



Standards Based Grading: Myth-Busting and Burning Issues

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Confederation of Oregon school Administrators
Southern Oregon ESD

**Our future depends
on this one here.**



Being good at taking
standardized tests doesn't
qualify students for creative
contribution to society or
successful citizenship.

**Create moral
imperative.**

Identify the Principles Involved, THEN Gather the Solutions

Example: How do I grade English Language Learners?

Principles/Tenets Involved:

- Teachers must be ethical. They cannot knowingly falsify a score or grade.
- To be useful, grades must be accurate reports of evidence of students' performance against standards.
- Regular report cards report against regular, publicly declared standards/outcomes. They cannot report about irregular standards or anything not publicly declared.
- Any test format that does not create an accurate report of students' degree of evidence of standards must be changed so that it does or replaced by one that does.

(continued)

Identify the Principles Involved, THEN Gather the Solutions

Example: How do I grade English Language Learners?

Principles Involved: (Continued)

- English Language Learners have a right to be assessed accurately.
- Lack of language proficiency does not mean lack of content proficiency.
- Effective teachers are mindful of cultural and experiential bias in assessments and try to minimize their impact.

If teachers act upon these principles, what decisions/behaviors/policies should we see in their assessment and grading procedures?

"Is my purpose to **select** talent or **develop** it?...If your purpose as an educator is to select talent, then you must work to maximize the differences among students. In other words, on any measure of learning, you must try to achieve the greatest possible variation in students' scores ...Unfortunately for students, the best means of maximizing differences in learning is poor teaching. Nothing does it better."

-- Thomas R. Guskey, *Education Leadership*,
ASCD, November 2011, Pages 16-21

Define Each Grade

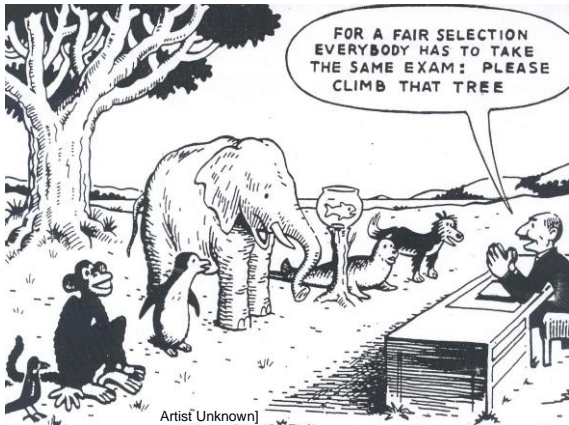
A:

B:

C:

D:

E or F:



Time is a variable, not an absolute.

"Nobody knows ahead of time how long it takes anyone to learn anything."



Dr. Yung Tae Kim, "Dr. Tae,"
Physics Professor,
Skateboarding Champion

It's what students carry forward, not what they demonstrated during the unit of learning, that is most indicative of true proficiency.

We are criterion-referenced, evidenced-based, *not* norm-referenced in classroom assessment and reporting.

We cannot conflate reports of compliance with evidence of mastery. Grades are reports of *learning*, not *doing*.

'Time to Change the
Metaphor:

Grades are NOT
compensation.

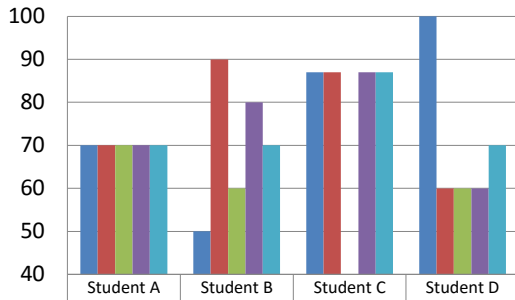
Grades are
communication:

They are an
accurate report of
what happened.

The Inner Net*
- David Bowden

"Learning is fundamentally
an act of creation, not
consumption of
information."
- Sharon L. Bowman,
Professional Trainer

Just because it's
mathematically
easy to calculate
doesn't mean it's
pedagogically
correct.



Fiction	70	50	87	100
Non-Fiction	70	90	87	60
Writing	70	60	0	60
Speaking	70	80	87	60
Listening	70	70	87	70

'Time to Stop Averaging

1. Society's definition of normal/"average" changes over time
2. Averaging tells us how a student is doing in relation to others, but we are criterion-referenced in standards-based classrooms.
3. Averaging was invented in statistics to get rid of the influence of any one sample error in experimental design, not how a student is doing in relation to learning goal.
4. Mode and in some cases, median, have higher correlation with outside the classroom testing.

Comment from Grading Expert, Tom Schimmer:

"Adults are rarely mean averaged and certainly, it is irrelevant to an adult that they used to not know how to do something. Yet for a student, these two factors are dominant in their school experience."

-- From, "Accurate Grading with a Standards-based Mindset" (Webinar, December 2013)

This quarter, you've taught:

- 4-quadrant graphing
- Slope and Y-intercept
- Multiplying binomials
- Ratios/Proportions
- 3-dimensional solids
- Area and Circumference of a circle.

