

**Not your mother's gradebook:  
Transitioning to standards-based grading**

presented by  
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*For purposes of our discussion today,  
"TO GRADE" means to assign points or letters to a piece of student work.*

The "how to" implement standards based grading is important—but it's pretty hard to change hearts and minds unless people see where their beliefs come from.

**Why do teachers grade student work?**

- \_\_\_1. To give students feedback about their learning.
- \_\_\_2. To assess student understanding or mastery.
- \_\_\_3. So parents can know if students are doing the work.
- \_\_\_4. So parents can know how well students are mastering the material.
- \_\_\_5. So I can have enough grades in the gradebook.
- \_\_\_6. To make sure students did it.
- \_\_\_7. To reward students for doing it.
- \_\_\_8. To show students there's a consequence for not doing it.
- \_\_\_9. So I can sort students into *very responsible, usually responsible, and irresponsible.*
- \_\_\_10. To help students who test poorly to "earn" a better grade

Most of these goals can be accomplished without *grading*.

### Do grades reward **WORKING** or **LEARNING**?

Survey of 300 middle school parents in Lincoln, Nebraska public schools  
 "What factors should teachers include when determining your child's academic grade?  
 (please check all that apply)"

	Percentage who thought the factor should count in the grade	
Attendance		38%
Extra credit		74%
Penalties for late work		71%
Attitude/behavior		62%
Knowledge/understanding		94%
Participation		80%
Effort/completion		90%
Group work		57%
Other		7%

*Which factors above represent behavior?*

*Which factors above represent work?*

*Which factors above represent learning?*

Is the grade determined by the ability to complete massive amounts of work or to show mastery of content?

For instance, must all homework be completed if mastery is demonstrated?  
 ~What if grades reflected what students really learned,  
 not which work they chose or were able to complete?

**Some kids test poorly? Rethink the test.**

Is adequate time provided?

What resources can the student use?

Is it a true measure of understanding or of rote memory?

Can assessments be retaken after remediation?

Can another task show mastery? ie: a verbal test.

What if you couldn't take the summative without passing 3 formative tests?

**More pretest, less retest!****Assessments/retests could be**

- ✓ Selected response  
*(Multiple choice, TF, matching, short answer)*
  
- ✓ Essay assessment
  
- ✓ Performance assessment  
*(demonstration of skill, verbal explanations, or product created)*
  
- ✓ Personal communication—formal or informal  
*(interviews, oral exams, class discussions, clicker response)*

(Stiggins, 2005)

### Evolution of an assessment

*Objective: TSW be aware of the important people and events in the history of the middle school movement.*

*What task is the most appropriate for the depth of knowledge?*

Research paper → multiple choice quiz → timeline →

- Students were given assigned reading about middle school history and told they would be making a timeline in class
- Surprise no-count quiz—students complete the quiz alone
- Students meet in groups and arrive at consensus answers
- Teacher explains answers to quiz
- Then groups make and share timelines.

(research shows practice tests are more effective than rereading or graphic organizers because they stimulate retrieval memory)

**Standards-based grading is not just about changing grading—  
it's a complete overhaul of the teaching-learning process.**

<b>CURRICULUM</b>	Outcomes based, prioritized (less, less, less)
<b>INSTRUCTION</b>	A series of masteries (instruction, application, feedback, revise instruction, differentiate) Less whole group instruction, more small groupings and computer assisted instruction
<b>ASSESSMENT</b>	Not an event but a process Time needed to learn is varied

Stop calling it SBG, call it Standards Based Education because it's not just about judging

*Standards Based Education ensure clear learning targets, common ways to assess student progress and effective communications with students and parents/guardians.*

(From Federal Way School District web site, Washington State).

