In the following report, Hanover Research discusses best practices for implementing standards-based grading systems and examines the impact of these systems on student performance.
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EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

This report discusses research and best practices for implementing standards-based grading systems. In broad terms, standards-based grading establishes a structure in which teachers conduct repetitive holistic assessments of student knowledge and skills to describe student mastery of specific content. This structure contrasts with traditional grading systems that reflect student performance across time and which may include non-academic factors, such as student behavior, that are not a direct reflection of content mastery. Advocates for standards-based grading believe that the system allows students to focus on knowledge and skill development. However, given that this system requires teachers, students, and parents to alter their view of grading substantially, districts must approach the transition carefully to ensure the new system achieves the intended outcomes.

This report explores this topic in two sections:

- **Section I: Literature Review** discusses the literature on standards-based grading and the impact of this system on student achievement.
- **Section II: Best Practices** discusses recommendations for implementing standards-based grading, including assessment, assigning formal grades, and promoting stakeholder engagement.

KEY FINDINGS

- **Standards-based grading aims to improve student outcomes by changing the way teachers communicate and students demonstrate progress.** Standards-based grading provides students, teachers, and parents with specific, actionable information regarding student mastery of specific concepts. Furthermore, the flexible timeframes for completing tasks and the opportunities to relearn material help ensure that students learn foundational concepts before progressing to new content.

- **Districts should provide teachers and parents with information about standards-based grading early in the transition process.** Accounts of the Omaha Public School’s adoption of a standards-based grading system note that professional development was critical for the shift to standards-based grading. The district also provided parents with a clear explanation of the system to dispel any misconceptions.

- **By assigning purposeful tasks and offering regular encouragement, teachers can support task completion.** Helping students recognize how homework completion affects learning enables teachers to encourage students to complete all assigned work. Through regular discussions regarding anticipated task deadlines, teachers can also help students make reasonable plans for their progress.
Many districts translate standards-based grades to traditional grades for the purpose of providing a grade on a report card. Often, districts use a four-point scale that corresponds with student mastery of a concept or skill: a score of “0” represents no mastery, a “4.0” score represents the highest level of mastery, and scores along this range represent varying levels of mastery. Teachers can translate these standards-based grades to traditional grades using appropriate intervals.
SECTION I: LITERATURE REVIEW

This section provides an overview of the literature on standards-based grading. Hanover Research used ProQuest, EBSCOhost, ERIC, and Google Scholar to locate these articles; we note, however, that the body of evidence studying standards-based grading is somewhat limited at this time as the concept is still relatively young.

LITERATURE ON STANDARDS-BASED GRADING

Academic, peer-reviewed literature on standards-based grading focuses heavily on the core tenets of this system and highlights its relative benefit in promoting and assessing student learning. As Robert Marzano and Tammy Heflebower explain in Educational Leadership, the system’s core concept is that student grades should accurately reflect achievement levels. Accordingly, in a standards-based grading framework, students do not receive an overall grade that averages their work performance overtime, and that may also include non-academic factors, such as behavior. Instead, they receive multiple grades that reflect their proficiency relative to specific expectations. Teachers also encourage students to practice a concept or skill until they can demonstrate full mastery of each standard.¹

Experts supporting the shift toward standards-based grading assert that the grading system “separates and elevates the advent of learning from points and numbers in a gradebook, lending new inspiration to the ages-old pursuit of education.”² Advocates also note that the system improves student achievement by establishing clear learning targets, accommodating different learning styles, and giving students feedback during the course of instruction.³ Likewise, this system increases fairness in grading by having all students, regardless of teacher, work toward common goals in the same course, thereby decreasing reliance on subjective evaluation criteria.⁴ Finally, the system enhances communication between teachers, students, and parents by giving these stakeholders critical information about student learning goals and progress.⁵

³ Ibid.
⁵ Ibid., p. 30.
Researchers and experts who promote standards-based grading have been critical of different components of traditional methods of grading. As Danielle Iamarino argues in *Current Issues in Education,*

Points-based grading is preoccupied with numbers, rather than communication. Final grades are sourced from gradebook figures (points), and there is often no comprehensive system in place to determine the integrity of the methods through which those figures are collected. This makes it difficult to determine whether or not the resulting final grades are accurate reflections of student proficiency levels.  

At a more practical level, advocates argue that traditional methods make it difficult to properly weigh the different components of a grade. In a traditional grading framework, teachers must ensure that the final grade reflects a student’s ability to reach the objectives that they established at the beginning of the instructional period. Teachers must also award a single grade that provides an accurate measure of student performance relative to the difficulty of the learning tasks.  

