#### University of Northern Iowa

## **UNI ScholarWorks**

**Faculty Publications** 

**Faculty Work** 

2020

# Losing As and Fs: What Works for Schools Implementing Standards-based Grading?

Matt Townsley University of Northern Iowa, matt.townsley@uni.edu

Tom Buckmiller Drake University

Let us know how access to this document benefits you

Copyright ©2020 Matt Townsley and Tom Buckmiller



This work is licensed under a Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 International License.

Follow this and additional works at: https://scholarworks.uni.edu/epfls\_facpub



Part of the Educational Leadership Commons, and the Educational Psychology Commons

#### **Recommended Citation**

Townsley, Matt and Buckmiller, Tom, "Losing As and Fs: What Works for Schools Implementing Standards-based Grading?" (2020). Faculty Publications. 3.

https://scholarworks.uni.edu/epfls\_facpub/3

This Article is brought to you for free and open access by the Faculty Work at UNI ScholarWorks. It has been accepted for inclusion in Faculty Publications by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

# Losing As and Fs: What Works for Schools Implementing Standards-based Grading?

Matt Townsley and Tom Buckmiller

While school leaders often think that pedagogical and curriculum improvements will provide the most leverage for systemic change in school reform efforts, innovative educational leaders are coming to understand the critical role that assessment plays in the teaching and learning process. When failing to close the loop, so to speak, or thinking about improving the grading/assessment piece, the optimism of reform efforts may not come to fruition and schools most likely will continue to spend money, time, and effort searching for the next "silver bullet."

A guaranteed and viable curriculum is the foundation for any school improvement effort (DuFour & Marzano, 2011). This includes an alignment of what's written (curriculum), what's taught (pedagogy) and what's tested (assessment). If schools fail to pay attention to the assessment component of this triad, the likelihood of misalignment is greater and thus the data that school leaders gather and use for instructional decisions may be deplorably inaccurate.

The directives of schools have changed since the time when our great-grandparents were in school. Instead of a system that sorts and selects students, modern schools are now charged with educating all students (i.e., No Child Left Behind, Every Child Succeeds Act). Unfortunately, school leaders today seeking educational reform have greatly neglected the updating of grading and reporting mechanisms (Guskey & Link, 2019) which still date back three generations. Many schools continue to put blind faith in antiquated, arbitrary, and unsubstantiated methods of traditional grading.

The Common Core State Standards have focused schools' efforts to clarify student learning goals. Regrettably, traditional grading practices are not advanced enough to accurately communicate student achievement relative to those standards and instead often distort reporting due to grade inflation or deflation (Brookhart et al., 2016). However, in response to the growing body of empirical research on the topic of accurate grading practices, a number of schools across Kansas and other states are moving away from letter grades and adopting standards-based grading which separately report learning goals from work habits (Bisaha, 2019).

The purpose of this essay is to document what works when K-12 schools implement standards-based grading through a deep dive into related literature and to suggest areas for future considerations. To ignore what others are doing and what is presented in the research literature on teaching and learning is not only inefficient, it is also irresponsible and unprofessional (Gupton, 2010). As more schools work to implement a robust teaching, learning and assessment system, K-12 teachers and administrators in the early stages of redesigning their grading practices will be looking towards the successes and struggles of early adopters in order to successfully reform grading in their own context. Similarly, researchers interested in this paradigm shift may benefit the educational community at large through building upon existing scholarship.

#### The History of Grading

In order to document what works in standards-based grading, it is first important to understand the historical roots of grading. Grading and marking systems in the United States date back to the 17th century, beginning in higher education. Several researchers credit Yale University as the first example of marking or grading systems, a 4.0 scale believed to influence the modern day grade point average system (Durm, 1993; Schneider & Hutt, 2013; Small, 1973; Weller, 1983). Prior to these more modern marking systems, colleges initially listed students by their family names and re-arranged order based on accomplishments and punishments (Tocci, 2008).