***In a nutshell:***

Everybody works  
 We only grade learning  
 We don't keep score during practice

**PARADIGM SHIFT--CONCEPTUAL**

- ***empower students*** to take control of their own learning  
 (move the locus of control from us-→to them)
- grades as judgment and external control→***grades as feedback***
- behaviorist(control by reward/punishment)→dignity and ***trust in the learning relationship***
- gaming the system-→***removing the system***
- all experience the same learning→***different ways*** of showing learning and a different type of learning
- time fixed/achievement varies→achievement fixed/***time varies***
- external motivation→***internal motivation***

From *The Leader Herald*, article "Parent notes concerns about grading policy"  
 .....Brenda Glover, a parent of two students in the district, said her children are no longer on the honor roll because they aren't being given enough homework to prepare them for exams and other course curriculum that weigh heavily on a student's overall grade.....

## Paradigm shift--practical

Old paradigm	New paradigm	
<p><b>Sorting and ranking</b> Norm referencing Grading on the bell curve</p>	<p><b>Teaching and learning</b> Criterion-referenced Striving for a "whale" curve</p>	<p>More success for more students</p>
<p>Crunching numbers Averaging (the mean) <b>Grades "calculated"</b></p>	<p>Body of evidence Median or mode <b>Grades "determined" using professional judgments</b></p>	<p>One bad grade should not seal your fate.  50's are a fix for the averaging system</p>
<p><b>All grades permanent</b> Moment-in-time assessments Do you know it today at 10:00?</p>	<p><b>Test for mastery/ grade in pencil</b> New information <i>replaces</i> old information Retakes after remediation</p>	<p>"What's really hurting education is ink" (Canady)</p>
<p><b>All assignments included in grade</b> both formative and summative</p>	<p><b>Only summative assessments "count"</b></p>	<p>The most recent evidence of learning is the most accurate.</p>
<p><b>Homework counts in the grade</b>, including late penalties</p>	<p><b>Homework does not count in the grade</b>—it is used to check for understanding, provide feedback to the learner and practice for tests.</p>	<p>"We don't keep score during practice"</p>
<p><b>Non-academic factors part of grade</b> (effort, lateness)</p>	<p><b>Only achievement "counts" in the grade</b> Work habits/life skills are shown as a separate category on the report card</p>	<p>Grades represent learning not amount of work completed or compliance.</p>

*"For parents the shift is from a timeline of assessment written in ink to a collection of barometers and thermometers in which student's level of understanding is displayed and fluctuating"*

Matt Townsley, Director of Instruction and Technology  
Solon Community School District, Solon, Iowa

### 6<sup>th</sup> grade social studies gradebook organized by assignments

Unit—Ancient civilizations						
Timeline	Activity/change	Activity/govt	Chart/govt	Map	Essay	Unit test
75	60	60	70	85	87	84

### 6<sup>th</sup> grade social studies gradebook organized by standards

Standard			Standard			standard		
Continuity/change			Principles of govt			Geography→culture		
Ancient	Middle ages	Mayan Aztec	Ancient	Middle ages	Mayan Aztec	Ancient	Middle ages	Mayan Aztec
timeline 75	timeline 80	timeline 70	Activity 60	Activity 70	Chart 80	Map 85	Map 90	Map 95
activity 60	webqst 87	activity 75	Chart 70	Chart 75	Chart 65	Essay 87	Essay 92	Essay 94
Test 30/35	Test 25/35	Test 22/35	Test 29/35	Test 19/35	Test 23/35	Test 25/30	Test 20/30	Test 28/30

unit test for each unit

35 points were about continuity/change

35 points were about principles of government

30 points were about geography/culture

Many schools are consolidating standards into broader power standards or learning targets (a shorter list of 20-40 standards for the year)

*Are we covering less—yes, but they are learning more.*

**Normandy School District-- a recently unaccredited school district in St. Louis, MO**

Consolidated state standards into smaller number of power standards

GLE tracker—tracked by common assessment every 6 weeks or less (not part of grade)

target populations—students who are 10 pts below proficient and students who are 10 pts below basic (parents are asked to commit to Saturday school)

## **The formative/summative process**

*Before the summative--*

- have you differentiated?
- do students see the relationship between formative tasks (ie: homework/classwork) and the summative assessment?