Experts also identify some challenges with standards-based grading systems, however. First, teachers and administrators must invest a significant amount of work and time to properly execute the system. Second, teachers must provide parents with additional support to help them understand the system and monitor student progress. Section II addresses best practices for gaining parent and teacher buy-in.

**DISTRICT- AND SCHOOL-LEVEL FINDINGS**

Studies examining the experience of districts that use standards-based grading systems have concluded that the **structure supports student outcomes.** An article discussing the experience of Omaha Public Schools (NE) notes a significant shift in the number of students receiving higher grades after the introduction of the new grading system. Specifically, the district analyzed the number of As through Fs for selected courses in the district’s high schools between 2009 and 2012 and found a significantly higher number of B and C grades and lower numbers of A, D, and F grades. While the district expected the number of D and F grades to decrease with the new system’s method of retake for assignments, the district attributes the lower number of A grades to the elimination extra credit assignments.  

In 2006, instructional leaders in the North Spencer County School Corporation in Lincoln City, Indiana, examined the impact of a standards-based grading system on communication of learning and its alignment to achievement on state testing at their district. The study found evidence that the adoption of a standards-based grading system improved the correlation between ratings in the standards-based system and performance on state assessments. The North Spencer County School Corporation first developed a standards-

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8 Ibid., p. 41.
based system to more accurately communicate student learning and to focus instruction on state academic standards, as measured by the Indiana Statewide Testing for Educational Progress Plus (ISTEP+). Then, the study examined the correlation of ISTEP+ scores to letter grades in the 2001-2002 academic year and to standards-based grading ratings in the 2004-2005 academic year. In the 2001-2002 academic year, 53 percent of students in grades three through six who earned an A or B failed the English and language arts section of the ISTEP+. After the district adopted a standards-based system in the 2004-2005 academic year, only 32 percent of students in grades three through seven who met or exceeded grade level standards failed the same portion of the ISTEP+. Findings were similar for math performance on the ISTEP+ and correlation with standards-based ratings.10

An overview of the implementation of standards-based grading in Lincoln Elementary in St. Charles, Missouri, found that the performance of the school’s students on the 2013 Missouri Assessment of Progress exam improved after the school adopted this system. The students’ mean scores on the mathematics and English sections of exam were higher than the district and state average even as the percentage of students receiving free and reduced-price lunch increased from 56.1 to 60.9 between 2009 and 2013.11 These examples show how districts and schools can identify the potential benefits of these grading systems on students’ performance or the communication of learning progress to students.

SECTION II: BEST PRACTICES

This section discusses best practices for adopting and maintaining standards-based grading. The first subsection discusses how to establish the evaluation standards that guide the grading process. The second subsection reviews the development and selection of assessments for tracking and evaluating student progress. The third subsection builds on this topic by discussing how to convert the rubrics used to measure student progress into traditional academic grades. The section concludes with an examination of best practices for promoting engagement among teachers, students, and parents.

ESTABLISHING EVALUATION STANDARDS

A successful standards-based grading framework should establish clear categories and learning targets that properly assess and track student knowledge. Experts at the Southern Regional Education Board recommend that teachers keep the following questions in mind when preparing evaluation criteria:

- What do all of my students need to know?
- What should all of my students be able to do to demonstrate they know?
- What standards do I want to measure?
- Which outcomes are not being assessed adequately?\(^{12}\)

A review of the standards-based grading system in Spokane Public Schools shows how school districts can address these questions in the development of their evaluation criteria. The school district uses a broad set of principles for establishing learning criteria and standards for its standards-based system (Figure 2.1).

**Figure 2.1: Spokane Public Schools Principles of Grading**

<table>
<thead>
<tr>
<th>PRINCIPLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades and Reports Should Be Based on Clearly Specified Learning Goals and Performance Standards</td>
<td>▪ All students in Spokane Public Schools, no matter their school, will be graded using the same standards.</td>
</tr>
<tr>
<td>Evidence Used for Grading Should Be Valid</td>
<td>▪ Students are assessed on what they are taught.</td>
</tr>
<tr>
<td></td>
<td>▪ “There are no trick questions and no surprises.”</td>
</tr>
<tr>
<td>Grading Should Be Based on Established Criteria, Not on Arbitrary Norms</td>
<td>▪ On a math assessment, students are graded on the math standards assessed, not on arbitrary norms such as poor handwriting or absent names on their paper.</td>
</tr>
</tbody>
</table>

### Not Everything Should be Included in Grades
- Students are not graded as they are learning the information, but after the learning has occurred.
- Students need to have enough “practice” in order to be successful in the “game.”
- “Practice” is learning time – formative, not graded – while “the game” is summative and graded.