In the early 19th century, college and universities continued to try out new grading practices. The College of William and Mary categorized students into four categories: "first in their respective classes...those who were orderly, correct, and attentive...those who made very little improvement...and those who had learned little or nothing" (Schneider & Hutt, 2013, p. 4). Fast forward to the mid and late 19th century, institutions such as the University of Georgia were beginning to sort students into categories such as high, medium, and deficient (Cureton, 1971). In 1877, Harvard began the practice of grading students using a 100-point scale (Durm, 1993; Tocci, 2008; Weller, 1983).

The number of public high schools increased dramatically in the 20th century and teachers needed a way to sort and communicate students who completed specific courses, therefore letter grades increased in popularity (Guskey, 1994). Again, higher education influenced high schools as Mt. Holyoke College is credited with introducing an A, B, C, D, E, F grading system, beginning the modern day practice of assigning letter grades to students for each course (Weller, 1983). Nearly thirty years later, Chapman and Ashbaugh (1925) collected 436 report cards from K-12 schools across the country. More than half, regardless of grade level, reported student progress based on letter grades or percentages. About one third of these same report cards utilized percentages, one third used letter grades translated into percentages and just under 20% reported letter grades alone. Fast forward to the 21st century, percentages and letter grades are the dominant method of marks noted on report cards and transcripts (Guskey, 2013).

Although highly entrenched in schools, letter grades communicate a hodgepodge of factors combining non-cognitive factors such as task completion, class participation, academic knowledge, and positive behaviors (Cross & Frary, 1999). At the high school level in particular, the omnibus letter grade tends to be multidimensional in nature rather than its assumed purpose, solely communicating student learning (Bowers, 2011). For example, teacher perception of urban high school students' being prepared for class, arriving on time and submitting homework assignments have been found to better correlate with grade point average than overall academic performance (Steward, Hill, Neil, Pritchett, & Wabaunsee, 2008).

#### **Standards-Based Grading**

In response to these critiques of traditional grading and in line with the growing emphasis on learning goals such as the Common Core State Standards, scholars and consultants alike recommend using standards-based grading (Iamarino, 2014; O'Connor, 2017). Also referred to as standards-referenced grading and proficiency-based grading, standards-based grading (SBG) is a philosophy of grading separating learning goals and work habits, repurposing homework as

practice, and emphasizing more recent evidence of learning rather than averaging multiple attempts (Iamarino, 2014; O'Connor, 2017; Spencer, 2012). While several states have policies requiring schools to implement some aspects of standards-based grading (Collette, 2015), a number of school systems are voluntarily transitioning to SBG as a means of more accurately communicating students' learning of state or national standards. Elementary schools have been quicker to move away from As and Fs in adopting standards-based report cards, however several secondary schools in Kansas and other states are now giving SBG strong consideration as well (Bisaha, 2019).

Implementing standards-based grading comes with a unique set of challenges. Educators who have used standards-based grading initially report an increased workload and perceived threat of grade inflation when compared to their previous experiences (Diegelman-Parente, 2011). Specifically, Spencer (2012) describes the undertaking teachers face when implementing standards-based grading prior to a system-wide adoption: determining the most important standards to assess and identifying additional time for students to reassess. In addition, writers note the challenge of utilizing standards-based grades in contexts such as high schools requiring some type of formulaic conversion to letter grades (Hooper & Cowell, 2014; O'Connor, 2018). Research from Buckmiller and Peters (2014) reminds educators that student information systems, parents' uncertainty of post-secondary implications of standards-based grading, and the inevitable implementation dip are all barriers to be anticipated when considering a system-wide change to standards-based grading. Although a number of experienced teachers have expressed confidence in standards-based grading (Tierney, Simon, & Charland, 2011), some parent groups have pushed back on this educational change at the secondary level (Dexter, 2015; Yost, 2015). With these challenges in mind, educators and researchers will also benefit from understanding what works when schools implement standards-based grading.

While research on standards-based grading effectiveness and implementation continues to evolve, educators should be aware of the successes and struggles of those who have gone before them. Three main themes in the standard-based grading literature are relevant for educators and researchers interested in this shift to more effective teaching and learning systems. These themes include teacher perceptions of what works in standards-based grading implementation, parent reactions to standards-based grading, and leadership lessons from school systems who have transitioned to standards-based grading.

