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The Four-Hour Grading Scale: Motivation, Self-Determination, and Academic Achievement in Raising Graduation Rates

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ABSTRACT

High school administrators desire a high graduation rate, and government actors and community members pressure administrators to raise this rate. In the context of this challenging dynamic, principals sometimes compel teachers to alter their grading practices. While amending grading practices may provide the impression of improvement, it is inauthentic and likely ineffective in producing achievement results. Although changing grading practices can increase graduation rates, it does not improve achievement; however, increasing motivation can. Self-determination theory (SDT) research has found that incorporating the principles of SDT can increase students' academic achievement. This essay reviews SDT and the seven autonomy-supportive instructional behaviors (ASIBs), arguing that they are a more achievement-focused alternative to increasing graduation rates.

***Keywords*:** educational policy, educational psychology, grading, graduation rate, high schools, motivation, principals

A high school in Indiana was facing a dilemma: its graduation rate. With a new principal and its lowest graduation rate in the county in years, it struggled to find solutions to pass more students. Despite the principal's plea to pass students who simply demonstrated effort, teachers stood firm in upholding their grading criteria. Consequently, the principal proposed changes to the grading scale in the middle of the semester. The traditional A–F scale would be replaced with a 1–4 scale. However, the new scale immediately received pushback from students, teachers, and the community for several reasons. Firstly, some students' GPAs would have dropped with the new grading scale. Furthermore, teachers felt the new scale compromised their morals, values, and ethics. Finally, the community thought it gave a false sense of what students really knew. Four hours after the scale was proposed, the principal reversed his decision.

This case of the four-hour grading scale highlights the struggle that high schools face with pressure from government actors (e.g., district administration, school board members, the state education agency, the federal government) and community members (e.g., parents) to raise the graduation rate. Campbell (1979) warned that when there is a single indicator being used for high-stakes decision-making, "the more subject it will be to corruption pressures and more apt it will be to distort and corrupt the social processes it is intended to monitor" (p. 85). In other words, relying on the graduation rate to measure educational success will likely lead to corrupt and distorting practices, making it an unreliable metric.

Grading has become an area of interest for reform, given that grades are a major factor in awarding a high school diploma (Brookhart et al., 2016; Rumberger, 2011). Indeed, research shows that grading influences (i.e., teachers' knowledge, beliefs, expectations, and values) and external factors (i.e., government actors and community members) often create tension, as government actors and the community impose various goals or demands on schools (Kunnath, 2017; McMillian & Nash, 2000; McMillian, 2003). Subsequently, teachers are forced to compromise their knowledge, beliefs, expectations, and values, which impacts their grading rationale and grading practices, contributing to what has been known as a "hodgepodge" (Brookhart, 1991), or mix, of academic and non-academic factors affecting the grade a student receives (Bowers, 2009, 2011, 2020; Brookhart et al., 2016; Brookhart, 1993, 1994; Chen & Bonner, 2017; Griffin & Townsley, 2021; Olsen & Buchanan, 2019; Randall & Engelhard, 2010).

Furthermore, data from the National Center for Education Statistics (2024) shows that the average adjusted cohort graduation rate (ACGR) in the US for the 2021–2022 school year was 87% among students in public high schools. Of the roughly 3 million students in the cohort, half a million did not earn a diploma within 4 years (U.S. Department of Education, 2023). Students who fail to graduate are more likely to be arrested, receive government assistance, and have poorer overall health than those who obtain a high school diploma (Lansford et al., 2016; McFarland et al., 2020). Therefore, supporting as many students as possible to learn and graduate from high school is a legitimate objective. The question becomes a matter of *how* to increase the graduation rate. Specifically, how can principals support teachers and students in improving academic achievement? This essay argues that principals should consider the students' psychological well-being in the classroom environment to improve academic achievement genuinely.

STUDENT MOTIVATION: SELF-DETERMINATION THEORY

Prioritizing motivation is beneficial due to its inherent ability to produce gains in various educationally meaningful outcomes, reduce problematic outcomes, and yield benefits for teachers (e.g., higher job satisfaction; Cheon et al., 2020; Furrer et al., 2014; Howard et al., 2021; Reeve & Cheon, 2021; Reeve et al., 2022; Vansteenkiste & Ryan, 2013). One particular motivation theory, self-determination theory (SDT), is a "broad theory of human development and wellness, with strong implications for education" (Ryan & Deci, 2020, p. 1).

