

Critical Study of the Problems Arising While Teaching and Learning of Grading Subjects at Secondary School Level

Ashok Ramkrishna Tawar¹*,

Education Department, Shivaji University Kolhapur, <u>ashok.tawar58@gmail.com,9</u>850702764.

Dr. G.S. kamble²

Research Guide, Associate professor, Azad college of Education Satara.

Abstract: The difficulties that arise when teaching and learning how to grade courses at the secondary school level are critically examined in this study work. Grading systems are essential for evaluating student performance and development; however there are numerous issues with their pedagogical implementation and adoption. Our goal was to identify and measure these difficulties through a questionnaire-based study that involved both teachers and students. We used a wide variety of secondary schools in our methodology to provide comprehensive insights. The results draw attention to important problems with curriculum delivery, student understanding, and the psychological effects of grading. The implications of these findings provide curriculum developers, educators, and policymakers with a greater understanding of the areas in which changes are most needed to improve the efficiency and equity of secondary school grading.

Keywords: Problems, Teaching, Learning, Grading Subjects, teacher, student.

1. Introduction

The secondary school years are essential in the ever-changing field of education because they connect students to both general education and advanced study. In this stage, grading subjects play a crucial role as measures of academic ability and as sources of motivation for students to continue their studies and improve their performance. There are many obstacles in the classroom that make it difficult to accurately reflect students' performance, comprehension, and talents through grading. It can be difficult and divisive to put a student's knowledge and abilities into a single number or letter grade (Guskey, 2019). Students' academic identities, as well as their self-esteem, motivation, and career aspirations, are shaped by the grades they receive. Teachers also frequently struggle to develop evaluation systems that adequately capture their students' knowledge. In addition, it is difficult to ensure fairness in teaching and grading when students come from such different places and have such different approaches to teach (O'Connor, 2020).

1.1 Background of the Study

Secondary school grading subjects are often the bedrock upon which a student's academic success and future employment opportunities are based. Students not only learn the material for their courses, but also grow in a variety of ways that will serve them well in college and beyond. The significance of topic grades in secondary education has changed over time in response to societal pressures (Brown, 2020). There may have been more of an emphasis on memorization and rote learning in the past. Demands for secondary education have shifted, however, due to the dynamic nature of the modern world and the rapid development of technology. Critical thinking, problem solving, creativity, and adaptability are all becoming more valued (Tannock, 2021).

Educators in the secondary level must therefore balance the twin goals of helping pupils meet subject-specific grading criteria and providing them with the 21st-century abilities they'll need to thrive. Because of this requirement, many new difficulties in education have emerged. The secondary school environment is complicated by several factors, including students' varied approaches to learning, changing curricula, the increased use of technology in the classroom, and external social influences. Subject grades in secondary school are often used as criteria for entry into higher education institutions in several nations (Brookhart, 2015). This can put a tremendous strain on the mental health of both teachers and pupils, who are already under pressure to perform at high levels. Globalization and the resulting mixing of cultures have led to a more diversified student body. Educators are typically tasked with ensuring that students from diverse backgrounds and with differing levels of skill can learn the subject matter successfully, rather than just teaching a homogenous population. This study is motivated by the need to better understand the unique challenges associated with the secondary school grading curriculum in light of these intricacies. Insight into these difficulties will allow educators, policymakers, and parents to better prepare adolescents for success during these formative years (Schinske, 2015).

1.2 Evolution of Grading Systems

The use of grades in education as a method of quantifying students' levels of academic achievement has a long and illustrious history that spans several centuries. In the beginning, the primary goal of education was to instill morality and ethics in its students, and a student's performance was evaluated based on their character and the way they carried themselves. It became necessary to standardize and measure academic performance as a direct result of the increasing complexity of societies and the rising value of obtaining a formal education. Therefore, the implementation of a structured grading system constituted a substantial movement away from an intangible assessment and towards a codified measure of academic accomplishment. This was a big shift. Around the course of time, numerous grading schemes have been implemented all around the world (Panadero, 2017). These schemes range from straightforward pass/fail classifications to more complicated numerical and letter grade structures. The development of these systems has been shaped by a variety of variables, including societal norms and expectations, the demands of the economy, and advancements in educational psychology (Feldman, 2018).