#### **Teacher Perceptions of Standards-Based Grading**

Because leading lasting and meaningful change should involve teacher voice (Quaglia & Lande, 2016), it is important to consider teacher perceptions of what works in SBG implementation. Understanding teacher perceptions towards grading can also be a first step prior to creating a unified vision of the purpose of grades. Surveys of teacher grading practices suggest as much as 20% of a typical teacher's grade is based upon non-cognitive factors such as participation and work completion (Guskey & Link, 2018). Not surprisingly, secondary teachers are more likely than elementary teachers to include homework in the final grade (Guskey, 2009). Generally speaking, teachers do not agree upon the criteria grades should be based upon. Consequently, administrators can support teachers implementing SBG by clearly creating clarity around the purpose of grades (Brookhart, 2011; Olsen & Buchanan, 2019). The diversity of thought

regarding factors influencing grades may vary based upon teacher personal experiences as a learner, success using grades to motivate students, and philosophical beliefs of education.

Differences in perceptions among teachers may be generational. For example, younger teachers tend to view SBG more favorably when compared to their more experienced counterparts (Hany, Proctor, Wollenweber, & Al-Bataineh, 2016; Hill, 2018). At the same time, teachers report SBG comes with an increased workload (Hill, 2018; Schiffman, 2016), which may be interpreted by some veteran teachers as devaluing their previous sweat equity creating lesson plans and assessments. As such, it is crucial for all teachers to understand the long view when implementing standards-based grading. For instance, a cross-section of teachers implementing standards-based grading report benefitting from more purposeful planning and increased clarity around specific students' academic needs (Knight & Cooper, 2019; Weaver, 2018; Urich, 2012).

As with other improvements in teaching and learning, staff possess varying levels of previous training and personal experience related to grading. In the near future, schools will need to develop the capacity of teachers in their system to understand and implement standards-based grading practices rather than relying on educator preparation programs to do so. Teachers report a lack of prior professional learning in the area of grading and assessment (Hill, 2018; Olsen & Buchanan, 2019), a theme Battistone, Buckmiller and Peters (2019) confirmed in pre-service teachers as well. In response to this notion of unpreparedness, teachers at one middle school reported positive feedback when the principal planned differentiated professional learning for teachers as their level of SBG expertise developed over time (Urich, 2012). Further, internal capacity may be limited to support next steps with grading shifts in some schools, therefore hiring outside consultants may be beneficial to lead staff professional development (Proulx, Spencer-May, & Westerberg, 2012).

#### **Parent Reactions to Standards-Based Grading**

Parents of high school students will have a number of questions related to standards-based grading implications for higher education. Most SBG high schools choose to utilize a conversion system from final standard marks to letter grades on the transcript, however this does not always ease tension around the change. Local college/university admissions officials should be directly involved in answering parent concerns (Riede, 2018). Yet another theme noted in the SBG literature is parents' confidence for the known and dislike for the unknown (Frankin, Buckmiller, & Kruse, 2016). Parents are generally familiar with percentages and points-based grade books. Confusion may stem from uncertainty around new grade book formats or why the change is needed altogether (Yost, 2015). In the same fashion, philosophical concerns may arise. One survey of middle school parents revealed a high level of agreement in providing students multiple opportunities to demonstrate understanding via standards-based grading, however omitting homework in calculating the final grade was generally viewed negatively (Patrick, 2015).

In other cases, parents have reported a perception of inadequate school communication during the change process (Dexter, 2015). The Omaha school district utilized parent focus groups to better understand the concerns and simultaneously communicate answers to frequently asked questions (Proulx, Spencer-May, & Westerberg, 2012). Adept school leaders will consider

reactions of parents including their specific concerns and needs in order to reframe the benefits of standards-based grading for teachers and students when compared to traditional grading practices. While parent reactions to standards-based grading may be highly contextual, schools considering SBG would be wise to understand common philosophical points of discussion and proactively communicate before, during and after the change.