The central premise of SDT is that humans have inherent motivational resources that drive human behavior. These resources include basic psychological needs and intrinsic motivation (Reeve et al., 2022). Psychological needs refer to autonomy, competence, and relatedness (Furrer et al., 2014; Reeve et al., 2022; Ryan & Deci, 2017, 2020). Autonomy is the need to start, regulate, and guide our behavior. A person has autonomy when they do not feel pressured to engage in a behavior (i.e., volition) and feel they have ownership over it (i.e., personal endorsement or internalization). Competence involves actively seeking optimal challenges, exerting effort, and thinking to progress toward mastery. When people interact effectively with the environment and feel they can handle the challenges they face both now and in the future (i.e., a sense of mastery), they have competence. Finally, relatedness refers to the need to bond with other people. People experience relatedness when they feel a sense of closeness and comfort while engaging with those who understand and accept them. These psychological needs are the source of intrinsic motivation (Reeve et al., 2022).

SDT also concludes that intrinsic motivation arises from a genuine interest and enjoyment in an activity. It embodies a natural inclination to pursue novelty, embrace challenges, explore new environments, engage in various activities, and expand one's horizons (Reeve et al., 2022; Reeve & Cheon, 2021). For instance, a person may garden because they have an interest and enjoyment in the activity. They do not feel pressured into gardening; they have ownership over their behavior; they find it optimally challenging; and they feel a bond with others (e.g., connecting with others who share their interest in gardening). Behaviors that support such basic psychological needs, as in the gardening example, also tend to be intrinsically motivating, enjoyable, and interesting to students in the classroom (Bureau et al., 2021).

APPLYING SDT IN THE CLASSROOM

Although it is unlikely that student motivation will be entirely intrinsic, as much classroom content is not inherently interesting to students, SDT is centered on a continuum of motivation. In addition to intrinsic motivation, extrinsic motivation consists of "behaviors done for reasons other than their inherent satisfactions" (Ryan & Deci, 2020, p. 2). One state of extrinsic motivation of focus here is *identified regulation*, which is when students engage in activities at school that they embrace and find personally significant and meaningful (Bureau et al., 2021). Specifically, students may not find the activity enjoyable, but they see and understand the value of the activity (Vansteenkiste & Ryan, 2013). While this state of motivation is not intrinsic, the behaviors here become internalized (Furrer et al., 2014), which can still promote meaningful educational outcomes while reducing problematic ones. This internalization plays a vital role in shaping students' engagement.

Students enter the classroom with different psychological needs, varying states of motivation, and differing goals and values. Teachers can neglect, suppress, or foster students' psychological needs, motivation, goals, and values based on their motivational style, which encompasses the teacher's tone and attitude (Reeve et al., 2022). When teachers support their students' basic psychological needs, the two groups are in sync. When teachers do not support students, students may resist the teacher's motivational style, and, as a result, teachers and students oppose each other.

Today, instead of autonomous teaching methods, teachers commonly use controlling methods in their classrooms (Ryan & Deci, 2017). This means they tend to use an "authoritarian attitude and interpersonal tone of pressure in which the teacher prescribes what students should think, feel, and do, irrespective of what students prefer" (Reeve et al., 2022, p. 34).

Controlling methods appear to be associated with maladaptive factors, such as absenteeism, anxiety, boredom, and students ultimately giving up (Furrer et al., 2014; Howard et al., 2021). One reason teachers use controlling methods is that the U.S. has been holding schools accountable with set objectives since the passage of the No Child Left Behind (NCLB) Act in 2001 and its revised successor, the Every Student Succeeds Act (ESSA) in 2015 (Furrer et al., 2014). The accountability pressure (e.g., graduation rates) that school administrators face is passed down to teachers, which has been shown to cause teachers to use controlling methods, reduced motivation in teachers and students, and poorer student-teacher relationships (Deci et al., 1982; Pelletier et al., 2002; Ryan & Deci, 2017).