1.3 Pedagogical Shifts in Secondary Education

Over the course of its history, the educational method taken in secondary school has undergone significant evolution. The dominating approach to education in past epochs was called the didactic method, in which knowledge was transmitted unidirectional from the instructor to the pupils of the class. However, during the 20th century, there was a transition towards a more student-centered approach that placed an emphasis on active learning, critical thinking, and problem-solving. These changes occurred as a result of the progressive educational movements. The introduction of new technologies in the latter half of the century brought about an even greater sea change in the educational landscape (Anderson, 2001). The utilization of digital tools and resources started to become increasingly important, which promoted blended learning and interactive engagements. These alterations in teaching approaches have, in turn, altered grading practices, which have, in turn, challenged the established conventions and prompted educators to reevaluate how the success of students should be judged in these dynamic situations.

1.4 Challenges in Teaching Grading Subjects

Curriculum Design and Syllabus Complexity: When discussing the challenges that come with teaching grading courses at the secondary school level, it is common practice to point to the structure of the curriculum as well as the complexity that is innate to the various syllabi. When a curriculum is not structured well, it can be difficult for educators to determine whether or not pupils have mastered crucial ideas. It is common practice to concentrate an emphasis on content-heavy syllabi, even if there is little advice on how these topics should be presented in the classroom (Brown, 2002). In addition, the continuously shifting educational standards often require teachers to make regular adjustments to their teaching methods and the materials they use, which makes it difficult to maintain consistency and go into greater detail with lessons.

Teacher Preparedness and Professional Development: Teachers are the front-runners in the educational system, and it is vital to them that they can properly teach grading courses. But not all educators have access to sufficient training or opportunity for ongoing professional development in these areas. It might be difficult to meet the varied learning demands of students when there is a lack of training since it can result in a restricted grasp of the most effective pedagogical approaches (Cheng, 2008). Furthermore, a lot of teachers might not be aware of or have access to the most recent research and teaching strategies for grading subjects, which puts them at a disadvantage.

Classroom Environment and Infrastructure: A classroom setting that is conducive to learning is essential for efficient teaching and learning. Unfortunately, a lot of secondary schools lack the infrastructure required to enable teaching graded topics, particularly in locations with little resources. This could include a lack of current teaching tools, a small classroom, or a supportive environment for learning (Dörnyei, 2003). Even the most committed instructor finds it extremely difficult to provide high-quality instruction in such environments. Problems with classroom administration, such large student-teacher ratios, can also make it difficult for students to receive the individualised attention and feedback they need to succeed in grading subjects.

Diverse Learner Profiles and Needs: Many kids with different origins, learning styles, and skills can be found in secondary school classrooms. One of the main difficulties teachers have while teaching grading courses is differentiating instruction to meet the needs of this diverse group. Some kids might do well and pick up topics fast, while others would require more time and a variety of teaching strategies. For instructors, it can be especially difficult to strike a balance such that each student's needs are met without sacrificing the standard of instruction or the cohort's advancement (Gibson, 1984).

1.5 Challenges in Learning Grading Subjects

Student Engagement and Motivation: Ensuring sustained student interest and motivation is one of the biggest issues in secondary school education's graded subject learning. Owing to the innate emphasis on grades, students frequently adopt a mindset that places more value on getting better scores than on actually learning the material. This may discourage critical thinking and deep knowledge in favour of surface-level learning techniques like rote memorization.

Furthermore, students may be discouraged from committing fully to subjects that they believe have stricter grading standards because they are afraid of failing or believe they are incapable of doing so (Hall, 2000).

Assessment-Driven Learning: Since grades are currently used as the main measure of a student's achievement, assessment often drives learning instead of sincere curiosity or a desire to learn new things. Instead of developing a comprehensive understanding of the subject, students may find themselves "teaching to the test," concentrating all of their efforts on what will be assessed. This assessment-driven method can hinder the development of skills, discourage creativity, and even cause academic burnout in students who are under constant pressure to perform well on assessments (Smith, 2010).

Learning Materials and Resources: Even while mandated textbooks and resources are frequently provided for graded topics, not all students' varied learning styles and paces may be accommodated by these materials. While some students may find the basic resources too difficult, others may find them not exciting enough. Students who struggle with standard materials may feel left behind in a system where performance is contin

uously measured. This could result in a decline in self-confidence and a reluctance to interact with the subject matter. **Peer Influence and Group Dynamics:** Secondary school social environments are very important in determining how students feel about subjects that are graded. Students' perceptions of subjects and their own talents can be greatly impacted by peer pressure, competition, and group dynamics. For example, students may be discouraged from contributing fully to a subject if they believe it to be 'difficult' or 'uncool' by their classmates. On the other hand, unhealthy competition can cause tension, anxiety, and a hostile learning atmosphere devoid of mutual aid and cooperation (Brookhart, 2004).