### **Standards-Based Grading Leadership Lessons**

Although grading reform is often an overlooked area of instructional leadership (Guskey & Link, 2019), school leaders bold enough to move their faculty in this direction are advised to consider several leadership lessons stemming from the literature. This is especially important because principals often agree with the tenets of reforming grading practices, yet disproportionately report implementing these same practices in their buildings (Carter, 2016). Schools should start with Susan Brookhart's (2011) practical steps for starting the conversation about grading. Working out gradebook and report card semantics, while important to teachers and parents, should take place *after* a leadership team has agreed upon the purpose of grading. In other words, schools should deeply consider the principles of grading reform before tackling the specific policies and procedures (Reeves, 2011).

The first lesson for school leaders is considering the pace of implementation. Urich (2012) and Weaver (2018) gradually expanded SBG through multiple grade levels over a multiple year time period rather than working with all grade levels in the school simultaneously. Because philosophical resistance to SBG is widely documented (Hill, 2018; Knight & Cooper, 2019; Weaver, 2018), some school leaders recommend starting with a small pilot group when redesigning grading (Carter, 2016; Feldman, 2019). Establishing frequent feedback loops between early adopting groups and decision-making bodies such as a grading leadership team may be an efficient way to eventually scale up the change.

The second lesson for school leaders is carefully communicating with multiple constituencies. Waters, Marzano and McNulty (2003) suggest communication is a leadership responsibility often overlooked when leading a second order change such as a change in grading practices. It's not enough to communicate about the change, but also to consider the audience, communication medium and timing. District leaders are advised to keep the board of education in the know (Townsley, 2017) through sharing scholarly literature, facilitating work sessions lead by early adopting teachers and agreeing on key implementation milestones. Principals strongly recommend allocating significant time to educate parents on the changes through mediums including social media interaction, email correspondence, and face-to-face forums (Hill, 2018; Urich, 2012).

A final standards-based grading leadership lesson is involving teachers during the change process. High school principal Jeffrey Erickson (2011) established a leadership team comprised of teachers to examine the purpose of grading and examine effective assessment practices. When involving teachers, at least one case study of multiple sites recommends administrators should be ready to compromise when comparing steps recommended by experts and the local reality (Peters & Buckmiller, 2014). One way to do this is by establishing tight and loose structures for common topics of teacher conversation including grade books, rubrics and grading

guidelines (Weaver, 2018). Consequently, teacher buy-in may be a determining factor regarding the success of grading policy reform (DeLarkin, 2013).

#### **Future Considerations**

Moving from traditional grading to standards-based grading is a paradigm shift many schools are currently considering. However, quantitative research conducted for the purpose of assessing the effectiveness of SBG as measured by standardized student outcomes has been relatively limited and disparate. While a few studies suggest implementing SBG begets significant statistical differences on these standardized measures (e.g., Haptonstall, 2010; Pollio & Hochbein, 2015), others paint a less desirable picture (e.g., Rosales, 2013; Welsh, D'Agostino, & Kaniskan, 2013). For example, Haptonstall (2010) concluded standards-based grades were better correlated with state tests in multiple subjects when compared to schools using traditional grading systems. While Welsh, D'Agostino and Kaniskan confirmed this theme, an even greater proportion of variability was found between classrooms incorporating standards-based grading. This may suggest additional professional learning is needed to ensure fidelity of implementation at schools utilizing standards-based grading.

Still other researchers have attempted to tease out the effectiveness of standards-based grading through examining differences in student populations. For example, Bradbury-Bailey (2011) concluded SBG can benefit African-American students, particularly in science. Without concluding evidence pointing in one direction, school leaders may be in a precarious position, wondering, what, if any, quantitative support exists for this change. Future researchers should consider conducting longitudinal studies of the effectiveness of standards-based grading implemented with fidelity as measured by state and other accountability assessments.

#### **Conclusion**

Grading has been referred to as a "thorn in the side of positive student-teacher relationships" (Craig, 1978, p. 1) and as such, has remained a topic of interest for educational researchers during the past 100 years (Brookhart et al., 2016). An Educational Resources Information Center (ERIC) system search for grading in the last twenty years lists more than 2,800 citations. Over 1,600 of those citations were written in the past 10 years, since 2010. The literature consists of a combination of essays about the problems of classroom grading, surveys of teacher perceptions of their grading practices, and some empirical studies examining the effectiveness of various grading practices. Despite not being a "trendy" topic, and most likely just the opposite, grading and reporting practices are being examined by thoughtful teachers and school leaders as a way to build an accurate assessment system can both promote and certify student learning and be the link between teaching, learning and student well-being (Stiggins, 2014).