### Avoid Grading Based on Averages
- Grading should reflect student performance as of the end of the grading period, rather than across the grading period.

### Focus on Achievement and Report Other Factors Separately
- Students’ achievement should be the only aspect included in their grade.
- Students’ math grades will reflect their math achievement. However, their work habits and responsibilities during math will be reported separately.

**Source:** Spokane Public Schools

In order to implement this rubric, the district uses an evaluation system with four levels of academic proficiency: “Beginning,” “Approaching,” “Meeting,” and “Above.” Figure 2.2 describes each level in this system. As the categories demonstrate, each level focuses exclusively on a student’s capacity to master a concrete set of goals and learning standards. Each level’s evaluation criteria build in a consistent manner that allows students and teachers to understand the targets for reaching these levels.

### Figure 2.2: Spokane Public Schools Overview of Content Achievement Criteria for Grading

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| **Level 1: Beginning** | ■ Students are beginning to identify concepts, develop vocabulary, and/or use skills. They are unable to make connections among ideas or extend the information.  
■ While instructors may expect all students to perform at this level at the beginning of instruction, subsequent practice should lead to increased levels of performance. |
| **Level 2: Approaching** | ■ The difference between a Level 1 and a Level 2 student is the ability to demonstrate some understanding.  
■ At Level 2, a student can correctly identify some concepts and/or vocabulary, and/or use some skills.  
■ Students at Level 2 cannot make connections among ideas or demonstrate their learning without support. |

In addition to these categories, the district also establishes separate criteria to provide parents with indicators of their child’s progress on work habits and social development. Figure 2.3 shows the criteria that appear in the district’s rubric. According to the district, separating learning evaluation from work habits allows teachers to communicate about a student’s work habits without distorting a student’s achievement in learning course content.

Figure 2.3: Spokane Public Schools Work Habits Criteria

<table>
<thead>
<tr>
<th>WORK HABITS AND SOCIAL DEVELOPMENT CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 = CONSISTENTLY 2 = SOMETIMES 1 = RARELY</td>
</tr>
<tr>
<td>Social Development</td>
</tr>
<tr>
<td>Follows School and Classroom Rules</td>
</tr>
<tr>
<td>Accepts Responsibility for Actions</td>
</tr>
<tr>
<td>Solves Problems in Positive Ways</td>
</tr>
<tr>
<td>Solves Problems in Positive Ways</td>
</tr>
<tr>
<td>Responds Appropriately to Adults and Students</td>
</tr>
<tr>
<td>Participation That Promotes Learning</td>
</tr>
<tr>
<td>Conversation and Behavior are focused on Task</td>
</tr>
<tr>
<td>Works Cooperatively</td>
</tr>
<tr>
<td>Follows Directions</td>
</tr>
<tr>
<td>Engages in Classroom Activity</td>
</tr>
<tr>
<td>Seeks Assistance When Needed</td>
</tr>
<tr>
<td>Completes Assignments</td>
</tr>
<tr>
<td>Turns in Work on Time</td>
</tr>
<tr>
<td>Quality Work</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Reading</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Math</td>
</tr>
<tr>
<td>Science</td>
</tr>
<tr>
<td>Social Studies</td>
</tr>
<tr>
<td>Fitness and Health</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Music</td>
</tr>
</tbody>
</table>

Source: Spokane Public Schools

14 Adapted from: Ibid., p. 9.
15 Ibid.
16 Adapted from: Ibid., p. 11.
ESTABLISHING LEARNING TARGETS

Clear learning targets are a central component of standards-based grading systems. Educators from Omaha Public Schools found that developing proficiency scales – holistic rubrics that look at student learning goals – for each course’s learning goal and standard was an important part of the district’s adoption of a standards-based grading system.\(^\text{17}\) As three of the consultants and supervisors who were involved in this initiative wrote in *Principal Leadership*:

Proficiency scales are summative in nature and do not identify the minute details commonly found in an analytical rubric. Instead they characterize the knowledge and skills that students need to have and be able to do as basic, proficient, and advanced. Many teachers had never collectively worked through what was to be taught and what success looks like, unit by unit, and they found the process meaningful.\(^\text{18}\)

In order to maximize the benefits of using these learning targets, districts and schools should use representative teams of master teachers to develop rubrics with feedback from colleagues, reduce the number of target concepts to help teachers focus on tracking consistent growth in specific areas, and pare down curricula to help teachers teach and reteach core material. As the authors explained, “this ‘less is more’ approach has increased student learning and trend scores.”\(^\text{19}\)

DEVELOPING AND SELECTING ASSESSMENTS

In addition to developing evaluation criteria and learning targets, teachers must also develop or select evaluation tools for tracking and measuring student progress. These assessments include *formative assessments, which track student progress during the course, and summative assessments*, which teachers administer at the end of the course.