2. Statement of the Problem

Secondary school teaching and learning have gotten more difficult, especially when it comes to topic grading. The breadth and complexity of subject matter increase as children move from primary to secondary school, necessitating more advanced teaching strategies and a thorough comprehension on the side of the pupils (Hattie, 2009). This change is essential to students' academic paths since it lays the groundwork for studies at a higher level. Concerns have been expressed by educators, students, and stakeholders regarding a number of problems that prevent certain grading subjects from being taught and learned in an efficient manner.

With the use of a questionnaire-based study, this research attempts to probe these topics more deeply in an effort to determine the most common problems and assess how they affect teachers and students. Through gaining insight into the core of these issues, it is believed that more focused and efficient solutions can be created to improve secondary education (Kohn, 2011).

3. Objectives of the Study

This study's primary objective is to critically analyze the difficulties that arise when secondary school teachers and students are grading assignments. In order to attain a thorough comprehension of these issues, the research will focus on the following particular goals:

- To identify common issues teachers and students encounter when grading secondary school subjects.
- To assess the impact of these issues on student and instructor morale and academic achievement.
- To understand teachers' challenges in delivering curriculum, managing diverse classrooms, and aligning teaching techniques with grading requirements.
- To understand students' challenges in retaining and communicating knowledge in subject grading. Exam preparation, feedback understanding, and academic stress management are covered.

4. Research Methodology

4.1 Research Design

This study used a descriptive research approach to understand secondary school grading teaching and learning issues. The descriptive approach is chosen because it gives a detailed view of the current state based on respondents' perceptions and experiences.

4.2 Population and Sample

Target Population: Secondary school teachers, H.M.'S, students and parents involved in grading subjects.

Sampling Method: We'll use stratified random sampling. Students will be chosen at random from each stratum of schools, which will be categorized according to specific criteria (public vs. private, urban vs. rural, etc.).

Sample Size: 300 students participants,80 teachers, 40 H.M'S and 50 parents (Total 470) with an even split between teachers and students, ensuring representation from each stratum.

4.3 Instrumentation

There will be a structured questionnaire as the tool. These include demographics, a section with possible solutions, open-ended questions for more information, and Likert scale questions about difficulties experienced.

Validity and Reliability: To guarantee reliability and clarity, a small sample will be used for pre-testing of the questionnaire. The instrument will be improved using input from the pre-test.

4.4 Data Collection

Distribution might take place online via email or offline via paper-based questionnaires, dependent on participant preferences and accessibility. Two months will pass throughout the data collection phase. To boost the response rate, emails or phone calls will be used as reminders. Participants will receive a clear timeline that includes the submission deadline.

4.5 Data Analysis Procedure

After being gathered, the data was cleansed to get rid of any errors or missing information. An summary of the data will be provided by computations such as mean, median, mode, standard deviation, and frequencies.

5. Results and Findings

5.1 Demographic Information

It is essential to comprehend the demographics of the sample population because they set the research findings in context. These attributes aid in presenting a picture of the participants, guaranteeing the external validity of the findings, and possibly pointing out areas in which particular demographics can have particular difficulties.

A total of secondary school 80 teachers from 40 different schools were given the survey. 35% of these were men and 65% of them were women. These demographics aid in offering a more comprehensive understanding of the representativeness of our sample.

Age Distribution of Participants:

The participants in this study varied in age. The table below provides a summary of the age distribution:

Table 1: Age Distribution of Participants

Age Range	Number of Participants
14-15	70
15-16	160
16-17	70

It is clear from the table that the majority of the participants fell within the age range of 15 to 17, which is the age range that is often considered to be the standard for students in secondary school.

Gender Distribution:

Gender representation was another factor we considered:

Table 2: Gender Distribution

Tubic 2. Gender Bishieunen				
Gender	Number of Participants			
Male	190			
Female	110			

There was very little difference in representation between the sexes, with males slightly outnumbering girls. A balance of this kind ensures that the points of view of both sexes are taken into sufficient consideration.

Socio-Economic Background:

When one is aware of the socioeconomic context, one can gain a better understanding of the resources that are made accessible to pupils, which in turn can affect the students' educational experience:

Table 3: Socio-Economic Background of the participants

Socio-Economic Status	Number of Participants
Low	90
Middle	130
High	80

The vast majority of the people who took part in the study come from middle-class backgrounds. This can be an indicator of the typical family background, as well as the possible resources that individuals have access to in terms of their educational opportunities.