Still in its infancy stages, schools have found it challenging to get standards-based grading "right" in the eyes of parents and teachers. This is most likely due to perceived inconsistencies in the implementation process. Bold and strategic leadership is needed because remedying issues of inaccurate grading practices not only moves schools toward a more highly reliable system, it also addresses some of the most inconsistent practices in our current schooling system (Heflebower, Hoegh & Warrick, 2014). And although several stakeholders have an interest in

providing learning environments that foster critical thinking and problem-solving skills, until we come to an agreement on what high quality and accurate assessment looks like, reform efforts will most likely be disappointing and fall short of expectations.

#### References

- Battistone, W., Buckmiller, T., & Peters, R. (2019). Assessing assessment literacy: Are new teachers prepared to assume jobs in school districts engaging in grading and assessment reform efforts? *Studies in Educational Evaluation*, 62, 10-17.
- Bisaha, S. (2019). Kansas high schools reluctant to lose A's and F's in favor of standards-based grading. *Kansas News Service*. Retrieved from https://www.kcur.org/post/kansas-high-schools-reluctant-lose-and-fs-favor-standards-based-grading
- Bowers, A. J. (2011). What's in a grade? The multidimensional nature of what teacher- assigned grades assess in high school. *Educational Research and Evaluation*, 17, 141–159.
- Bradburd-Bailey, M. (2011). A preliminary investigation into the effect of standards-based grading on the academic performance of african-american students. (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (3511593).
- Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Smith, J. K., Smith, L. F., Stevens, M. T., & Welsh, M. E. (2016). A century of grading research: Meaning and value in the most common educational measure. *Review of Educational Research*, 86(4), 803-848.
- Brookhart, S.M. (2011). Starting the conversation about grading. *Educational Leadership*, 69(3), 10-14.
- Carter, A. B. (2016). *Best practices for leading a transition to standards-based grading in secondary schools*. (Doctoral dissertation). Retrieved from https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3217&context=dissertation s
- Chapman, H. B., & Ashbaugh, E. J. (1925). Report cards in American cities. *Educational Research Bulletin*, 4(14), 289-293.
- Collette, M. (2015). Why schools are ditching A's, B's, and C's for greens, yellows, and reds. *Slate*. Retrieved from https://slate.com/human-interest/2015/04/standards-based-grading-why-schools-are-ditching-letter-grades-for-a-new-model.html
- Craig, R. P. (1978). A question of testing and grading. Educational Considerations, 5(2), 1-4.
- Cross, L. H. & Frary, R. B. (1999). Hodgepodge grading: Endorsed by students and teachers alike. *Applied Measurement in Education*, 12(1), 53-72. doi:10.1207/s15324818ame1201 4
- Cureton, L. W. (1971). The history of grading practices. *NCME Measurement in Education*, 2(4), 1-8.
- DeLarkin, C. (2013). *A study of teacher-buy-in and grading policy reform in a Los Angeles Catholic high school* (Doctoral dissertation). Retrieved from http://pqdtopen.proquest.com/doc/1450044386.html
- Dexter, P. (2015, September 9). 'Standards-based' grading confuses high school parents. *Chanhassen Villager*. Retrieved from http://www.swnewsmedia.com/chanhassen\_villager/news/education/standards-based-grading-confuses-high-school-parents/article\_e23a6ced-7305-5d20-ad0c-15bcb69e3f4b.html