At a broad level, the Southern Regional Education Board recommends that teachers use the following principles to guide assessment selection:

- Use summative assessments to frame performance goals as desirable outcomes.
- Show students criteria in advance to help them understand these standards.
- Assess students before beginning the instruction period.
- Offer students appropriate assessment choices.
- Provide students with specific, clear feedback as early and often as possible.
- Encourage self-assessment and goal-setting among students.
- Allow new evidence to replace old evidence in student assessments\(^\text{20}\)

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\(^{18}\) Ibid.

\(^{19}\) Ibid.

Similarly, the Sheridan County School District in Ranchester, Wyoming, suggests that teachers follow five key recommendations for developing or selecting assessments (Figure 2.4).

**Figure 2.4: Sheridan County School District Recommendations for Developing or Selecting Assessments for Standards-Based Grading**

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
<th>DISTRICT NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Assessment Must Align to Grade Level or Course Outcomes</td>
<td>▪ While an assessment can cover more than one outcome, teachers must be clear which parts of the assessment connect to which outcomes.</td>
</tr>
<tr>
<td>The Assessment Needs to Measure Individual Proficiency</td>
<td>▪ While group work and collaboration is important, teachers should only evaluate work that they can clearly attribute to an individual student.</td>
</tr>
<tr>
<td>The Assessment Must Be Valid So That It Accurately Assesses the Intended Material in a Fair and Consistent Manner</td>
<td>▪ An assessment that evaluates a student’s ability to analyze a topic is not valid if it only asks students to recall basic facts about a topic.</td>
</tr>
<tr>
<td></td>
<td>▪ A teacher can improve the validity of an assessment by aligning these items to level 2 and including additional assessment items in levels 3 and 4.</td>
</tr>
<tr>
<td>The Rubric Should Provide the Structure for the Assessment</td>
<td>▪ Teachers must make the assessment items align to the levels of the rubric since they will use the assessment to give students feedback on the rubric on a component-by-component basis.</td>
</tr>
<tr>
<td>The Depth of Knowledge Assessed Needs to Match the Level of Instruction and the Corresponding Outcome</td>
<td>▪ If the learning target asks students to analyze a topic, then the assessment should also be based on analysis tasks.</td>
</tr>
<tr>
<td></td>
<td>▪ This part of an assessment requires careful planning – using analysis-level verbs in the task does not guarantee that students are doing analysis-level work.</td>
</tr>
</tbody>
</table>

Source: Sheridan County School District

Researchers also recommend building assessments around specific concepts or groups of concepts. This method allows students to see the breakdown of each concept in their tests instead of receiving an ambiguous percentage on a test without additional guidance. This approach also allows instructors to target instruction to help students, including gifted or struggling students, who may benefit from additional instruction in a specific area.

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DEVELOPING FORMATIVE ASSESSMENTS

In one report, standards-based grading advocates suggest that teachers use three forms of formative assessments during the course of instruction: probing discussions, unobtrusive assessments, and student-generated assessments. Figure 2.5 describes these methods.

**Figure 2.5: Recommendations for Formative Assessments**

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
</tr>
</thead>
</table>
| **Probing Discussions** | - A teacher meets with a student and questions him or her about the measurement topic, making sure to ask questions that involve 2.0 level content, 3.0 level content, and 4.0 level content.  
- The teacher has the flexibility to continue asking questions until he or she is confident about a student’s level of proficiency.  
- At the end of the discussion, the teacher determines the student’s level of performance using the proficiency scale. | - If the teacher decides that the student has demonstrated adequate understanding of level 2.0 content and partial understanding of level 3.0 content, the student receives a score of 2.5.  
- If the teacher determines that the student does not respond accurately to level 2.0 and 3.0 content but demonstrates partial understanding of this information, the student receives a score of 1.0 |
| **Unobtrusive Assessments** | - A teacher develops a performance scale and observes students – who may not know they are being assessed – and evaluates them. | - A physical education teacher has developed a four-point proficiency scale for the overhand throw.  
- Level 2.0 content involves the simpler aspects of this skill, level 3.0 content is the target performance level, and level 4.0 is an advanced level of performance.  
- The teacher observes a student executing an overhand throw that meets the target level of performance. The teacher records a 3.0 score. |
| **Student-Generated Assessments** | - The student approaches the teacher and proposes what he or she will do to exhibit a specific level of performance on the proficiency scale. | - A student who is currently at a level 3.0 in a science course proposes creating a graphic organizer comparing plants and animals on specific traits and explains it to the class. |

