

## Do Minimum Grading Practices Lower Academic Standards and Produce Social Promotions?

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*by James Carifio and Theodore Carey*

**A**lthough schools have always struggled with student failure, retention, and attrition, the turn of the new century has produced added pressures for schools to reduce student dropout rates. In the current political and economic environment, increased costs and reduced budgets are forcing difficult choices in how best to spend limited resources. In many districts, high-cost intervention programs designed to keep “at-risk” students in school can be among the first eliminated (Brindley 2010; Chapman 2009; Daniels and Sonies 2010; Nettles 2009). That basic fact leaves educators pondering a very short list of effective low-cost options.

Cognizant of the secondary and affective aspects of assigned grades on student confidence, self-efficacy, and motivation, increasing numbers of schools have been experimenting with modified grading practices. Although many variations can be found in those practices, their common origins lie in various approaches that try to address the different problems associated with students who post catastrophically low grades in the first six to eight weeks of the school year. The student has few options left to recover or to use the remaining school year effectively (Craft 1997; Dunham 2008; Guskey 2002). Many of the strategies addressing the problem have been described in the popular press as “minimum grading practices” or “zeros aren’t permitted” (ZAP) programs (Friess 2008a).

Proponents of modified grading claim such practices do more than pass a few students who would otherwise fail. They argue that modified grading helps contribute positively to student motivation—primarily through maintaining a healthy locus of control within the student. Critics counter that those practices offer unfair

and unearned assistance to low-performing students and contribute to overall grade inflation (Friess 2008b).

Although modified grading programs are based on strategies that individual teachers have long used to mediate the harsher effects of catastrophically low grades, implementing a modified grading scheme schoolwide can quickly generate intense controversy. Nowhere has this been truer than in Texas this past summer, when the governor signed legislation that effectively bans both minimum grading practices and ZAP programs (Montgomery 2009). An unstated but underlying point of contention in the Texas debate was that those practices were being applied disproportionately to disadvantaged students in an effort to reinstate the largely discredited practice of social promotion (*Texas Insider* 2009).

To address such concerns and to assist educators looking to make informed decisions about modified grading practices, this article explores minimum grading and ZAP programs in the larger context of the historical and ongoing debates concerning student retention and social promotion. The analysis will focus on the alleged social benefits such practices claim to realize and the collateral social harms they may induce.



## The Rise and Fall of Social Promotion

Debates concerning social promotion began almost as soon as the first graded schools were established. In the early nineteenth century, it was not uncommon for students of all ages to be taught by one teacher in one large, common room. As early as the 1830s, communities with growing school populations began to recognize the inefficiencies of one-room schools. Just as important, parents were becoming deeply concerned about the unanticipated and undesired effects that exposure to older students had on younger children. In response, reformers such as Henry Barnard proposed graded schools, describing them as both more humane and more efficient (Hacsi 2002).

Modern-day reformers can only envy the speed at which the graded school model was adopted, and that model remains dominant today—virtually unchanged since the mid-nineteenth century. Yet even as the graded school was becoming the norm, communities became concerned about the large numbers of students being retained (Tyack 1974). Through the early twentieth century, decisions to promote students from one grade to the next were based largely on how well students performed on a series of standard tests. Proponents hoped that using the tests would minimize the effects of teachers' personal judgments about whom to promote. (Interestingly, they also hoped that the testing would encourage teaching a standard curriculum—presaging, in many ways, No Child Left Behind and the current educational-reform movement.) Whether using the tests had the desired effects is unclear, but one result of these practices was that increasing numbers of students were retained each year and the number of them too old for the grade in which they were enrolled was quickly growing—recreating many of the social problems graded schools were designed to eliminate. By the turn of the twentieth century, retention rates had reached nearly 50 percent, and 20 percent of all students left school before finishing eighth grade (Frey 2005).

Although retention did allow separating and sorting students by ability, ostensibly for more-efficient instruction, two obvious downsides to the practice made it ultimately unacceptable. For many urban districts already struggling to raise money for the rapidly growing public schools of the early twentieth century, the added costs associated with retained students were true budget breakers. Additionally, parents were again voicing concerns about the social effects of placing over-age students in classes with younger children. A low-cost solution to both problems was social promotion, or simply promoting students along with their age groups—whether they had adequately mastered required skills or not. By the 1930s,

and to the end of the twentieth century, social promotion was the norm in schools across the country (Hacsi 2002).

