Teachers’ Perceptions of Grading Practices: How Pre-Service Training Makes a Difference

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This study examines the enduring problem of inconsistent K-12 grading practices by exploring the relationship between teachers’ perceptions of various grading practices, such as factoring student behavior in academic grades, as related to grade level, district locale, and training. Survey responses from 2,996 K-12 teachers from one suburban and one urban school district in the southeastern region of the United States were examined. Results revealed that middle/high school teachers from non-traditional training programs favored behavior-focused grading practices, such as homework completion, over practices focused on academic mastery. With increasing teacher shortages and more non-traditionally trained teachers being employed, these ineffective grading practices are likely to find their way into more classrooms, potentially impacting students’ ability to achieve academic success. These results heighten the urgency to better understand teachers’ perceptions of grading practices and to create alternative training programs meant to help teachers develop more effective grading and reporting practices.

Keywords: grading, urban districts, teacher training, middle/high teachers, classroom assessment
Grading practices vary widely among teachers in American schools, especially at the middle and high school levels (Brookhart, 1994; Fenzel, Dean, & Gerivonni, 2014; Schneider & Hutt, 2014; Stiggins, 2002). These practices often conflate students’ behavior with academic mastery and have been shown to diminish students’ motivation to learn (Bonesronning, 1998; Brookhart, 1993, 1994; Guskey, 2015; McMillan & Lawson, 2001; McMillan, Myran, & Workman, 2002; McMillan & Nash, 2000; O’Connor, 2007, 2009; Reeves, 2011). The effects of this grading conflation are compounded in the context of our current high-stakes testing and accountability processes designed to measure only student academic mastery (Brookhart et al., 2016; Kolio-Keaikitse, 2012).

Most teachers have limited prior or job-embedded training in effective assessment or grading practices, especially those coming from non-traditional or alternative certification-route preparation programs (Brewer & deMarrais, 2015; Redding & Smith, 2016). Further, with the existing and predicted teacher shortages across the nation, many K-12 districts are looking to these non-traditional route teachers to fill their workforce needs, especially in high-poverty, urban schools (Redding & Smith, 2016). As highlighted in a recent report from the National Center on Teacher Quality (Greenberg, Walsh, & McKee, 2014), non-traditional route teachers are often inadequately prepared or under prepared for the challenges and demands of the urban school environment, making it necessary to deprioritize high-impact activities such as effective assessment and grading practices. Instead, they focus on the basics such as instructional skill and classroom management for the sake of professional survival.

Differences in teacher training across traditional and alternative certification programs become increasingly important as alternative certification programs emerge as a significant pathway into teaching (Redding & Smith, 2016). Alternatively-certified teachers helped fill the
estimated 60,000 teacher shortage gap during the 2015-16 school year (Will, 2016). Across the country, half of all schools and 90% of high-poverty schools, are expected to experience a continued rise in teacher shortages well into the 2020s (Will, 2016). Moreover, according to the 2011-2012 Schools and Staffing Survey (SASS), nearly a quarter of early career teachers entered the teaching profession outside of a traditional teacher preparation program.

Across the US, enrollment in traditional teacher preparation programs has fallen drastically; subsequently, there are fewer applying for teaching licenses. In Indiana, for example, the number of applicants for teacher licenses fell by 50% between 2009 and 2013 (McIntyre, 2016). With a diminishing pool of licensed, traditionally-trained teacher candidates, many school leaders rely on teachers prepared through non-traditional pipelines to fill needed teaching positions. The need to understand the classroom impact of non-traditionally trained teachers is heightened by the recent reform discourse highlighting these teachers’ lack of pedagogical training and subsequent use of classroom practices that prompt discouragement and disengagement among students (Brewer & deMarrais, 2015).