Source: Marzano and Heflebower

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DEVELOPING SUMMATIVE ASSESSMENTS

In developing summative assessments, teachers should distinguish between teaching activities through which students learn and practice and summative assessments through which students demonstrate their knowledge. In concrete terms, the Jessamine School District in Kentucky advises teachers to:

- Replace final exams with periodic summative assessments.
- Require students to pass each summative assessment to complete a portion of the course.
- Require students to pass all summative assessments to earn credit for the course.
- Require students to complete alternate credit opportunities when they do not pass summative assessments.
- Enter grades using the district’s standards-based alphabetic grading scale.
- Revise the summative grade based on the most recent summative assessment results, especially for standards that appear multiple times over the course.\(^{24}\)

DEVELOPING REASSESSMENTS

In addition to developing assessments, teachers can also create reassessments to allow students to retake examinations to demonstrate improved mastery of a subject. While teachers can have students retake the same examination, Sheridan County School District has developed a five-step process for creating individualized reassessment plans (Figure 2.6).\(^{25}\)


\(^{25}\) Figure adapted from: “Standards-Based Learning Teacher Handbook 2014 – 2015,” Op cit., p. 8
According to the district, the reassessment agreement supports student learning by ensuring that relearning takes place before reassessment. This process also clarifies the reassessment process for the student and the teacher and identifies how the teacher will reassess student performance to assuage student concerns about the exam.²⁶

ASSESSING LATE SUBMISSION OF STUDENT WORK

Classroom policies must also address concerns related to late work and create incentives for students to finish incomplete assignments. Former teacher Jeanetta Miller encourages teachers to be flexible with deadlines and communicate with students about work completion on a regular basis, writing in the *English Journal* that,

> The teacher can say, “I’d like to begin responding to your current work-in-progress this week. Please get a draft to me as soon as you can. If I don’t have one within a week, we should talk about your situation.”²⁷

²⁶ Ibid.
²⁷ Miller, J. J. “A Better Grading System: Standards-Based, Student-Centered Assessment.” *English Journal,*
Miller highlights several benefits associated with this approach. First, the approach allows teachers to avoid the process of setting a single due date for all students and developing a penalty to enforce the deadline that could distort student achievement. The process of logging student progress from the dialogues also makes it easy for teachers to determine which students need attention and “sends a clear message to students that the teacher values thinking and writing more than compliance.” Finally, by inevitably staggering the dates when students complete assignments, this method “prevents the teacher from feeling overwhelmed by five class sets of essays in one day.”

Similarly, Sheridan County School District advises teachers to discuss the importance of practice with students who have not completed homework assignments and set goals for future work. Teachers can also require students to work on assignments during class or to come in during a flex period or after school. Finally, teachers should provide students with feedback about their work habits by regularly recording homework in the grade book and using the information to support student learning.

In Omaha Public Schools, the district’s teachers made practice and coursework “more purposeful” so that students felt the value of completing these assignments. Nevertheless, many of the district’s teachers initially opposed the idea of giving students multiple chances to master a learning target and submit late work without any penalties. As the article notes, “those [issues] continue to be hot topics of conversation, but teachers are starting to see the value of not punishing students for making mistakes while they are learning new skills.”

**TRANSLATING STANDARDS-BASED EVALUATIONS INTO LETTER GRADES**

Many schools rely on a four-point scale with clear learning targets to align standards-based grades with grades awarded on a traditional grading scale. The Southern Regional Education Board recommends that teachers use the following guidelines when preparing for this process:

- Link grading procedures to the intended learning goals.
- Use criterion-referenced standards as reference points to distribute grades.
- Limit the valued attributes included in grades to individual achievement.
- Use representative samples of student performance rather than including all scores in a final grade.
- “Grade in pencil” and keep records so they can be updated easily.
- “Crunch” numbers carefully – if at all – during this process.
- Use quality assessment and properly recorded evidence of student achievement.

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28 Ibid.
29 Ibid.
Discuss and involve students in assessment, including grading throughout the learning process.\(^{31}\)

In concrete terms, the process of translating grades from standards-based evaluations to standard letter grades generally revolves taking an evaluation scale with a 0 to 4.0 range and establishing corresponding letter grades. Figure 2.7 shows two approaches to translating this four-point scale into letter grades or GPA ranges.