Social promotion spread quickly during the early 1900s for several reasons. Historically, socialization was still seen as the primary purpose of school, and keeping students in age-appropriate groups aligned with that view. More important, social promotion was not only easy to administrate: it also reduced costs. It can also be noted that other emerging trends in schooling, most notably the legal segregation of that era's schools and the then-new practice of academic tracking, gave districts options beyond retention to separate and sort students (Tyack 1974).

Opposition to social promotion grew slowly, beginning in the 1950s. With the advent of the Cold War and through the early phases of global competition, academic achievement supplanted socialization as education's primary aim, particularly during the science and mathematics boom of the post-Sputnik era (Kliebard 2004). By the 1970s, many urban districts, including those of New York City, Baltimore, Washington, and Philadelphia, were attempting to eliminate social promotion with efforts that included reinstating standard tests (Hacsi 2002). The publication and popular reception of *A Nation at Risk* in 1983 helped spark widespread support for standards-based reform in education (McGuinn 2006), and eliminating social promotion quickly became a part of the larger reform movement. Politically, efforts to end social promotion enjoyed wide, bipartisan support. The death of social promotion was declared in 1998, when President Clinton called for an end to the practice in the State of the Union address (U.S. DOE 1999).

Although there had always been objections to social promotion, its long-time popularity and widespread use are attributable not only to its low cost and ease of implementation but also to the perceived ineffectiveness of high-cost alternative programs—particularly when social promotion is compared with the practice of retention (Hacsi 2002). A number of landmark studies from the late 1980s and early 1990s explore the effects retention has upon students (Alexander, Entwistle, and Dauber 1994; Lorence et al. 2002). Although the studies document some short-term benefits enjoyed by retained students, the high financial costs associated with retention and the lack of long-term benefits (retained students are much more likely to drop out before finishing high school than are socially promoted students) have led to conclusions that neither social promotion nor retention is an acceptable educational practice (Rotherham 2002).

## The Rise of Modified Grading Practices

Unsurprisingly, districts seeking alternatives to social promotion and retention would continue to search for and experiment with low-cost solutions to high student failure and attrition rates, and the recent trend of schools or districts instituting modified grading programs is likely a result of those efforts. The most popular form of minimum grading attempts to address the problems associated with students who post catastrophically low grades in their first-quarter grades. In place of a punishingly low first-quarter grade, any grade below a certain threshold is administratively raised to a determined minimum, usually set at 50. Although the student still receives a failing grade, the assigned minimum grade leaves open a better opportunity for the student to ultimately pass the course.

Although minimum grading is often applied at the macro level by adjusting quarter or term grades, ZAP programs are almost always applied at a micro level by adjusting individual grades assigned *within* a marking term. ZAP programs look to mediate the severe and often-unfair skewing of quarter or term grades that one or two low outlying grades can create. Often, the outliers consist of zeros assigned for missing work (Guskey 2004a; Reeves 2004).

ZAP programs are based on the philosophy that missing or failing work should be redone until the student demonstrates a minimal level of mastery. Thus, rather than assign minimum grades in place of low outlying grades, teachers record “incompletes” and provide students the opportunity to make up the assignments. The make-up sessions are often held after school or on weekends in what some teacher-resource Web sites have called “no-zeros detentions” (Bafle 2008). In the most extreme forms, ZAP programs require students to re-do any failed assignments, at which point students are assigned a passing grade—creating a scenario in which (theoretically) failing a course becomes impossible.

Both minimum grading and ZAP programs often meet resistance. Critics object to minimum grading on ideological grounds; they claim the practice falsely rewards underperforming students with unearned grades. Teachers who resist implementing ZAP programs object to the added time and effort needed to deal with the increased make-up work. In broader terms, the popular press has characterized both minimum grading and ZAP programs as “no-fail grading” (Miller 2009) and as an attempt to reinstate social promotion (*Texas Insider* 2009).

## Do Modified Grading Practices Result in Social Promotion?

It is easy to see why minimum grading and ZAP programs are often compared to social promotion. All three practices look to mediate student failure, attrition, and dropout rates, and each does so, not by improving instruction, restructuring curricula, decreasing class sizes, or providing early or special intervention for at-risk students, but rather by modifying traditional student grading and assessment processes in ways that try to influence student emotions and expectations—all in an attempt to increase student motivation.