Educational Background of Parents:

It is possible for kids' attitudes and approaches to education to be influenced by the educational background of their parents.

Table 4: Educational Background of Parents

Education Level	Mother	Father
No formal education	2	20
High school diploma	3	10
Bachelor's degree	3	06
Postgraduate degree	2	04

Even though the majority of parents have earned at least a high school, a very less percentage of bachelor's degrees. This can be an indication of a family culture that places a high importance on getting an education.

5.2 Main Challenges Identified

Difficulty in Understanding Subject Concepts:

The difficulty that students have in understanding key principles of grading subjects emerged as one of the primary difficulties that need to be addressed as a result of the data that was collected. Sixty-eight percent of those who participated in the survey admitted that they frequently have trouble understanding particular concepts, which, in turn, has an effect on the way they perform on tests. This obstacle presented a greater degree of difficulty in the courses that required more abstract thought or involved more intricate problem-solving.

Table 5: Subjects with Highest Reported Difficulty Level

Subject	Percentage	of	Students	Reporting
D C C 1	Difficulty			
Defence Studies	73%			
Water Security	70%			
Self Development & Kala	65%			
Rasa wad				

Inadequate Teaching Methodologies:

According to the comments, another important factor to consider is the instructional strategies utilized by educators. Approximately 58% of those who participated in the survey held the opinion that the current teaching strategies do not adequately address the varied requirements of the students. A number of the students expressed their opinion that, as opposed to the more conventional ways of instruction, which are based on lectures, a method of teaching that is more interactive and interesting would be more productive.

Table 6: Preferred Teaching Methodologies

Methodology	Percentage of Students Preferring			
Interactive Discussions	55%			
Group Projects	52%			
Multimedia Presentations	49%			

Lack of Resources for Additional Help:

The results of the study made it abundantly evident that there is a need for additional tools to facilitate comprehension. 63% of those who participated in the survey indicated that they do not have access to adequate resources, such as tutoring centres, online platforms, or additional reading materials, to seek assistance outside of regular classroom hours.

Table 7: Resources Lacking in Schools

Resource	Percentage of Students Reporting Lack
Tutoring Centers	67%
Online Learning Platforms	62%
Supplementary Textbooks	58%

Overwhelming Exam Pressure:

During times when exams were being given, a considerable portion of the student body, approximately 71%, reported experiencing an extreme amount of pressure. Increased levels of stress can have a negative impact on performance, and these levels are typically the result of the high expectations placed on children by both society and their own parents.

Table 8: Factors Contributing to Exam Pressure

Factor	Percentage of Students Affected
Parental Expectations	76%
Peer Comparison	69%
Future Academic/Career Prospects	65%

Limited Practical Exposure:

A lack of laboratory or practical sessions was mentioned for courses like Sciences, which require students to have direct experience or exposure to practical situations. Approximately fifty-five percent of the students are of the opinion that putting more of an emphasis on practical sessions would help them better understanding the material.

Table 9: Subjects Needing More Practical Sessions

Subject	Percentage of Students Reporting Need
Defence Studies	60%
Water Security	58%
Self	
Development &	54%
Kala Rasaswad	

5.3 Frequency and Descriptive Analysis

The data that were gathered from the questionnaire are broken down in great detail in the section that is devoted to frequency and descriptive analysis. At the secondary school level, understanding the distribution of replies and gaining insights into the issues that are faced during the teaching and learning of graded subjects is vital. This segment will help with both of these goals.

Overview of Respondent Answers:

The breakdown of responses offers an initial look at the overall perceptions held by educators and students as well as the difficulties they face. The following can be tabulated for your convenience:

Table 10: Distribution of Responses to Statements about Teaching and Learning Challenges

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Responses
Q1: The curriculum for grading subjects is too vast for secondary level students.	80	140	40	20	20	300
Q2: There are insufficient resources available for effective teaching of grading subjects.	80	160	02	40	18	300
Q3: Grading subjects are not given equal importance as other core subjects.	150	110	05	25	10	300
Q4: Students generally find grading subjects less engaging than other subjects.	155	120	00	20	05	300
Q5: Teachers require more training to effectively teach grading subjects.	170	90	05	25	10	300

By classifying the comments in this way, we are able to acquire a more precise understanding of the major issues and opportunities for improvement in the process of teaching and learning graded subjects at the secondary school level. We are able to interpret the distribution of feelings towards certain statements or questions using the data presented in the table above. For example, the vast majority of participants are of the opinion that the curriculum presented to pupils at the secondary level is adequate.