**Figure 2.7: Grade Translation Methodologies for Four-Point Standards-Based Scales**

<table>
<thead>
<tr>
<th>MARZANO AND HEFLEBOWER</th>
<th>SHERIDAN COUNTY SCHOOL DISTRICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.51 to 4.00 = A</td>
<td>2.17 to 2.33 = C</td>
</tr>
<tr>
<td>3.00 to 3.50 = A-</td>
<td>2.00 to 2.16 = C-</td>
</tr>
<tr>
<td>2.84 to 2.99 = B+</td>
<td>1.84 to 1.99 = D+</td>
</tr>
<tr>
<td>2.67 to 2.83 = B</td>
<td>1.67 to 1.83 = D</td>
</tr>
<tr>
<td>2.50 to 2.66 = B</td>
<td>1.50 to 1.66 = D-</td>
</tr>
<tr>
<td>2.34 to 2.49 = C+</td>
<td>0.00 to 1.49 = F</td>
</tr>
<tr>
<td>4</td>
<td>3.4 to 4.0 GPA</td>
</tr>
<tr>
<td>3</td>
<td>2.5 to 3.3 GPA</td>
</tr>
<tr>
<td>2</td>
<td>2.0 to 2.4 GPA</td>
</tr>
<tr>
<td>1</td>
<td>1.5 to 1.9 GPA</td>
</tr>
<tr>
<td>0</td>
<td>0.0 to 1.4 GPA</td>
</tr>
</tbody>
</table>

Source: Marzano and Heflebower, Sheridan County School District\(^{32}\)

One of the benefits of this methodology is the opportunity to develop assessment ranges based on different scales for measuring student progress. In the case of Marzano and Heflebower’s approach in *Educational Leadership*, instructors can use proficiency scales that track student mastery of a range of subjects on a 0 to 4.0 proficiency scale. Figure 2.8 shows an example of this scale. In this chart, each component quantifies student understanding along a continuum from lack of understanding – 0 – to mastery of a given subject – 4.0. A score of 3.0 contains the target instructional goal for a topic and serves as the scale’s fulcrum.

**Figure 2.8: Standards-Based Grading Proficiency Scale for a Middle School Math Student**

<table>
<thead>
<tr>
<th>MEASUREMENT TOPIC</th>
<th>SCORE</th>
<th>.5</th>
<th>1.0</th>
<th>1.5</th>
<th>2.0</th>
<th>2.5</th>
<th>3.0</th>
<th>3.5</th>
<th>4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Systems</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Computation</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio/Proportion/Percent</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patterns</td>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Equations</td>
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<tr>
<td>Data Analysis</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Marzano and Heflebower\(^{33}\)

Figure 2.9 describes each point in the scale’s range. As Figure 2.9 shows, teachers can translate evaluations from this system over to traditional grades on a five-point scale.


Teachers can apply proficiency scales and this translation to other areas, including homework, cooperation, and personal responsibility.\textsuperscript{34}

**Figure 2.9: Description of Proficiency Scale Scores**

<table>
<thead>
<tr>
<th>SCORE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>More complex content.</td>
</tr>
<tr>
<td>3.5</td>
<td>In addition to score 3.0 performance, partial success at score 4.0.</td>
</tr>
<tr>
<td>3.0</td>
<td>Target objective.</td>
</tr>
<tr>
<td>2.5</td>
<td>No major errors regarding score 2.0 content, and partial success at score 3.0 content.</td>
</tr>
<tr>
<td>2.0</td>
<td>Simpler content.</td>
</tr>
<tr>
<td>1.5</td>
<td>Partial success at score 2.0 content, but major errors or omissions regarding score 3.0 content.</td>
</tr>
<tr>
<td>1.0</td>
<td>With help, partial success at score 2.0 content and score 3.0 content.</td>
</tr>
<tr>
<td>.5</td>
<td>With help, partial success at score 2.0 content, but not at score 3.0 content.</td>
</tr>
<tr>
<td>0.0</td>
<td>Even with help, no success.</td>
</tr>
</tbody>
</table>

Source: Marzano and Heflebower\textsuperscript{35}

Sheridan County School District also uses a similar rubric for student evaluations:

**Figure 2.10: Sheridan County School District Proficiency Rubric**

<table>
<thead>
<tr>
<th>SCORE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>The student demonstrates an in-depth understanding of the material by completing advanced applications of the material.</td>
</tr>
<tr>
<td>3.5</td>
<td>In addition to a 3.0 score, the student demonstrates in-depth inferences and applications with partial success.</td>
</tr>
<tr>
<td>3.0</td>
<td>The student demonstrates proficiency on the complex, targeted knowledge and skills for the class.</td>
</tr>
<tr>
<td>2.5</td>
<td>In addition to a 2.0 score, the student demonstrates partial knowledge of 3.0 elements.</td>
</tr>
<tr>
<td>2.0</td>
<td>The student understands the foundational material, but is still working to master application of the concepts and skills.</td>
</tr>
<tr>
<td>1.5</td>
<td>The student demonstrates understanding of all 2.0 elements with help and independent understanding of some 2 elements.</td>
</tr>
<tr>
<td>1.0</td>
<td>The student is able to demonstrate an understanding of all of the foundational material with support.</td>
</tr>
<tr>
<td>.5</td>
<td>The student demonstrates understanding of some 2.0 elements.</td>
</tr>
<tr>
<td>0.0</td>
<td>Even with assistance from the teacher, the student shows no understanding of the material.</td>
</tr>
</tbody>
</table>

Source: Sheridan County School District\textsuperscript{36}

\textsuperscript{34} Ibid., p. 37.  
\textsuperscript{35} Ibid., p. 38.  
During the course of instruction, the district recommends that teachers use the following guidelines to assign scores to student progress:

- A student’s complete body of work must show proficiency in a subject.
- Evidence of proficiency can come from any part of a student’s work.
- A student cannot receive a score higher than 0.5 until demonstrating proficiency in all elements of the prior level with or without support.
  - Once the student demonstrates this proficiency at a specific level, the amount of support that the student needs determines whether they receive a 1.0, 1.5, or 2.0.
- A student must demonstrate proficiency on the lower levels of the rubric prior to receiving scores for proficiency at the higher levels.
- Proficiency must be demonstrated on all of the elements on a rubric — it is never acceptable to group an entire level of the rubric together when assigning a score.  

Not all districts rely on a four-point scale, however. Jessamine School District uses a six-point letter grade scale that also easily translates to a traditional grading scale (Figure 2.11). The district requires teachers to determine the final grade by averaging the standard grades from each summative assessment.

**Figure 2.11: Jessamine School District Six-Point Letter Grade Scale**

<table>
<thead>
<tr>
<th>Standards-Based Grade</th>
<th>Traditional Grade/GPA Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E – Exceptional</td>
<td>A: 98 – 100</td>
<td>The student demonstrates analysis and applications that exceed expectations.</td>
</tr>
<tr>
<td>M – Mastery</td>
<td>A: 90 – 97</td>
<td>The student demonstrates analysis and applications that allow them to function independently at a high level.</td>
</tr>
<tr>
<td>A – Approaching Mastery</td>
<td>B: 80 – 89</td>
<td>The student demonstrates knowledge and skills that allow them to function independently with few misconceptions.</td>
</tr>
<tr>
<td>P – Partial Mastery</td>
<td>C: 70 – 79</td>
<td>The student demonstrates some misconceptions and partial understanding of the knowledge and skills.</td>
</tr>
<tr>
<td>N – No Mastery</td>
<td>F: 1 – 69</td>
<td>The student does not demonstrate understanding of knowledge or skills.</td>
</tr>
<tr>
<td>I - Incomplete</td>
<td>F: 0</td>
<td>Missing work.</td>
</tr>
</tbody>
</table>

Source: Jessamine School District

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37 Adapted from: Ibid.
38 Ibid., p. 2.
PROVIDING DIFFERENTIATED TEACHING IN STANDARDS-BASED CLASSROOMS

Sheridan County School District recommends that teachers adopt flexible methods of evaluation, especially for students who struggle with a specific type of assessment:

If a student has trouble with traditional pencil-and-paper assessments, you could assess that student’s knowledge through a verbal assessment or use evidence from class discussions, performance on assigned tasks or other quick, informal assessments to determine the student’s level of proficiency. If a student proposes an alternative way to demonstrate advanced, in-depth understanding of an outcome, the teacher should make sure the task is sufficiently rigorous and aligns to the outcome it is intended to measure, then assess the student’s work appropriately.\textsuperscript{40}

As a part of this approach, teachers may also use meetings to provide students with individualized feedback. As Jeanetta Miller notes, “students need timely feedback on work in progress that salutes original ideas, solid research, and effective use of skills as well as offering suggestions for improvement.”\textsuperscript{41} Teachers can also ask students to provide information about the current status of a project for the teacher.\textsuperscript{42}

Finally, for students with individual education or 504 plans, Jessamine School District offers specific accommodations, including changes in the quantity of work, time allotted, presentation format, and type of evidence collected. While these adjustments should address the accommodations in these plans, the district states that the changes should not reduce learning expectations, adjust content, or reduce the rigor of the material to be mastered, or change the grade calculation. The adjustments also should not alter test expectations, the difficulty level, or the constructs or content being measured.\textsuperscript{43}

PROMOTING STAKEHOLDER BUY-IN AND ENGAGEMENT

In transitioning to a new grading framework, districts must also develop a plan for gaining teacher, student, and parent buy-in. Among the school districts in this study, Omaha Public Schools uses several key practices to improve instructor buy-in during the process of transitioning from traditional grading systems to standards-based grading. These practices include:

- Hiring outside consultants to train all teachers involved in the early stages of the transition.
- Training began with explaining the system, reasons for moving to standards-based education, the research and philosophy behind the concept, and specifics about standards-based education in practice.