The focus on the affective component of grading is based on the long-held (Dewey 1922), widely accepted (Bandura 1997), highly developed (Covington 1992), and largely intuitive idea that how students feel about school and schooling strongly influences their willingness to engage in academic activities. Critics claim that how students feel should be a secondary concern when assigning grades, and many objections to modified grading can be explained in terms of that one major ideological difference.

Opponents of social promotion (and by extension, modified grading plans) believe the practice gives students a falsely optimistic view of their abilities. They believe that promoting students to levels beyond their abilities only frustrates already-struggling students and produces classes where teachers “teach down” to the skill levels of underprepared students at the expense of students with grade-appropriate skills (Lorence et al. 2002). Opponents contend that social promotion and other associated practices lower expectations and that students lose an important incentive to work if they know they will be passed along anyway (Frey 2005; Friess 2008b). Critics of those practices contend that social promotion devalues the meaning of a diploma and violates the inescapable obligations of the school under the social contract: to bear witness relative to grading students and to certify that students are properly prepared for productive pursuits in either the workplace or higher studies (Phelps 2009; U.S. DOE 1999).

Although the similarities between those three affective-centered strategies may lead to conclusions that rejecting one necessitates rejecting all three, a closer look at the differences among social promotion, minimum grading, and ZAP programs may lead to a different conclusion. Specifically, when discussion turns to maintaining appropriate student expectations, care must be taken to avoid reducing expectancy theory to simple, one-dimensional statements about preventing school from becoming too easy.

## Achievement Motivation, Self-efficacy, and Student Expectations

Expectancy theory is well developed and well researched, and it has been a widely accepted part of motivation theory for more than forty years; however, the truism that students are less motivated by tasks they perceive as easy to perform makes sense only when expectancy of success is paired and balanced with incentive. Atkinson's theory of achievement motivation realizes that balance by positing that an individual's behavior results from the individual's subjective expectations of attaining a particular outcome *and* the personal perceptions of the value one attaches to the particular outcome. In Atkinson's model, the value associated with the outcome has an inverse relationship to the expectancy of success. Thus, succeeding in a task perceived as easy carries little satisfaction, while completing a more difficult task is often more highly valued (Atkinson and Feather 1966).

An individual whose tendency is to approach success will predictably undertake tasks in which the uncertainty of the eventual outcome is greater. Although easy tasks could guarantee success, they usually carry little incentive. Importantly, tasks perceived as too difficult are likewise avoided, even though they may offer the greatest incentives. Those predictions align with popular views that individuals naturally choose tasks that are optimally challenging—neither too hard nor too easy—and many recommended classroom practices are based on those views (Kohn 1993). Research performed by Atkinson and others long ago corroborated many of those predictions.

To the extent that schools constrain students by assigning tasks and limiting choices, it becomes important for teachers to maintain an environment where schooling remains optimally challenging—neither too easy nor too difficult. Thus, “no-fail” practices, such as social promotion or the more-extreme implementations of the ZAP program, could lower expectations and, in turn, lower achievement motivation.

At the same time, teachers must avoid placing students in situations where successfully completing curricular goals becomes hopeless. Students who lack any reasonable perception of personal control over the eventual outcome of their efforts will predictably (and independently of teacher or school expectations) adjust their personal expectancies downward. They will become less interested, less active in worthy pursuits, and more susceptible to adopting “deviant routes” toward desired goals—paths that come with their own difficulties, which often heighten the feeling of helplessness (Lefcourt et al. 1979).

Assigning catastrophically low grades, especially early in the school year, can trigger such defensive and often self-destructive responses in students (Covington 1992). The emotional nature of



assigning and receiving grades means that a single catastrophic failure can suddenly stop even motivated and engaged students (Carifio and Rhodes 2002). That aspect of expectancy theory is too-often ignored in one-dimensional calls to keep standards high. It is also the scenario that judicious use of minimum grading is designed to address. Paramount in successfully implementing minimum grading, therefore, is correctly determining the proper minimum threshold for assigning grades.