Much of the existing literature on K-12 grading addresses historical grading patterns and trends that perpetuate ineffective grading and assessment classroom practices (Brookhart, 1993, 1994; Guskey, 2015; McMillian & Lawson, 2001; McMillan, Myran, & Workman, 2002; O’Connor, 2007; Reeves, 2011). Additionally, literature that discerns points of grading agreement (Guskey, 1996) has helped shape discussions focusing on effective grading practices (O’Connor, 2009), and literature on grading scales has helped illuminate the mathematical disproportion found in standard grading scales (Guskey, 2009a; Reeves, 2004). Over the last decade, literature that addresses teachers’ changing beliefs about classroom assessment has emerged while state and local grading policies primarily remain stagnant and stymied (Dueck,
The literature further reveals that our quest for grading consistency has eluded us for the last century (Brookhart et al., 2016; Guskey, 2015; Schneider & Hutt, 2014). One hundred years of grading studies conclude “that grades typically represent a mixture of multiple factors that teachers value” and that those factors vary widely (e.g., effort, ability, work habits, participation, attendance, etc.) depending on what teachers believe and subsequently endorse as relevant to grading (Brookhart et al., 2016). This variance limits grades as effective means to communicate pure academic mastery to students, their parents, and other stakeholders involved in the educational process.

It is also clear that limited attention is directed to teacher training that equips teachers to design assessments, analyze test results, and act on inconsistencies and gaps in student learning, instead of merely reporting such gaps by way of letter grades. In fact, most teachers today “are not well trained” in methods such as utilizing specific learning criteria to enhance grading reliability or appropriately interpreting student work as evidence of learning, which contributes to variations in teachers’ grading practices (Brookhart et al., 2016, p. 31). Lack of training may unintentionally cause teachers to consider evidence of student achievement as well as evidence of different ‘process’ variables such as homework, formative assessments, class participation, etc. in determining students’ grades (Guskey, 2015). This combination of student achievement and process variables may produce “score pollution,” in which students’ grades do not represent academic mastery and limit “students, families and other stakeholders in the educational system from attaining valid information regarding academic achievement” (Green, Johnson, Kim, & Pope, 2006, p. 1002).

Utilizing the outcomes of existing grading literature, the author hypothesizes that training
is a significant factor in teachers’ grading perceptions. Without improved training in assessment and better understanding of teachers’ beliefs about grading and the role it plays in student success, school leaders and policy makers may continue to have limited knowledge about the challenges current grading practices pose. Some of these grading struggles may have major implications on the quality of teaching and learning offered in K-12 schools and may ultimately prevent many students from attaining their educational goals.

The purpose of this study was to investigate differences in teachers’ views on significant issues regarding grading and reporting student learning. Specifically, it sought to determine the nature of K-12 teachers’ perspectives on grading and reporting, and whether these perspectives are related to teaching context, especially grade level, district locale, and teachers’ traditional versus non-traditional training. For purposes of this study, non-traditional training is defined as “anything other than a four- or five-year undergraduate program in a college or university” (Zeichner & Paige, 2007, p. 3). Because teachers’ personal perspectives on these issues are likely to affect their grading practices, a better understanding of those views is important in efforts to reform K-12 grading.

**Methods**

**Participants**

The participants in this study were 8,750 full-time teachers in two school districts, one suburban and one urban, in a state in the southeastern US. These teachers served nearly 147,000 students within 264 schools. In the suburban district, 38.6% of students were classified as economically disadvantaged, while 85% were in the urban district. While 3,219 teachers responded to the survey, 223 surveys were returned incomplete and subsequently not included in this study. A total of 2,996 teachers returned usable surveys.
Table 1 shows the demographic characteristics of the responding teachers including their grade levels taught, district locale, gender, and training background. Specifically, 1,580 participants were elementary teachers (52.7%) and 1,416 were middle/high teachers (47.3%). A total of 1,633 participating teachers (56%) reported working in an urban district, and 1,333 teachers (44.5%) reported working in a suburban district. Additionally, 474 participants were male (15.8%) and 2,522 were female (84.2%). Regarding their training, 2,633 participating teachers (87.9%) reported being traditionally trained, and 363 teachers (12.1%) reported coming from non-traditional training programs.

Table 1.