*Giving a summative assessment*

- ✓ Don't give until most students are ready
- ✓ Do students know the nature and organization of the summative?
- ✓ Have you provided the option testing environment?
- ✓ Student: "Do I have to take it if I'm not ready?"—yes, because you need to know what you don't know.

### *Remediation for the retest*

- ❖ To qualify for the retest--you must be remediated (redeemed)
- ❖ Remediation should be *ACTIVE*--they have to do something, produce something, not read something or get direct instruction.
- ❖ Remediation could be incorporated into RTI
- ❖ Options for remediation
  - test corrections
  - take-home review quizzes
  - view and respond to video
  - computer assisted tutorials/webquests
  - graphic organizers/other tools
  - peer tutoring with activity or reflection
  - teacher help sessions with activity or reflection
  - complete missing homework--*only if you are confident that will truly remediate*

### *Issues for retakes*

- ✓ What evidence of readiness is required? (like portfolio, submit evidence, performance)
- ✓ How many test options will I create?
- ✓ How different can the versions be? What are you comfortable with?
- ✓ What is the optimum retake environment? (Was it the test or the conditions under which it was given?)

**Jeff Harding Math teacher, Mundelein High School, Mundelein, Illinois**

### **Mr. Harding's routines**

#### **Class time**

- warm-ups done in groups (sometimes problems from the past) (ungraded)
- virtually no homework, but practice problems available on line (ungraded)
- voting on answers to problems introduced in class
- free write—"what you learned today" and share in small groups

#### **Formative assessments**

About twice a week or at the conclusion of an instructional objective, **exit slips (quizzes)** are graded and recorded. These are 65% of the grade. These take about 10-15 minutes. Green questions are basic skills, yellow are multiple steps, red are new or require application. (see sample next page)

#### **Summative assessments**

6 common assessments are 35% of the grade. These grades are fixed.

He scores these a second time by grouping the questions by Instructional Objective which can replace the previous exit slip grade.

(He wrote a formula to tag the questions by instructional objective in Excel and then import them into the gradebook.)

**Mr. Harding's Pre-Calculus****Exit Slip #5**

Name: \_\_\_\_\_

**Instructional Objective #2: I can sketch the graphs of sine and cosine functions.****Green (1 point each)**

1. What is the amplitude of the function  $y = 6\sin x$  ?
2. What is the length of the period for the function  $y = 3\cos(2x)$  ?
3. Where is the midline in the function  $y = -3 + 5\sin(6x)$  ?

**Yellow (3 points each)**

4. Sketch one cycle of the graph  $y = -7\sin(5x)$ .
5. Sketch one cycle of the function  $y = 2 + 5\cos(3x)$ .

**Red (2 points)**

6. Write the equation of the function that has the following criteria:  
a midline of 4  
an amplitude of 3  
a period of  $\frac{\pi}{3}$   
the first half of the cycle lies under the midline

**(Maximum grade is 10 points)**

Exit slips may be retaken after proven remediation ("Make your case that you are ready").

If they outperform their previous quiz, the new score replaces the old score. If they underperform, the quiz is used as remediation and reteaching.

### Jeff's GRADEBOOK in PowerSchool

	IO1 Evaluate six trig functions on the unit circle				IO2 Sketch graphs of sine and cosine functions				IO3 Given one trig value, find the remaining trig values				IO4 Solve trig equations in radians with argument x			
Student 1	7. 5	10	10		10				10	10			6.5	10	7	
	9/ 5	9/2 4	9/2 6		9/26				9/10	9/26			9/1 4	9/2 4	9/2 6	
	Final: 10				Final: ?				Final: 10				Final: 9			
Student 2	3	8	10		5	9			10	9			3.5	9.5	6	9
	9/ 5	9/6	9/2 6		9/26	10/2			9/11	9/26			9/1 4	9/2 0	9/2 6	10/2
	Final: 10				Final: 9				Final: 9.5				Final: 9			
Student 3	8	10			10				9	10			9.5	10		
	9/ 5	9/2 6			9/26				9/10	9/26			9/1 4	9/2 6		
	Final: 10				Final: ?				Final: 10				Final: 10			
Student 4	8. 5	8			10				8.5	7.5			8.5	8		
	9/ 5	9/2 6			9/26				9/10	9/26			9/1 4	9/2 6		
	Final: 8.5				Final: ?				Final: 8.5				Final: 8.5			

numbers shown are scores on the exit slip quizzes with the dates below the scores

"Final" is Jeff's judgment on the body of evidence for that objective, if he feels he has enough evidence to judge. The final scores for each objective are then averaged for 65% of the grade.