### Defining a Zone of Proximal Development

In *Fair Isn't Always Equal*, Wormeli contends that student grades must align with “clear and consistent evidence” of student performance (Wormeli 2006, 32). When a student’s performance is inconsistent, averaging often results in a grade unfairly skewed by one or two outlying performances. Although judiciously using minimum grading could address that scenario, advocates of minimum grading differ in their recommendations of what constitutes an appropriate threshold. It should be noted that such recommendations are made in a complete absence of research. Much of the literature supporting minimum grading cites the works of Thomas Guskey (1994; 2002; 2004b; 2006), who since the early 1990s has written eloquently and compellingly against using zeros in grading. Yet even Guskey stops short of recommending minimum grading, admitting he knows of no studies that explore its effectiveness (Friess 2008b). Thus, proponents who argue for appropriate minimum thresholds must invariably use hypothetical situations rather than actual data (Guskey 2002; Wormeli 2006). Such thought exercises have led Guskey to suggest 50 as an appropriate threshold, while Wormeli makes a convincing case for 60. In practice, the popular press has carried reports of schools using assigned thresholds as high as 70 (Montgomery 2009).

Any school concerned that minimum grading might reinstate the undesired effects of social promotion would likely choose the lower threshold of 50, but does that threshold give students hope they can pass? A student assigned a 50 in the first marking quarter would need to average a 70 in each of the remaining three quarters to pass a year-long class, requiring an unlikely 20-point improvement between marking terms. Likewise, a student assigned a 50 in the first quarter of a half-year course would need to post an even more unlikely 80. Realistically, it would seem most students who are “gifted” a quarter grade of 50 are still likely to fail the course.

At the same time it should be remembered that the stated goals of minimum grading are not to pass students who would otherwise fail but to mediate the effects of unfair skewing caused by low



outlying grades and to keep hope alive in ways that keep students engaged and motivated. Will assigning a minimum grade as low as 50 accomplish those goals? In the absence of research, the answer to that question can only be grossly inferred from motivation theory. Specifically, Bandura's model of self-efficacy may hold some clues. Self-efficacy is defined as belief in one's own capabilities to effect necessary actions required to attain desired goals (Bandura 1977a). Bandura describes self-efficacy as a major predictor of how much effort an individual will expend toward attaining a goal and how long the effort will be sustained (Bandura 1977b).

A central tenet of Bandura's theory is that most people tend to overestimate their own capabilities slightly. Far from providing individuals an unrealistic and falsely optimistic outlook, that trait is necessary if they are ever to aspire to goals that lie just beyond their immediate reach (1994). Bandura's view aligns with Vygotsky's construct of the *zone of proximal development*, described as the difference between what a learner can do without help and what he or she can do with help (Karpov and Haywood 1998). Although, realistically and rationally, the possibilities of passing a course after receiving a quarter grade of 50 are small, the *perception* of students (and teachers) may be that the probabilities fall within this proximal zone, particularly if the student receives support. The result can be a more-engaged student and a more-honest effort.

Even efforts that still result in failure are much-different experiences from the sudden and complete cessation of effort that punishingly low grades typically foster. Students and teachers benefit by being spared the increase in disrupting discipline problems often associated with disengaged students. More important, those students build resilience in dealing with rejection and failure that Bandura sees as critical (1997). It is more than a truism that failure can teach as much as success. Students who sustain effort, even in failure, are more likely to see failure as part of the learning process; they will indeed learn from their mistakes when the failure is not crushing (Roediger and Finn 2010). Those individuals come to view setbacks as cues to exert more effort and to engage in better strategies (Bandura 1994). Such experiences are missing, and those traits are unlikely to be developed, either when "no-fail" practices are supported or when students are placed in situations of hopeless failure.

## Conclusion

The possibility exists that many students may be struggling not so much with content as with the grading and assessment system. Unchanged for nearly a century, the traditional grading scheme was

instituted when only an advantaged few students were expected to, or allowed to, advance to the higher levels of learning. One large failing of common grading practices is their inability to account for teachers' needs to manage their classrooms and motivate their students (Brookhart 1994). Traditional grading does not so much ignore motivation theory as much as it simply predates it.