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>n= 2,996</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>474 15.8</td>
</tr>
<tr>
<td>Female</td>
<td>2522 84.2</td>
</tr>
<tr>
<td>Grades Taught</td>
<td></td>
</tr>
<tr>
<td>Pre-Kindergarten – Grade 2</td>
<td>750 25.0</td>
</tr>
<tr>
<td>Grades 3-5</td>
<td>830 28.0</td>
</tr>
<tr>
<td>Grades 6-8</td>
<td>591 19.7</td>
</tr>
<tr>
<td>Grades 9-12</td>
<td>825 27.5</td>
</tr>
<tr>
<td>Years of Experience</td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>402 13.4</td>
</tr>
<tr>
<td>5-10 years</td>
<td>532 17.8</td>
</tr>
<tr>
<td>10-15 years</td>
<td>590 19.7</td>
</tr>
<tr>
<td>15-20 years</td>
<td>493 16.5</td>
</tr>
<tr>
<td>20-25 years</td>
<td>198 6.7</td>
</tr>
<tr>
<td>25+ years</td>
<td>781 26.0</td>
</tr>
<tr>
<td>Characteristics</td>
<td>n</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Subject Primarily Taught</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>522</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>914</td>
</tr>
<tr>
<td>Science</td>
<td>194</td>
</tr>
<tr>
<td>Social Studies</td>
<td>147</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>139</td>
</tr>
<tr>
<td>Physical Education</td>
<td>71</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>59</td>
</tr>
<tr>
<td>Career Tech</td>
<td>95</td>
</tr>
<tr>
<td>Library</td>
<td>77</td>
</tr>
<tr>
<td>Counseling</td>
<td>42</td>
</tr>
<tr>
<td>Other</td>
<td>736</td>
</tr>
<tr>
<td>Special Education Teacher</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>308</td>
</tr>
<tr>
<td>No</td>
<td>2,688</td>
</tr>
<tr>
<td>English as a Second Language Teacher</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
</tr>
<tr>
<td>No</td>
<td>2,927</td>
</tr>
<tr>
<td>District Locale</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1,663</td>
</tr>
<tr>
<td>Suburban</td>
<td>1,333</td>
</tr>
<tr>
<td>Type of Teacher Training</td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>2,633</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>363</td>
</tr>
</tbody>
</table>
Instrumentation

Data for this study were gathered with the *Teachers’ Perceptions of Grading Practices* (TPGP), a scale developed and validated through exploratory and confirmatory factor analysis by Liu, O’Connell, & McCoach (2006). Link (2012) added a *Perception of Scale* section to the survey, providing an overall reliability of $\alpha = .73$ (see Appendix A). The TPGP survey consists of 10 multiple-selection demographic items and 45 Likert-type rating scale items. The Likert-type items asked teachers to indicate their agreement or disagreement with statements about a wide range of grading practices. Teachers recorded their Likert-type responses on a five-point scale ranging from “Strongly Disagree” to “Strongly Agree.” Teachers were assured anonymity with their responses, as no identifiers were captured by the researcher.

Procedures

All teachers were contacted via email by their respective superintendents, who requested their voluntary participation in the online survey. Participating teachers signed an online consent form that included the purpose of the study and were afforded three weeks to complete the survey. Superintendents sent teachers a reminder to participate email five days prior to the survey’s close.

Survey results were analyzed in three stages. First, descriptive statistics were calculated and compared for all subgroups on all items in the modified TPGP. Second, *t*-tests were conducted and effect sizes computed to compare item means among the various subgroups of teachers (i.e., grade level, district locale, gender, and training). Finally, differences among teachers with regard to grade level taught, district locale, gender, and training were explored using chi-squared testing. For all analyses procedures, the more conservative $p < .001$ and minimal .20 Cohen’s $d$ effect size were used, considering the study’s relatively large sample size.
The researcher secured proper permissions to conduct the survey research from the participating districts’ administration and approval from the Institutional Review Board.

**Results**

Descriptive analyses of the survey items showed that teachers were quite consistent in their responses to some items and quite divergent on others. Of the 45 Likert-type survey items, 16 items were rated similarly (i.e., high agreement on response selections) by all respondents regardless of teachers’ grade level, district locale, or training. Yet 39 items were found to have significant difference (i.e., high disagreement on response selections) with regard to teachers’ grade level, district locale, and training. Eleven of the 39 items had a Cohen’s $d$ effect size less than .20 and were therefore not included. Twenty-eight remaining items are listed, by magnitude of difference, in Tables 2 through 4.

