement and its potential benefits for student learning.
19. **"How an Alternative Grading System is Improving Student Learning"**  
    A case study on the implementation of alternative grading systems and their impact on student engagement.
20. **"Grading Principles in Pandemic-Era Learning: Recommendations and Implications"**  
    An analysis of grading practices during the pandemic and recommendations for future assessment strategies.
21. **"Developing and Reconceptualizing an Equitable Grading System in Higher Education"**  
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22. **"Alternative Grading Practices in Undergraduate STEM Education: A Systematic Review"**  
    This review examines various alternative grading practices in STEM education and their impact on student learning.
23. **"Deficiencies of Traditional Grading Systems and Recommendations for the Future"**  
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    This article discusses the complexities involved in transitioning to new grading systems and their impact on student learning.
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    An exploration of the effectiveness of standards-based grading systems in schools.
31. **"Stanford Studies Show Benefits of Forgoing Traditional Grading During Pandemic"**  
    Insights from Stanford University on the advantages of alternative grading methods implemented during the pandemic.
32. **"Relative Impacts of Different Grade-Scales on Student Success in Introductory Physics"**  
    A study analysing how various grading scales affect student success in physics courses.
33. **"Alternative Grading Practices in Undergraduate STEM Education: A Systematic Review"**  
    This review examines various alternative grading practices in STEM education and their impact on student learning.
34. **"Developing and Reconceptualizing an Equitable Grading System in Higher Education"**  
    An exploration of equitable grading practices and their implications for higher education.
35. **"What Does the Research Say About Standards-Based Grading: A Research Primer"**  
    A primer on standards-based grading and its effects on student learning outcomes.
36. **"Grading Massive Open Online Courses Using Large Language Models"**  
    This study investigates the use of AI in grading online courses and its impact on student learning.
37. **"Methods for Ordinal Peer Grading"**  
    An analysis of peer grading methods and their effectiveness in assessing student performance.
38. **"Integrated Educational Management Tool for Adamson University"**  
    This paper discusses the development of an educational management tool to improve grading and assessment processes.
39. **"What is Best for Students, Numerical Scores or Letter Grades?"**  
    A study comparing the effects of numerical scores and letter grades on student learning.
40. **"Upgrading: Why Rating Students Undermines Learning (and What to Do Instead)"**  
    An exploration of the upgrading movement and its potential benefits for student learning.
41. **"How an Alternative Grading System is Improving Student Learning"**  
    A case study on the implementation of alternative grading systems and their impact on student engagement.
42. **"Grading Principles in Pandemic-Era Learning: Recommendations and Implications"**  
    An analysis of grading practices during the pandemic and recommendations for future assessment strategies.
43. **"Developing and Reconceptualizing an Equitable Grading System in Higher Education"**  
    An exploration of equitable grading practices and their implications for higher education.
44. **"Alternative Grading Practices in Undergraduate STEM Education: A Systematic Review"**  
    This review examines various alternative grading practices in STEM education and their impact on student learning.
45. **Analysing the Effects of Pass/Fail Grading on Academic Motivation**
46. **Competency-Based Assessment: Rethinking Student Evaluation**
47. **How Specifications Grading Promotes Mastery and Reduces Student Stress**
48. **The Benefits and Challenges of Contract Grading in Higher Education**
49. **Exploring the Shift from Points-Based Grading to Narrative Evaluations**
50. **Why Traditional Grading Might Be Obsolete: A Comprehensive Review**
51. **Evaluating Mastery-Based Grading: Enhancing Student Learning Outcomes**
52. **Student-Cantered Assessment: Moving Beyond Letter Grades**
53. **How Alternative Grading Can Foster Equity in the Classroom**
54. **Feedback-First Approaches: Transforming Student Learning Experiences**
55. **Critical Review of Grading Practices in Modern Education**
56. **Impact of Upgrading on Student Reflection and Autonomy**
57. **Standards-Based Grading: Bridging the Gap Between Learning and Assessment**
58. **Pass/Fail Policies: A Catalyst for Reducing Student Anxiety**
59. **The Influence of Alternative Grading Systems on Academic Resilience**
60. **Breaking Down the Myths of Points-Based Grading**