Struggling students are often labeled as "uninterested" or "lazy," yet the problem may be not so much students' lack of motivation but instead too much motivation *in the wrong direction*. Various models of motivation, including achievement motivation, locus of control, attribution theory, self-worth theory, and self-efficacy, all predict that common grading practices, such as grading for effort, using grades as rewards and punishments, and assigning punishingly low grades, often both encourage and produce results opposite from those intended. Such practices can invoke the same self-destructive behaviors educators are trying to mediate (Carifio and Carey 2009; Covington 1992).

Educators and policymakers would do well to consider current models of motivation when developing and assessing grading strategies. We should not let educational reform and No Child Left Behind blind us to the fact that the social and emotional outcomes of education are as important (if currently unmeasured) as the academic outcomes. They also need consideration in setting policies and adopting practices.

In the end, the many problems faced by our public school will not be solved by making simple choices but will instead come through a combination of many reforms and interventions, the shape and form of which remain largely unclear. In the meantime, schools will continue to struggle with failure and attrition rates. As resources for improving instruction, restructuring curriculum, decreasing class sizes, and instituting special-intervention programs become increasingly scarce, schools will continue to experiment with low-cost solutions such as social promotion and modified grading practices. Of those practices, judicious use of minimum grading seems based more soundly in educational and psychological theory, easiest to implement and administer, and more effective in a wider variety of ways. Minimum grading is an exemplar practice of the emerging movement and culture of compassion, forgiveness, and hope in our schools that will help our students become better students, adults, and citizens in the long run.

## References

- Alexander, K. L., D. R. Entwistle, and S. L. Dauber. 1994. *On the Success of Failure: A Reassessment of the Effects of Retention in the Primary Grades*. Port Chester, N.Y.: Cambridge University Press.

- Atkinson, J. W., and N. T. Feather. 1966. *A Theory of Achievement Motivation*. New York: John Wiley & Sons.
- Bafile, C. 2008. *Teaching Heroes: Toss the Zeros*. Retrieved January 3, 2010, from <<http://www.educationworld.com>>.
- Bandura, A. 1977a. "Self-efficacy: Toward a Unifying Theory of Behavioral Change." *Psychological Review* 84 (2): 191–215.
- . 1977b. *Social Learning Theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- . 1994. "Self-efficacy." In *Encyclopedia of Human Behavior*, ed. V. S. Ramachandran, 71–81. New York: Academic Press.
- . 1997. *Self-efficacy: The Exercise of Control*. New York: W. H. Freeman.
- Brindley, M. 2010. "Phoenix Program Could Be Eliminated." *Nashua Telegraph* (January 14): A1, A5.
- Brookhart, S. M. 1994. "Teachers' Grading: Practice and Theory." *Applied Measurement in Education* 7 (4): 279–301.
- Carifio, J., and T. Carey. 2009. "A Critical Examination of Current Minimum Grading Policy Recommendations." *The High School Journal* 93 (1): 23–37.
- Carifio, J., and L. Rhodes. 2002. "Construct Validities and the Empirical Relationships between Optimism, Hope, Self-efficacy, and Locus of Control." *Work: A Journal of Prevention, Assessment, and Rehabilitation* 19: 125–136.
- Chapman, C. 2009. "State's Failure to Pay Forces Program Cuts." *Morris Daily Herald* (December 12). Retrieved January 23, 2010, from <<http://www.morrisdailyherald.com>>.
- Covington, M. V. 1992. *Making the Grade: A Self-worth Perspective on Motivation and School Reform*. New York: Cambridge University Press.
- Craft, H. 1997. "Grading: The Games We Play." *Principal* 77 (2): 57–58.
- Daniels, B., and S. Sonies. 2010. "School Cuts Looming: Superintendents Sound 'Doomsday Budget' Alarm." *Tidewater News* (January 20). Retrieved January 23, 2010, from <<http://www.tidewaternews.com>>.
- Dewey, J. 1922. *Democracy and Education*. New York: Macmillan Company.
- Dunham, L. 2008. "Why Zeros Should Not Be Permitted." *Principal* 87 (3): 62.
- Frey, N. 2005. "Retention, Social Promotion, and Academic Redshirting: What Do We Know and Need to Know?" *Remedial and Special Education* 26 (6): 332–346.
- Friess, S. 2008a. "Great Education Debate: Reforming the Grading System." *USAToday* (May 19). Retrieved May 20, 2008, from <<http://usatoday.com>>.
- . 2008b. "At Some Schools, Failure Goes from 0 to 50." *USAToday* (May 19). Retrieved May 20, 2008, from <<http://usatoday.com>>.
- Guskey, T. R. 1994. "Making the Grade: What Benefits Students?" *Educational Leadership* 52 (2): 14.
- . 2002. "Computerized Gradebooks and the Myth of Objectivity." *Phi Delta Kappan* 83 (10): 775.
- . 2004a. "Are Zeros Your Ultimate Weapon?" *Education Digest* 70 (3): 31–35.
- . 2004b. "0 Alternatives." *Principal Leadership: High School Edition* 5 (2): 49–53.
- . 2006. "Making High School Grades Meaningful." *Phi Delta Kappan* 87 (9): 670–675.
- Hacsí, T. A. 2002. *Children as Pawns: The Politics of Educational Reform*. Cambridge, Mass.: Harvard University Press.