Table 2 shows that middle/high school teachers generally put more emphasis on students’ behavior in assigning grades than did elementary teachers. In particular, middle/high school teachers favored assigning grades of zero for incomplete work. They also were more likely than elementary teachers to base students’ grades on effort, homework completion, and ability to turn in assignments on time, and they favored subtracting points progressively until students turned in assignments. Middle/high school teachers also preferred using their own grading procedures as compared to elementary teachers. Elementary teachers did not indicate a preference for grading students’ behaviors, as did their middle/high peers, but did favor using letter grades rather than numbers when reporting student grades. Elementary teachers also indicated a preference for basing grades on students’ spelling ability.
Table 2.

Means, Standard Deviations, t Statistics, and Effect Sizes of Items of Statistical Significance Comparing Elementary and Middle/High School Teachers

<table>
<thead>
<tr>
<th>Categories</th>
<th>Elementary n = 1580</th>
<th>Middle/High n = 1416</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. If a student fails to complete an assignment, I will assign him/her a grade of zero.</td>
<td>2.49</td>
<td>1.00</td>
</tr>
<tr>
<td>42. I tend to use letter grades (e.g. A, B, C) rather than numbers (e.g. 1, 2, 3) in grading.</td>
<td>3.01</td>
<td>1.26</td>
</tr>
<tr>
<td>29. I will pass a failing student if he or she puts forth effort.</td>
<td>2.81</td>
<td>0.94</td>
</tr>
<tr>
<td>54. I use a Standard grade scale (0-100) which is an effective means to report grades.</td>
<td>3.44</td>
<td>1.15</td>
</tr>
<tr>
<td>47. I have my own grading procedure.</td>
<td>2.80</td>
<td>1.07</td>
</tr>
<tr>
<td>30. Grades are based on students’ completion of homework.</td>
<td>2.42</td>
<td>1.05</td>
</tr>
<tr>
<td>38. Grades are based on students’ ability to turn assignment in on time.</td>
<td>3.16</td>
<td>1.00</td>
</tr>
<tr>
<td>45. If a student fails to complete an assignment, I will subtract points progressively until the assignment is turned in.</td>
<td>3.03</td>
<td>1.07</td>
</tr>
<tr>
<td>41. Grades are based on students’ spelling ability.</td>
<td>2.76</td>
<td>0.93</td>
</tr>
</tbody>
</table>
Table 3 shows that teachers working in the urban district indicated a stronger preference to assigning grades based on students’ behavior compared to teachers working in the suburban district. Urban district teachers more strongly favored assigning grades based on class participation, homework completion, attendance, effort, behavior, ability, and turning in assignments on time. Urban district teachers also indicated a stronger preference for using professional discretion when assigning grades, such as giving students a second chance to take a test if they fail, awarding extra credit, grading on a curve, and passing students if they put forth effort, more so than suburban district teachers. With regard to students’ progress, urban district teachers indicated a preference for basing grades on students’ improvement. Suburban teachers are more likely to confer with colleagues regarding grading criteria and use the Standard scale (0-100) when grading than urban district teachers.
Table 3.

*Means, Standard Deviations, t Statistics, and Effect Sizes of Items of Statistical Significance Comparing Urban and Suburban District Teachers*