Another reason for the use of controlling teaching methods is the way grades are utilized. They are used to determine if the student should move on to the next grade, repeat a course, take advanced courses, receive honors, participate in extra-curricular activities, and attend college (Olsen & Buchanan, 2019). When grades carry such significant consequences for students, and teachers face pressure to ensure students perform well, teachers may resort to controlling teaching methods to produce compliance and performance. Due to grades being a reliable predictor of whether a student will graduate from high school and how they will perform in college (Brookhart et al., 2016), teachers may resort to controlling methods to boost grades to maintain or raise grades as a proxy for success

Further, since much of what is done in the classroom tends to be graded and used to gatekeep students from opportunities, grades can serve a controlling rather than informational purpose (Ryan & Deci, 2017). This assumes that grades and high-stakes accountability testing will motivate students to perform better, which is a questionable assumption (Butler, 1987; Kramer et al., 2024; Link & Guskey, 2022; Nichols & Harris, 2016; Ryan & Deci, 2017). Despite surrounding pressures to use controlling methods, teachers can still manage their classrooms by teaching in ways that satisfy students' psychological needs and by having students internalize their learning, while reducing the "need frustration" (i.e., not having students' psychological needs fulfilled; Vansteenkiste & Ryan, 2013) and anti-internalization.

A possible objection is that reforming the grading method (e.g., standards-based grading [SBG]) to align with SDT elements could increase motivation and student learning. While reforming grading methods may align with elements of supporting students' intrinsic motivation and internalization, such as providing rationales that are "explicit and transparent about the learning goals or standards" (Link & Guskey, 2022, p. 408), no evidence appears to suggest that other grading methods, such as SBG, solely increases motivation (Kramer et al., 2024) or improves student learning (Link & Guskey, 2022).

Seven Autonomy-Supportive Instructional Behaviors

Seven autonomy-supportive instructional behaviors (ASIBs) can be implemented in the classroom to support students' intrinsic motivation and internalization (Furrer et al., 2014; Reeve & Cheon, 2021; Reeve et al., 2022). The first and foundational ASIB is for the teacher to, in part, set aside their own perspective and instead view the classroom from the students' perspective. Teachers should ask students what they want, think, or feel, thus enabling students to voice their opinions and adjust the lesson accordingly (Reeve et al., 2022).

The next two ASIBs are intended to support students' intrinsic motivation. ASIB 2 invites students to pursue their personal interests by asking them what they like to do and what they are interested in. ASIB 3 is to present learning activities in need-satisfying ways by providing meaningful choices in classroom activities, methods, topics, work pace, and participation; offering optimal challenges and guidance; and encouraging students to pursue prosocial goals together.

The remaining four ASIBs support internalization, which is essential for students to internalize societal norms. ASIB 4 is to provide explanatory rationales, in which the teacher explains why the activity is worth the student's effort. ASIB 5 is to acknowledge negative feelings, which is done by acknowledging the feelings, accepting the validity of the adverse affect, and working collaboratively to remedy. ASIB 6 is to rely on invitational language, such as "you may" versus "you must," and consider the pitch, speed, and quality (i.e., soft versus sharp) of tone. ASIB 7 is to display patience by listening to and understanding students, and by waiting to advise until the student is ready to hear the teacher's input.

Teachers can be trained to implement these seven behaviors effectively in the classroom (Reeve et al., 2004). For a more in-depth look at ways to support students' psychological needs and for more tangible examples, consider reading articles by Reeve et al. (2022) and Reeve and Cheon (2021).

CONCLUSION

The position of this essay is not that grading practices need no reform; there is certainly room for improvement. Indeed, research has shown significant variation in the validity and reliability of teachers' grading (see Brookhart et al., 2016). However, addressing controlling teaching methods and supporting students' psychological needs through autonomy-

supportive instruction may be more directly tied to improving motivation and graduation rates than grading reform alone. Future research should explore how grading practices intersect with self-determination theory to understand their combined effects on student motivation and graduation rates.

The focus here is that principals should shift their focus from grading practices and the graduation rate to promoting psychological well-being and implementing autonomy-supporting instructional behaviors in classrooms—if the ultimate goal is to increase student learning. As Ryan and Deci (2017) point out, few "have specifically focused on improving basic need supports as the strategy for leveraging better achievement and completion outcomes" (p. 377). While amending grading practices to pass more students may increase graduation rates and provide a short-term relief for high school administrators, Campbell (1979) suggests that undesirable consequences often occur. Instead, if principals seek to improve academic achievement in their schools, it is worth considering the principles of SDT in the classroom environment.

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