\textsuperscript{42} Ibid.

As training sessions progressed, the focus shifted to the actual components of the implementation process.\(^{44}\)

The district also notes that providing teachers and staff with initial training before implementation of the system and follow-up training sessions after the first grading period would have improved the district’s implementation of this system.\(^{45}\)

To earn student buy-in, researchers, experts, and school districts recommend that teachers set learning expectations early, engage them in the evaluation process, and meet with them and provide feedback regularly to improve student engagement. Sheridan County School District recommends that teachers set learning expectations and targets at the very beginning of the course to eliminate the misconception that “only the tests count” in their evaluation. The district also suggests that teachers:

- Prepare purposeful tasks that connect to the outcome and use consequences that focus on the students’ behavior if they do not complete the work.
- Remind students that the evaluations will assess every component of their work such as class discussions and homework to convey the value of these assignments.\(^{46}\)

The district also tells teachers that students will not do their work if their instructors give them the perception that they will not enforce these principles and their assignments are not important to their final evaluation.\(^{47}\)

In addition, teachers may set up appointments with students toward the end of the first marking period to discuss their progress and set new goals. In particular, the meeting should focus on major projects and recent work instead of small activities and work done early in the semester. Teachers and students can also agree not to assess standards for which students did not have time to demonstrate progress.\(^{48}\)

Finally, districts may gain parent buy-in by providing written explanations of the new grading system early in the transition period. Figure 2.12 shows a sample written explanation of standards-based grading prepared and distributed by Jeanetta Miller.

\(^{45}\) Ibid.  
\(^{47}\) Ibid.  
Students earn points for engagement in the process of learning and for progress toward mastery of standards as demonstrated by the student’s written and spoken performance and as documented by the student’s log and portfolio. In addition, each marking period, there will be one or two reading exams that combine an essay prompt with objective questions about texts, literary terms, and conventions of print. Each marking period will conclude with a student-teacher conference based on log, portfolio, exam, and a reflective essay called State of the Student. Students are expected to be active participants in the evaluation process. Students earn points for progress toward mastery of each standard:

- 10 points = Documented mastery
- 9 points = Major documented progress
- 8 points = Documented progress
- 7 points = Documented attempt

Each student’s progress toward mastery of standards is then converted into a conventional grade percentage derived from the number of points earned out of the total possible:

<table>
<thead>
<tr>
<th>Category</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Standards</td>
<td>150 points (10 each for 15 standards)</td>
</tr>
<tr>
<td>Collaboration Standards</td>
<td>80 points (10 each for 8 standards)</td>
</tr>
<tr>
<td>Reading Exams</td>
<td>50 to 100 possible points</td>
</tr>
<tr>
<td>State of the Student</td>
<td>50 possible points</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>330 to 380 possible points</strong></td>
</tr>
</tbody>
</table>

Source: Miller

After distributing this document, Miller received questions from parents. In order to assuage their concerns, Miller thanked them for their interest, listened carefully, and provided additional details about the system. “Without exception,” she writes, “the response [from parents] was something along the lines of ‘makes sense.’” Omaha Public Schools distributed similar documents in school newsletters and on district web pages.

Education experts also recommend that districts provide parents with information about the grading system as early as possible. In addition to discussing the system with parents and students the year before implementation, districts should address this issue in back-to-school sessions, parent-teacher association meetings, or open houses during the year of implementation.

Districts can also host focus groups for parents, teachers, and students to determine ways to improve descriptions of the new grading system, clear up misconceptions, and develop buy-in strategies for the adoption of this system. This strategy is especially effective for honors students and their parents who are concerned that the process may affect GPAs and potential scholarship opportunities. Incorporating unions and their leaders at the beginning

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49 Ibid., p. 114.
50 Ibid., p. 113.
52 Ibid., p. 33 – 34.
stages of the adoption the process can also strengthen buy-in from teachers, students, and parents.\textsuperscript{53}

\textsuperscript{53} Ibid.
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