<table>
<thead>
<tr>
<th>Categories</th>
<th>Urban $n = 1663$</th>
<th>Suburban $n = 1,333$</th>
<th>t</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>31. Grades are based on the degree to which students participate in class.</td>
<td>3.44</td>
<td>0.93</td>
<td>2.89</td>
<td>1.07</td>
</tr>
<tr>
<td>30. Grades are based on students’ completion of homework.</td>
<td>2.82</td>
<td>1.05</td>
<td>2.30</td>
<td>1.04</td>
</tr>
<tr>
<td>43. If a student fails a test, I will offer him/her a second chance to take the test.</td>
<td>3.90</td>
<td>0.86</td>
<td>3.47</td>
<td>1.04</td>
</tr>
<tr>
<td>46. I often give students opportunities to earn extra credit.</td>
<td>3.70</td>
<td>0.97</td>
<td>3.26</td>
<td>1.12</td>
</tr>
<tr>
<td>32. Grades are based on students’ improvement.</td>
<td>3.52</td>
<td>0.86</td>
<td>3.16</td>
<td>0.97</td>
</tr>
<tr>
<td>33. Grades are based on students’ attendance.</td>
<td>2.83</td>
<td>1.09</td>
<td>2.50</td>
<td>1.09</td>
</tr>
<tr>
<td>27. Grading on a curve can provide appropriate consistency in grade distributions.</td>
<td>2.98</td>
<td>0.94</td>
<td>2.70</td>
<td>1.00</td>
</tr>
<tr>
<td>28. I consider student effort when I grade.</td>
<td>3.89</td>
<td>0.82</td>
<td>3.64</td>
<td>0.91</td>
</tr>
<tr>
<td>48. I often confer with my colleagues on grading criteria.</td>
<td>3.39</td>
<td>1.00</td>
<td>3.66</td>
<td>0.92</td>
</tr>
<tr>
<td>39. Grades are based on students’ behavior in class.</td>
<td>2.54</td>
<td>1.08</td>
<td>2.25</td>
<td>1.04</td>
</tr>
<tr>
<td>41. Grades are based on students’ spelling ability.</td>
<td>2.78</td>
<td>0.95</td>
<td>2.55</td>
<td>0.96</td>
</tr>
<tr>
<td>54. I use a Standard grade scale (0-100) which is an effective means to report grades.</td>
<td>3.50</td>
<td>1.13</td>
<td>3.75</td>
<td>0.98</td>
</tr>
</tbody>
</table>
34. I consider student ability in grading. 3.71 0.83 3.52 0.92 5.63 0.22
38. Grades are based on students’ ability to turn assignments in on time. 3.40 0.97 3.18 1.04 6.49 0.22
29. I will pass a failing student if he or she puts forth effort 3.11 0.96 2.91 0.95 7.24 0.20

Table 4 shows that non-traditionally trained teachers were more likely to consider students’ behavior when assigning grades compared to traditionally trained teachers in two ways. Non-traditionally trained teachers favored assigning grades of zero if a student fails to complete an assignment and basing grades on a student’s homework completion. Non-traditionally trained teachers also indicated a preference for having their own grading procedures. Traditionally trained teachers were more likely to use letter grades rather than numbers when grading than non-traditionally trained teachers.

Table 4.

Means, Standard Deviations, t Statistics, and Effect Sizes of Items of Statistical Significance Comparing Traditionally Trained and Non-Traditionally Trained Teachers

<table>
<thead>
<tr>
<th>Categories</th>
<th>Traditionally Trained</th>
<th>Non-Traditionally Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Items</td>
<td>n = 2,633</td>
<td>n = 363</td>
</tr>
<tr>
<td>44. If a student fails to complete an assignment, I will assign him/her a grade of zero.</td>
<td>2.75</td>
<td>1.11</td>
</tr>
<tr>
<td>47. I have my own grading procedure.</td>
<td>2.93</td>
<td>1.09</td>
</tr>
<tr>
<td>30. Grades are based on students’ completion of homework.</td>
<td>2.55</td>
<td>1.07</td>
</tr>
<tr>
<td>42. I tend to use letter grades (e.g. A, B, C) rather than numbers (e.g. 1, 2, 3) in grading.</td>
<td>2.76</td>
<td>1.27</td>
</tr>
</tbody>
</table>
Table 5 illustrates that nearly 95% of elementary teachers in the sample were trained in traditional programs, but only 80% of middle/high teachers were similarly trained. A chi-squared test revealed this difference to be statistically significant ($\chi^2 = 151.71; p < .001$). This implies that the middle/high school students in these districts were far more likely to encounter non-traditionally trained teachers than were their elementary school peers.

Table 5.

Percent of Traditionally Trained Teachers by Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Elementary n = 1,580</th>
<th>Middle/High n = 1,416</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent traditionally trained</td>
<td>94.8%</td>
<td>80.1%</td>
</tr>
</tbody>
</table>

($\chi^2 = 151.71; df = 1; p < .001$)

Similarly, Table 6 shows while about 96% of suburban teachers are graduates of traditional teacher preparation programs, only 81% of the urban teachers in the sample are traditionally trained ($\chi^2 = 162.64; p < .001$). This means students in the urban school district were less likely to encounter teachers’ grading practices that are based on students’ academic performance, which were preferred by the suburban teachers in the study.

Table 6.