- Diegelman-Parente, A. (2011). The use of mastery learning with competency-based grading in an organic chemistry course. *Journal of College Science Teaching*, 40(5), 50-58.
- DuFour, R., & Marzano, R. J. (2011). *Leaders of learning: How district, school, and classroom leaders improve student achievement*. Bloomington, IN: Solution Tree Press.
- Durm, M. W. (1993). An A is not an A is not an A: A history of grading. *The Educational Forum*, 57, 1-4. doi:10.1080/00131729309335429
- Erickson, J.A. (2011). How grading reform changed our school. *Educational Leadership*, 69(3), 66-70.
- Feldman, J. (2019). Equitable grading: Tales of three districts. *School Administrator*. 76(5), 38-41.
- Frankin, A., Buckmiller, T., & Kruse, J. (2016). Vocal and vehement: Understanding parents' aversion to standards-based grading. *International Journal of Social Science Studies*, 4(11), 19-29.
- Gupton, S. L. (2010). *The instructional leadership toolbox: A handbook for improving practice* (2nd ed.). Thousand Oak, CA: Corwin.
- Guskey, T. R. (1994). Making the grade: What benefits students? *Educational Leadership*, 52(2), 14-20.
- Guskey, T. R. (2009). *Bound by tradition: Teachers' views of crucial grading and reporting issues*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Guskey, T. R. (2013). The case against percentage grades. *Educational Leadership*, 71(1), 68-72.
- Guskey, T. R., & Link. L. J. (2018). Exploring the factors teachers consider in determining students' grades. *Assessment in Education: Principles, Policy & Practice, ??*(?), ??-??. doi:10.1080/0969594X.2018.1555515
- Guskey, T. R. & Link, L. J. (2019). The forgotten element of instructional leadership: Grading. *Educational Leadership*, 76(6).
- Hany, K., Proctor, M., Wollenweber, J. & Al-Bataineh (2016). Teacher perceptions of standards-based grading: Implication and effectiveness. *Journal of Teaching and Education*, 5(1), 749-765.
- Haptonstall, K.G. (2010). An analysis of the correlation between standards-based, nonstandards-based grading systems and achievement as measured by the Colorado student assessment program (CSAP). (Doctoral dissertation). Available from ProQuest Dissertations and Theses (3397087)
- Heflebower, T., Hoegh, J. K., Warrick, P. (2014). *A school leader's guide to standards-based grading*. Bloomington, IN: Solution Tree Press.
- Hill, G. R. (2018). *Impact of teacher attitudes on implementation of a standards-based grading system* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (13426348)
- Hooper, J., & Cowell, R. (2014). Standards-based grading: History adjusted true score. *Educational Assessment*, 19(1), 58-76. doi:10.1080/10627197.2014.869451
- Iamarino, D. L. (2014). The benefits of standards-based grading: A critical evaluation of modern grading practices. *Current Issues in Education*, *17*(2), 1-10. Retrieved from http://cie.asu.edu/ojs/index.php/cieatasu/article/view/1234

- Knight, M. & Cooper, R. (2019). Taking on a new grading system: The interconnected effects of standards-based grading on teaching, learning, assessment, and student behavior. *NASSP Bulletin*, 103(1), 65-92.
- O'Connor, K. (2017). A case for standards-based grading and reporting. *School Administrator*, 74(1), 24-28.