- Karpov, Y. V., and H. C. Haywood. 1998. "Two Ways to Elaborate Vygotsky's Concept of Mediation." *American Psychologist* 53 (1): 27–36.
- Kliebard, H. M. 2004. *The Struggle for the American Curriculum*. 3rd ed. New York: RoutledgeFalmer.
- Kohn, A. 1993. *Punished by Rewards: The Trouble with Gold Stars, Incentive Plans, A's, Praise, and Other Bribes*. Boston: Houghton Mifflin.
- Lefcourt, H. M., C. L. Von Bayer, E. E. Ware, and D. J. Cox. 1979. "The Multidimensional-Multiattribitional Causality Scale: The Development of a Goal-specific Locus of Control Scale." *Canadian Journal of Behavioral Science* 11 (4): 286–304.
- Lorence, J., A. G. Dworkin, L. A. Toenjes, and A. N. Hill. 2002. "Grade Retention and Social Promotion in Texas 1994–99: An Assessment of Academic Achievement among Elementary School Students." In *Brookings Papers on Education Policy 2002*, ed. D. Ravitch, 13–57. Washington, D.C.: Brookings Institution Press.
- McGuinn, P. J. 2006. *No Child Left Behind and the Transformation of Federal Education Policy, 1965–2005*. Lawrence, Kan.: University Press of Kansas.
- Miller, J. R. 2009. "Are 'No-Fail' Grading Systems Hurting or Helping Students?" *Fox News* (April 27). Retrieved January 23, 2010, from <<http://www.foxnews.com>>.
- Montgomery, D. 2009. "Half-dozen Districts Sue over Texas Law Prohibiting Minimum Grades." *Dallas Star Telegram* (November 19). Retrieved November 20, 2010, from <<http://www.star-telegram.com>>.
- Nettles, A. 2009. "Montgomery Public Schools Cut Funding to Groups That Aid At-Risk Students." *Montgomery Advertiser* (December 21). Retrieved January 23, 2010, from <<http://www.montgomeryadvertiser.com>>.
- Phelps, R. P. 2009. "Dropping the Ball on Dropouts." *Educational Horizons* 87 (3): 169–181.
- Reeves, D. R. 2004. "The Case against the Zero." *Phi Delta Kappan* 86 (4): 324–326.
- Roediger, H., and B. Finn. 2010. "The Pluses of Getting It Wrong." *Scientific American Mind* 21 (1): 38–41.
- Rotherham, A. 2002. "Comment." In *Brookings Papers*, ed. D. Ravitch, 52–56. Washington, D.C.: Brookings Institution Press.
- Texas Insider*. 2009. "Social Promotion Still Happens in Texas Schools, Legislature Addressing." May 12. Retrieved November 8, 2009, from <<http://www.texasinsider.org>>.
- Tyack, D. B. 1974. *The One Best System: A History of American Urban Education*. Cambridge, Mass.: Harvard University Press.
- United States Department of Education (U.S. DOE). 1999. *Taking Responsibility for Ending Social Promotion: A Guide for Educators and State and Local Leaders*. Retrieved from <<http://www2.ed.gov/PDFDocs/socialprom.pdf>>.
- Wormeli, R. 2006. *Fair Isn't Always Equal: Assessing and Grading in the Differentiated Classroom*. Portland, Maine: Stenhouse Publishers.

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