Percent of Traditionally Trained Teachers by District Locale

<table>
<thead>
<tr>
<th>District Locale</th>
<th>Suburban n = 1,333</th>
<th>Urban n = 1,663</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent traditionally trained</td>
<td>96.4%</td>
<td>81.1%</td>
</tr>
</tbody>
</table>

($\chi^2 = 162.64; df = 1; p < .001$)
Table 7 illustrates differences in teachers’ training by gender. Clearly, a much larger percent of female teachers (91%) compared to male teachers (73%) were traditionally trained. This difference also proved to be statistically significant ($\chi^2 = 118.12; p < .001$).

Table 7.

Percent of Traditionally Trained Teachers by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 474</td>
<td>n = 2,522</td>
</tr>
<tr>
<td>Percent traditionally trained</td>
<td>72.9%</td>
<td>90.6%</td>
</tr>
</tbody>
</table>

($\chi^2 = 118.12; df = 1; p < .001$)

Thus, it appears the non-traditionally trained teachers in this sample are more likely to be male than female, as well as middle/high school teachers who teach primarily in urban schools. This combination of variables implies that middle/high school students in participating urban schools assigned to male teachers may be least likely to encounter grading practices based on their academic performance and more likely to be assigned grades based on their behavior.

Discussion

The evidence gathered in this study shows that nearly all teachers believe that grading plays a role in the teaching and learning process. However, the data show that elementary and middle/high school teachers’ views remain widely different. Elementary teachers tend to see grading as a formative process rather than an end state. They are more likely to give students multiple opportunities to evidence academic mastery and use homework as a means to learn about students’ progress rather than score it for completion. Elementary teachers also tend to collaborate with regard to their grading procedures rather than work in isolation like their
middle/high school peers. All of this implies that elementary teachers may have a different view regarding the purpose of grades and as a result, students will likely experience a shift in teachers’ expectations regarding assignments and homework, especially as they transition from elementary to middle school. Moreover, students will likely face a range of grading protocols and practices from teacher to teacher throughout middle school and high school, which may include seven or more different grading practices to keep up with on a typical secondary class schedule (Williamson, 2009).

Additionally, middle/high school students are more likely to have to work within teachers’ timelines for content mastery rather than their own, since they may experience a grade of zero if they do not. This could mean a drastic adjustment in learning and study practices for some students transitioning from elementary to middle school, if they are used to getting multiple opportunities to turn in assignments or not working under the threat of getting zeros from their elementary teachers.

If middle/high school students are attending urban schools and assigned to non-traditionally trained teachers, their likelihood of experiencing a shift in teachers’ grading practices is even greater. The data show that male, non-traditionally trained middle/high school teachers, often working in urban school districts, find it more acceptable to assign grades based on students’ behavior, such as homework completion, and to assign zeros for assignments not turned in. According to Guskey (2015), such practices “distort the meaning of grades and miscommunicate vital information about student learning…and often diminish students’ motivation and frequently alter students’ perceptions of school, of learning, and of themselves as learners” (p. 97-98). This research is supported by years of the same evidence: grading experiences, especially negative ones, may have a significant impact in both the short and long
term for students (Alm & Colnerud, 2015).

Why middle/high school teachers use this approach may be as Guskey (2009b) noted, which is that “secondary teachers tend to see grading and reporting as a vital component of classroom management and control” (p. 11). Middle/high school teachers may feel the need to use grading for control as they compete with students’ increased access to social tools and activities both inside and outside of the classroom, such as video games, virtual apps, FaceTime, movie streaming and more. Or, middle/high school teachers may lean on grading for control because their own instructional skill and ability to manage a classroom of students is inadequate. This may be especially the case with non-traditionally trained teachers since they tend to have “less student teaching experience or other pre-service pedagogical training than their traditionally trained peers” (Darling-Hammond, Chung, & Frelow, 2002; Darling-Hammond, Holtzman, & Gatlin, 2005; Redding & Smith, 2016, p. 1087).