Six common summative assessments are 35% of the grade.

### Documenting without grading

McNally High School English 11

Edmonton, Alberta, Canada

<i>Classroom assessment(formative)</i>	<i>Weight</i>	<i>Task score</i>	<i>Out of</i>	<i>Mark</i>	<i>Class average</i>
<i>Reading comprehension</i>	<i>0.0</i>	<i>25</i>	<i>45</i>	<i>56%</i>	<i>53%</i>
<i>Forrest Gump persuasive</i>	<i>0.0</i>		<i>15</i>		<i>57%</i>
<i>Personal response to poetry</i>	<i>0.0</i>	<i>5</i>	<i>5</i>	<i>100%</i>	<i>78%</i>
<i>Catch me if you can lit ex</i>	<i>0.0</i>	<i>19</i>	<i>25</i>	<i>76%</i>	<i>66%</i>
<b><i>Summative assessments</i></b>					
<i>Persuasive response</i>	<i>0.0</i>	<i>12</i>	<i>15</i>	<i>80%</i>	<i>65%</i>
<i>Literary response to text</i>	<i>0.0</i>	<i>20</i>	<i>25</i>	<i>80%</i>	<i>65%</i>
<i>Oral presentation</i>	<i>0.0</i>	<i>11.5</i>	<i>12</i>	<i>96%</i>	<i>69%</i>

- ✓ All formatives are weighted 0.
- ✓ All summatives are weighted 0 until end of marking period.
- ✓ Students choose which formatives they do for feedback--but if they wish to retake a summative assessment, they must complete all formatives for that assessment.

See Vatterott (2011) for more details

## ADAPTING COMPUTERIZED GRADING SYSTEMS

### Judy's standard-based method

All grades are 1-4 scored using rubric

0= no attempt or not present

1=emerging/some understanding

*[looks like Bloom or DOK]*

2=comprehension level

3=application level

4=highly proficient—synthesis/able to reflect etc

(+ comments "too many absences", "needs more time")

Judy worked with the central office subject coordinator  
to set values within the computerized grading system  
to convert the numbers to percentages for the final grade calculation

### Judy's conversion system

1=65%	on a 100 point scale
2=75%	90-100= A
3=85%	80-89=B
4=95%	70-79=C
	60-69=D

### Judy's standards-based gradebook

	1 Std 1	2 Std 1	3 Std 1	Average Std 1	1 Std 2	2 Std 2	Average Std 2	1 Std 3	2 Std 3	Average std 3	Qtr average
<b>Joe</b>	2	3	3	<b>2.67</b>	4	4	<b>4</b>	3	2	<b>2.5</b>	<b>3.05</b>
All evidence for each standard is averaged to give 1 score for each standard. All standards are weighted equally and are averaged together for a final grade											

Judy's system gives Joe a middle B

OR Matt Townsley's system---total points (8+8+5=23) out of 28 possible= 23/28 Or 82%

OR the final grade is the % of standards met (ie:8/9 stds met=A, 7/9=B etc)

**Forrest Clark, Nisqually Middle School, Lacey, WA**

(see handouts for his presentation at this conference)

uses *Skyward* grading system (standards based version)

students grades are percentages for each standard—their final grade is the average of those percentages—BUT teachers may choose to average by median, mean, or mode and may exclude a low score

**A good computerized grading system should make it easy for teachers to:**

- Organize assignments by standard
- Add comments by grades
- Average grades by standard
- Compare averaging grades using mean, median, or mode
- View a learning trends graph for each student to show student progress by standard
- Compare one group or class to another by standard

**Weighting--How do 10 standards = 1 grade?**

Weight should not be determined by time spent, but by

- complexity of standard/objective
- lower vs high depth of knowledge
- essential vs nonessential standards/objectives

**Credit recovery/course retake ideas**

**Spaulding High School, Rochester, NH**

NYC (Not Yet Competent)—student focuses only on the parts of the course they did not master. (student has until the end of the next term to relearn material and raise their grade.)