  O'Connor, K. (2018). *How to grade for learning* (4th ed.). Thousand Oaks, CA: Corwin Press.
- Olsen, B. & Buchanan, R. (2019). An investigation of teachers encouraged to reform grading practices in secondary schools. *American Educational Research Journal*, Advanced online publication. doi:10.3102/0002831219841349
- Patrick, C. M. (2015). *Educational stakeholders' perceptions during grading reform in one middle school*. (Doctoral dissertation). Retrieved from https://search.proquest.com/docview/1735489657
- Peters, R. & Buckmiller, T. (2014). Our grades were broken: Overcoming barriers and challenges to implementing standards-based grading. *Journal of Educational Leadership in Action*, 2(2). Retrieved from https://www.lindenwood.edu/academics/beyond-the-classroom/publications/journal-of-educational-leadership-in-action/all-issues/previous-issues/volume-2-issue-2/our-grades-were-broken-overcoming-barriers-and-challenges-to-implementing-standards-based-grading/
- Pollio, M. & Hochbein, C. (2015). The association between standards-based grading and standardized test scores as an element of a high school reform model. *Teachers College Record*, 117(11), 1-28.
- Proulx, C., Spencer-May, K., & Westerberg, T. (2012). Moving to standards-based grading: Lessons from Omaha. *Principal Leadership*, *13*(4), 30-34.
- Quaglia, R. J. & Lande, L. L. (2016). *Teacher voice: Amplifying success*. Thousand Oaks, CA: Corwin Press.
- Reeves, D. B. (2011). Taking the grading conversation public. *Educational Leadership*, 69(3), 76-79.
- Riede, P. (2018). Making the call inside admissions offices. School Administrator, 75(2), 26-29.
- Rosales, R.B. (2013). *The effects of standards-based grading on student performance in algebra* 2 (Doctoral dissertation). Retrieved from http://digitalcommons.wku.edu/diss/53/
- Schiffman, M. P. (2016). Standards-based grading: Educators' perceptions of the effects on teaching, student motivation, and assessment at the high school level. (Doctoral dissertation). Available through ProQuest Dissertations and Theses. (10117267).
- Schneider, J., & Hutt, E. (2013). Making the grade: A history of the A–F marking scheme. *Journal of Curriculum Studies*, 46(2), 1-24. doi:10.1080/00220272.2013.790480
- Small, A. A. (1973). Marking practices in historical perspectives. *Educational Studies*, *4*(4), 189-197.
- Spencer, K. (2012). Standards-based grading. Harvard Education Letter, 28(5).
- Steward, R. J., Hill, M. F., Neil, D. M., Pritchett, T., & Wabaunsee, A., (2008). What does GPA in an urban high school actually mean? *Educational Considerations*, *36*(1), 11-16.
- Stiggins, R. (2014). *Revolutionize assessment: Empower students, inspire learning*. Thousand Oaks, CA: Corwin Press.
- Tierney, R. D., Simon, M., & Charland, J. (2011). Being fair: Teachers interpretations of principles for standards-based grading. *The Educational Forum*, 75(3), 210-227. doi:10.1080/00131725.2011.577669

- Tocci, C. (2008). An immanent machine: Reconsidering grades, historical and present. *Educational Philosophy and Theory.* 42(7), 762-778. doi:10.1111/j.1469-5812.2008.00440.x
- Townsley, M. (2017). Three lessons for schools shifting their grading. *School Administrator*, 74(1), 27.
- Urich, L.J. (2012) *Implementation of standards-based grading at the middle school level* (Doctoral dissertation). Retrieved from http://lib.dr.iastate.edu/etd/12492
- Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced Leadership: What 30 years of research tells us about the effect of leadership on student achievement*. Aurora, CO: Midcontinent Research for Education and Learning
- Weaver, D. J. (2018). *High school principals' leadership activities in policy development and implementation of standards-based grading* (Doctoral dissertation). Retrieved from https://www.ideals.illinois.edu/bitstream/handle/2142/102461/WEAVER-DISSERTATION-2018.pdf
- Weller, L. D. (1983). The grading nemesis: A historical overview and a current look at pass/fail grading. *Journal of Research and Development in Education*, 17(1), 39-45.
- Welsh, M. E., D'Agostino, J. V., & Kaniskan, B. (2013). Grading as a reform effort: Do standards-based grades converge with test scores? *Educational Measurement: Issues and Practice*, 32(2), 26-36. doi:10.1111/emip.12009
- Yost, R. (2015). Standards-based proposal draws concerns in Forest city. *The Globe Gazette*. Retrieved from http://globegazette.com/news/local/standards-based-proposal-draws-concerns-in-forest-city/article\_c3c640fd-bade-5d83-b353-c6a4a235653f.html

Matt Townsley (matt.townsley@uni.edu) is an assistant professor in the Department of Educational Psychology, Foundations, and Leadership Studies, College of Education, at the University of Northern Iowa in Cedar Falls, IA. Follow him on Twitter @mctownsley

Tom Buckmiller (thomas.buckmiller@drake.edu) is an associate professor in the Leadership and Counseling Department, School of Education, at Drake University in Des Moines, IA. Follow him on Twitter @tombuckmiller