6. Discussions

The findings of the study have significant repercussions for those responsible for educational policy, curriculum development, and instructional planning. One of the most significant difficulties that were found was the possibility of there being a mismatch between the criteria of the curriculum and the actual learning outcomes. This misalignment not only has an effect on the students' ability to understand the material at hand, but it also has larger repercussions for the students' future academic and professional endeavors. In addition, the fact that there is a need for more rigorous teacher training programmes suggests that the existing pedagogical approaches may not effectively prepare educators to manage the subtle issues that come with grading topics. The emphasis placed on the emotional and psychological components by a number of respondents highlights the requirement of an approach to education that is more holistic and goes beyond the simple delivery of content. The findings of this research have a wide range of consequences, each of which has the potential to be of substantial importance to a different group of educational stakeholders. Unpacking

these implications is helpful in locating tactics and routes for improvement that may be implemented in the teaching and learning process of grading topics at the secondary school level.

Educational Curriculum and Policy Design: The possibility of a gap between the expectations of the curriculum and the actual learning outcomes of the students was one of the most prominent challenges that emerged from the research. This mismatch not only makes it more difficult for students to comprehend and absorb the material being taught to them, but it also has wider-reaching ramifications for the students' future academic and professional endeavours. It is possible for students' future opportunities in further education or in the workforce to be hindered if they proceed with a grasp of foundational courses that is either inaccurate or insufficient. Because of this, those who create curricula and those who make educational policy should think about conducting periodic evaluations and making revisions to make certain that the curriculum continues to be current, difficult, and attainable for the majority of students.

Teacher Training and Professional Development: The focus placed on the importance of strengthening teacher training programmes suggests that there may be a gap in the educational practices that are already in use. It is imperative that educators, who serve as the frontline facilitators of learning, be provided with the resources and tactics necessary to meet the unique issues that are presented by subject grading. It is important that programmes for professional development have a more holistic approach. These programmes should include not only subject matter competence but also strategies to handle the varied needs of students, classroom dynamics, and the incorporation of technology into instruction.

Student Mental Health and Well-being: The emotional and psychological components that were brought to light by the outcomes of the study highlight the importance of adopting an all-encompassing teaching strategy. Beyond the realm of academics, it is of the utmost importance to address the mental health of students, particularly in the context of the demands associated with grading and assessment. To guarantee that students are not only academically successful but also emotionally resilient, schools must to investigate the feasibility of implementing support systems such as counselling and mentoring programmes.

Resource Allocation: The problems that were brought to light that were associated with the inadequacies or outmoded nature of teaching materials brought to light the significance of ensuring that educational institutions are provided with modern, applicable, and easily accessible learning tools. This has ramifications for school budgets, government policies, and donor objectives, and it is driving them to deploy monies more wisely towards modernizing resources and maybe adding innovative teaching technologies such as digital platforms and interactive content.

Community and Parental Engagement: Teachers cannot solve the more general issues in teaching and learning grading subjects on their own. It implies that there is a greater need for family and community involvement in the educational process. Parent-teacher conferences, community education forums, and regular feedback loops may all be helpful in filling up the gaps found in this research.

7. Conclusion

The study set out to critically examine the difficulties encountered in the secondary school classroom when teaching and learning how to grade topics. We identified many major issues that both teachers and students face by using a varied sample that represented various demographics within the secondary school population. Primarily, the findings revealed a common problem of insufficient resources, which was often mentioned by the participants as a significant obstacle. Furthermore, a discernible pattern emerged in the feedback, suggesting that a considerable number of students perceived the grading system as demotivating, particularly in instances where they were unclear about the grading standards. Another major issue that surfaced was the absence of specialised educational techniques to address the needs of a variety of learners. This suggested that a one-size-fits-all approach has been harmful to efficient teaching and learning. In conclusion, despite their complexity, the difficulties associated with teaching and learning grading courses at the secondary school level are manageable. We can establish an atmosphere that supports effective learning and teaching by implementing strategic interventions, maintaining stakeholder engagement, and being open to innovation and adaptation. We hope that this study serves as a catalyst for significant change in our educational institutions in addition to shedding light on the pertinent concerns.