IWS (Insufficient work shown)—student must retake the course as they have not submitted enough work to warrant a relearning and reassessment process

## LOGISTICS

### How to do it—logistics require systemic support

time! — captive audience/not a choice if below \_\_\_\_\_% ( your floor)

typically built into the school day

personnel (by grade, department, or schoolwide)

ie: success coordinator/academic coach

#### East Union High School, Afton, Iowa

- All teachers are required to have a course syllabus with 7-10 summative assessments for the course
  - Students must pass summatives with a 70% or retake
  - Summatives are 70% of the grade
  - Daily homework/participation is 30%
- 
- Made simpler by the block schedule—full year courses are taught in one semester
  - 
  - 4 full year courses each semester
  - 
  - Language and reading both semesters/math both semesters
  - 
  - 45 minute intervention period 4 days a week (for reteaching, retesting)
  - 
  - Students keep portfolios, do student led conferences, set goals, chart tests
  - 
  - Remediation=correct test + study guide + reteaching
  - 
  - Success coordinator (RTI for academic and behavior) can pull kids who aren't working in class

### **Bridges to standards based grading—**

**When teachers, parents, or the community are just not ready—start here.**

- Limit the percentage non-academic behaviors (such as participation and attendance) may count in the grade.
- Limit the percentage homework may count in the grade (10% is best, 20% should be the max.).
- Give two grades for every assignment (content and work habits), reporting work habits as a separate category worth a small part of the total grade.
- Replace zeros with Incompletes
- Implement a Zeros Aren't Possible program.
- Tie homework and classwork to assessments by allowing students to use notes or homework on tests.
- Allow retakes of summative assessments after remediation.

### **Baby steps to grading reform (slower and more complex)**

- Develop and standardize reasonable late policies
- Empower students with more self assessment
- Educate parents
- Standardize weighting of formative and summative assessments
- Prohibit non-academic factors from counting in the grade
- Remove the power of Zero by using a different measure of central tendency (median or mode rather than mean) to arrive at grades.
- Prioritize mastery concepts/Develop common assessments
- Organize gradebooks by standards or concepts, not assignments
- Revise schedule to allow time for reteaching and retesting
- Create a process for credit recovery for course failures

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### **About the presenter**

Dr. Cathy Vatterott is a Professor of Education at the University of Missouri-St. Louis, as well as a parent and a former teacher and principal. She is the author of three books—*Academic Success through Empowering Students* (National Middle School Association, 1999), *Becoming a Middle Level Teacher: Student-focused Teaching of Early Adolescents* (McGraw Hill, 2007), and *Rethinking Homework: Best Practices that Support Diverse Needs* (ASCD, 2009). She has presented her homework research to over 10,000 educators and parents in the U.S., Canada, and Europe. She has been interviewed as a homework expert for radio and television, for numerous articles appearing in magazines such as *Parents*, *Better Homes and Gardens*, and *Parade*, and newspapers such as the *New York Times*, the *Chicago Tribune*, and *USA Today*.

Discussions about the grading of homework in her presentations in the U.S. and Canada revealed a major disconnect between how grades are typically used in K-12 classrooms and our goal of helping students meet academic standards. These discussions have been the catalyst for her latest research about K-12 standards based grading. She recently began work on her fourth book, tentatively titled *Rethinking Grading*. She is interested in talking with teachers and administrators who are experimenting with or transitioning to standards-based grading. She can be reached at [vatterott@umsl.edu](mailto:vatterott@umsl.edu) or through her website [www.homeworklady.com](http://www.homeworklady.com).