Less training for non-traditional teachers means there is a greater likelihood that they did not encounter student teaching experiences or pre-service lessons on grading before they were assigned classrooms of students. Since studies from the last century conclude that teachers in more traditional teacher preparation programs are “not well trained” with regard to classroom grading, the ability for non-traditionally trained teachers to effectively assess and grade student work is even less promising (Brookhart et al., 2016, p. 31). Subsequently, middle/high school students assigned to non-traditionally trained teachers are likely provided less access to teachers that employ effective grading practices compared to their suburban peers. Less access to effective teachers may lessen students’ ability to attain academic achievement, which may reduce their life opportunities as a result.
Unfortunately, reduced access to effective teachers in urban schools is not uncommon. According to Feistritzer (2009), most non-traditionally trained teachers work in urban school districts due to market demands, filling subjects that are often in need, especially middle/high school math, science, and special education. Therefore, non-traditionally trained teachers can frequently be found teaching our most at-risk students in urban school environments – environments defined as “apartheid schools” that lack diversity and where less than 1% of the student body is White (UCLA Civil Rights Project, 2013). In addition, the creation of teacher preparation programs that cater to non-traditionally trained teachers are trending upward. Since 2010-2013 alone, there has been a 10% increase in the number of programs (439 in total across 45 states) classified as alternate route teacher preparation programs (US DOE, 2013).

With many non-traditionally trained teachers being assigned to our nation’s apartheid schools, many are encountering classrooms that tend to have the largest numbers of high-poverty students (UCLA Civil Rights Project, 2013). Also, 85% of this study’s urban district students qualify for free and reduced lunch; as a result, adding classroom grading practices based on students’ behavior to an already fragile surrounding context multiplies the negative impacts students are facing in urban middle/high school environments and interferes with students’ ability to achieve an equitable education, which has unlimited impact well beyond the classroom. When grading policies and practices improve, student failures decrease, motivation to persist in courses rises, and opportunity after high school expands (Reeves, 2009).

**Delimitations**

Though this study’s sample population is large and provides both suburban and urban vantage points, the data were drawn purposefully from two school districts due to convenience, which may limit the generalizability of these findings. Teachers from different regions and
locations across the country may offer a difference in perceptions due to different student populations, training, history, and practices with regard to grading, though there are similarities of these findings to those of other researchers that support a more generalizable reach (e.g., Guskey, 2009b; McMillan, 2001; McMillan, Myran, & Workman, 2002).

**Future Directions**

This study has implications for pre-service teacher education programs, teacher professional development, and researchers. Knowing that the elements teachers use in determining students’ grades vary across grade levels can help target teacher pre-service and professional development efforts aimed at developing and improving teachers’ assessment and grading literacy. Recognizing, for example, that middle/high school teachers rely more on students’ behavior, such as homework completion, to show evidence of student learning than do elementary teachers could lead to professional development or pre-service programs specifically designed to help middle/high school teachers recognize the potential benefits of using homework formatively rather than simply as a basis for a summative score. Moreover, knowing that non-traditionally trained teachers rely more on students’ behaviors than academic mastery to evidence student learning than do traditionally trained teachers, educators in alternative teacher preparation programs can improve their training by including more contemporary assessment literacy and effective grading practices research. Researchers can build on this study’s findings by conducting more in-depth studies examining assessment and grading curriculums used by traditional and non-traditional teacher preparation programs to determine and analyze further differences. Combined efforts among traditional and non-traditional pre-service educators and researchers can improve implementation of effective grading practices across all grade levels and district locales.
Conclusion

These findings indicate the need for improved pre-service grading practices training. Alternative, or non-traditional, teacher preparation programs could especially benefit by offering training on research-based grading practices to pre-service teachers. Since more non-traditionally trained teachers rely on ineffective grading practices and are being employed by urban districts, students in these districts, especially at the middle/high school level, are negatively impacted. Changing non-traditionally trained teachers’ grading practices has the potential to change students’ academic success.
References


Appendix A

Teachers’ Perceptions of Grading Practices Survey (TPGP)

Thank you for taking the time to complete this important survey on grading practices. Before you start, please complete the school and individual questions below so we can capture grading similarities and differences and best serve you in the future.

School Information

1. The district and grade level in which I teach is
   • MCS, Elementary Level (Urban)
   • MCS, Middle or High School Level (Urban)
   • SCS, Elementary School Level (Suburban)
   • SCS, Middle or High School Level (Suburban)

2. After they select from above, they would get a drop down menu of the schools tied to the level they chose. Please ask them to select one. If they teach in more than one school, they are to choose the one they spend the majority of their time teaching in.