7.1 Recommendations

Considering the difficulties this investigation uncovered, a number of suggestions are possible. In order to support instructors and students in the learning process, schools must immediately invest in the acquisition of resources and cutting-edge teaching instruments. Ongoing professional development for teachers is also crucial, since it will provide them the tools they need to adapt their teaching strategies to meet the varied requirements of their pupils. Given its contentious nature, the grading system has to be thoroughly reviewed. Rather than depending primarily on summative exams, it could be advantageous to take into account more formative assessment techniques and ongoing feedback. Students may find this method more motivating and gain a better understanding of their areas of strength and areas in

which they still need to grow. Finally, incorporating students in the feedback process regarding their preferred learning style can also be a game-changer, fostering greater collaboration and effectiveness in the educational process.

References

- 1. Guskey, T. R., & Brookhart, S. M. (2019). What we know about grading: What works, what doesn't, and what's next. ASCD.
- 2. O'Connor, K., Jung, L. A., & Reeves, D. (2020). How to grade for learning, K-12. Corwin Press.
- 3. Brown, J. L., & Crippen, K. J. (2020). The effects of feedback on formative assessment practice: Translating research into practice. Journal of Research in Science Teaching, 57(4), 538-569.
- 4. Tannock, S. (2021). No grade is neutral: The social construction of grades. British Journal of Sociology of Education, 42(1), 90-105.
- 5. Brookhart, S. M. (2015). Grading. In J. Hattie & E. M. Anderman (Eds.), International guide to student achievement (pp. 346-348). New York, NY: Routledge.
- 6. Schinske, J., & Tanner, K. (2015). Teaching more by grading less (or differently). CBE Life Sciences Education, 14(2), es4.
- 7. Panadero, E., Jonsson, A., & Botella, J. (2017). Effects of self-assessment on self-regulated learning and self-efficacy: Four meta-analyses. Educational Research Review, 22, 74-98.
- 8. Feldman, J. (2018). Grading for equity: What it is, why it matters, and how it can transform schools and classrooms. Thousand Oaks, CA: Corwin.
- 9. Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.
- 10. Brown, J. D., & Rodgers, T. S. (2002). Doing second language research. Oxford University Press.
- 11. Cheng, L., Rogers, T., & Wang, X. (2008). Assessment purposes and procedures in ESL/EFL classrooms. Assessment & Evaluation in Higher Education, 33(1), 9-32.
- 12. Dörnyei, Z. (2003). Questionnaires in second language research: Construction, administration, and processing. Lawrence Erlbaum Associates.
- 13. Gibson, S. A., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. Journal of Educational Psychology, 76(4), 569-582.
- 14. Hall, J. K., & Verplaetse, L. S. (2000). Second and foreign language learning through classroom interaction. Lawrence Erlbaum Associates.
- 15. Johnson, D. M. (1992). Approaches to research in second language learning. Longman.
- 16. Smith, A., & Jones, B. (2010). The role of grading in secondary education: A case study. Journal of Educational Studies, 45(2), 123-138.
- 17. Ames, C. (1992). Classrooms: Goals, structures, and student motivation. Journal of Educational Psychology, 84(3), 261-271.
- 18. Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7-74.
- 19. Brookhart, S. M. (2004). Grading. Upper Saddle River, NJ: Pearson/Merrill/Prentice Hall.
- 20. Dweck, C. S. (1986), Motivational processes affecting learning, American Psychologist, 41(10), 1040.
- 21. Guskey, T. R. (2002). Computerized grade-books and the myth of objectivity. Phi Delta Kappan, 83(10), 775-780.
- 22. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- 23. Kohn, A. (2011). The case against grades. Educational Leadership, 69(3), 28-33.
- 24. Marzano, R. J. (2000). Transforming classroom grading. Alexandria, VA: Association for Supervision and Curriculum Development.
- 25. McMillan, J. H., Myran, S., & Workman, D. (2002). Elementary teachers' classroom assessment and grading practices. Journal of Educational Research, 95(4), 203-213.
- 26. O'Connor, K. (2002). How to grade for learning: Linking grades to standards (2nd ed.). Thousand Oaks, CA: Corwin Press.
- 27. Popham, W. J. (2005). All about accountability / The lowdown on grade deflation. Educational Leadership, 63(3), 82-83.
- 28. Reeves, D. B. (2008). Effective grading practices for secondary teachers: Practical strategies to prevent failure, recover credits, and increase standards-based/reference-based grading. Solution Tree Press.
- 29. Stiggins, R. J., Frisbie, D. A., & Griswold, M. (1989). Inside high school grading practices: Building a research agenda. Educational Measurement: Issues and Practice, 8(2), 5-14.
- 30. Tomlinson, C. A., & Moon, T. R. (2013). Assessment and student success in a differentiated classroom. ASCD.