3. Is your school a Title I school?
   • Yes
   • No

4. What is the percentage of free/reduced lunch students in your school?
   • 0% to 10%
   • 11%-25%
   • 25%-50%
   • 50%-75%
   • 75%-100%

5. What is the student enrollment in your school?
   • 0-199
   • 200-350
   • 351-750
   • 751-1,000
   • 1,000-1,750
   • Over 1,750

Individual Information

1. I primarily teach ____________________ grade(s).
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2. I primarily teach ________________ subject(s).
3. I am a Special Education teacher? Yes/No
4. I am an ESL teacher? Yes/No
5. I am highly-qualified/certified in the subject area(s) I currently teach? Yes/No
6. I have been teaching for ____________ years.
7. I was trained to teach through the traditional university/ student teaching process. (Yes/ No)
8. I received the following TEM/TEAM overall summative evaluation score last school year (2011-12)
   • Level 1
   • Level 2
   • Level 3
   • Level 4
   • Level 5
9. This year, I have primarily received TEM/TEAM observations scores at the following level
   • Level 1
   • Level 2
   • Level 3
   • Level 4
   • Level 5
10. I am a (male/ female).

Thank you for completing the brief survey below using candor and the following rating scale as your guide to answering:

1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree

Importance

11. Grading is an important criteria for judging students’ progress.
   1 2 3 4 5
12. Grading has an important role in classroom assessment.
   1 2 3 4 5
13. Grading has a positive effect on students’ academic achievement.
   1 2 3 4 5
14. Grading practices are important measures of student learning.
   1 2 3 4
15. Grading practices are important measures of student achievement.
   1 2 3 4 5
16. Grading has strong impact on students’ learning.
   1 2 3 4 5
Usefulness

17. Grading helps me categorize students as above average, average and below average.

18. Grading can help me improve instruction.

19. Grading can encourage good work by students.

20. Grading is a good method for helping students identify their weaknesses in a content area.

21. Grading can keep students informed about their progress.

22. Grading provides information about student achievement.


24. Grading provides feedback to my students.

25. High grades can motivate students to learn.

26. Grades of zero can demotivate students to learn.

27. Grading on a curve can provide appropriate consistency in grade distributions.

Student Effort

28. I consider student effort when I grade.

29. I will pass a failing student if he or she puts forth effort.

30. Grades are based on students’ completion of homework.

31. Grades are based on the degree to which students participate in class.

32. Grades are based on a student’s improvement.

33. Grades are based on students’ attendance.

Student Ability

34. I consider student ability in grading.

35. Grades are based on students’ problem solving ability.
Teachers’ Perceptions of Grading Practices

36. Grades are based on students’ critical thinking ability.
   1  2  3  4  5

37. Grades are based on students’ writing ability.
   1  2  3  4  5

38. Grades are based on students’ ability to turn assignments in on time.
   1  2  3  4  5

39. Grades are based on students’ behavior in class.
   1  2  3  4  5

40. Grades are based on students’ ability to follow directions.
   1  2  3  4  5

41. Grades are based on students’ spelling ability.
   1  2  3  4  5

Teachers’ Grading Habits

42. I tend to use letter grades (e.g., A, B, C) rather than numbers (e.g., 1, 2, 3) in grading.
   1  2  3  4  5

43. If a student fails a test, I will offer him/her a second chance to take the test.
   1  2  3  4  5

44. If a student fails to complete an assignment, I will assign him/her a grade of zero.
   1  2  3  4  5

45. If a student fails to complete an assignment, I will subtract grade points progressively until the assignment is turned in.
   1  2  3  4  5

46. I often give students opportunities to earn extra credit.
   1  2  3  4  5

47. I have my own grading procedure.
   1  2  3  4  5

48. I often confer with my colleagues on grading criteria.
   1  2  3  4  5

Perceived Self-efficacy of Grading Process.

49. Grading is the easiest part of my role as a teacher.
   1  2  3  4  5

50. It is easy for me to assess student achievement with a single grade or score.
   1  2  3  4  5

51. It is difficult to measure student effort.
   1  2  3  4  5

52. Factors other than a students’ actual achievement on a test or quiz make it difficult for me to grade.
   1  2  3  4  5

53. I need grades to teach well.
   1  2  3  4  5
Perceptions of Scale

54. I use a Standard grade scale (0-100), which is an effective means to report grades.
   1  2  3  4  5

55. I use the Standard grade scale (0-100), which is not an effective means to report grades.
   1  2  3  4  5