The student's grade: B

What does this mark tell us about the student's proficiency with each of the topics you've taught?

Unidimensionality – A single score on a test represents a single dimension or trait that has been assessed

Student	Dimension A	Dimension B	Total Score
1	2	10	12
2	10	2	12
3	6	6	12

Problem: Most tests use a single score to assess multiple dimensions and traits. The resulting score is often invalid and useless. – Marzano, CAGTW, page 13

We can learn without grades,
we can't learn without
descriptive feedback.

What are you supposed to be learning,

...and where are you in relation to that goal?

What is the Role of Each One?

- Formative Assessment
- Summative Judgment
- Common Formative Assessment
[Focus on Common Evidence first!]
- Alternative Assessment

*Formative vs
Summative in Focus:*

Lab Reports in a Science Class

“If we don’t count
homework heavily,
students won’t do it.”

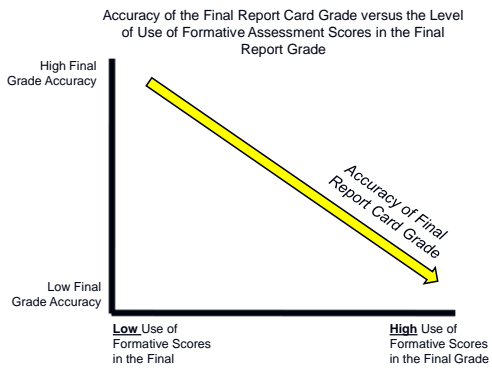
*Do you agree with this?
Does this sentiment cross a line?*

Two Homework Extremes that Focus Our Thinking

- **If a student does none of the homework assignments, yet earns an “A” (top grade) on every formal assessment we give, does he earn anything less than an “A” on his report card?**
- **If a student does all of the homework well yet bombs every formal assessment, isn’t that also a red flag that something is amiss, and we need to take corrective action?**

Be clear: We mark and grade against standards/outcomes, not the routes students take or techniques teachers use to achieve those standards/outcomes.

Given this premise, marks/grades for these activities can no longer be used in the academic report of what students know and can do regarding learner standards: maintaining a neat notebook, group discussion, class participation, homework, class work, reading log minutes, band practice minutes, dressing out in p.e., showing up to perform in an evening concert, covering textbooks, service to the school, group projects, signed permission slips, canned foods for canned food drive...



Set up your gradebook into two sections:

Formative

Assignments and assessments completed on the way to mastery or proficiency

Summative

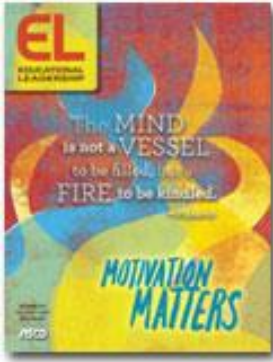
Final declaration of mastery or proficiency

Study Executive Function!

Late, Lost, and Unprepared
Joyce Cooper-Kohn, Laurie Dietzel

Smart, but Scattered
Peg Dawson, Richard Guare

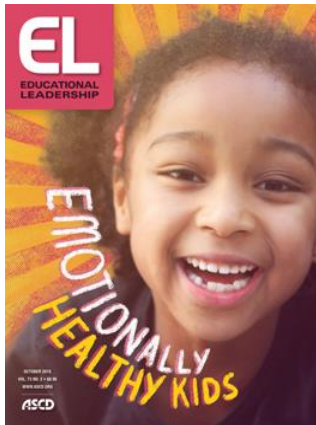
Also, *Smart, but Scattered for Teens!*



Motivation Matters

September 2014
| Volume 72 |
Number 1

www.ascd.org



ASCD's *Education Leadership* "Emotionally Healthy Kids"

October 2015 | Volume 73 |
Number 2

www.ascd.org

New report on self-regulation and social competence
Posted: 12/8/2015 by Dr. Daniel Willingham - A new working
paper from Transforming Education presents high quality
research that establishes the following:

- Non-cognitive skills predict high school and college completion.
- Students with strong non-cognitive skills have greater academic achievement within K-12 schooling and college.
- Fostering non-cognitive skills as early as preschool has both immediate and long-term impact.
- Employers value non-cognitive skills and seek employees who have them.

- Higher non-cognitive skills predict a greater likelihood of being employed.
- Stronger non-cognitive skills in childhood predict higher adult earning and greater financial stability.
- Adults with stronger non-cognitive skills are less likely to commit a crime and be incarcerated.
- Strong non-cognitive skills decrease the likelihood of being a single or unplanned teenage parent.
- The positive health effects associated with stronger non-cognitive skills include reduced mortality and lower rates of obesity, smoking, substance abuser, and mental health disorders.

From Assessment/Grading Researcher, Doug Reeves, *The Chronicle of Higher Education*, September 18, 2009:

“The Class of 2013 grew up playing video games and received feedback that was immediate, specific, and brutal – they won or else died at the end of each game. For them, the purpose of feedback is not to calculate an average or score a final exam, but to inform them about how they can improve on their next attempt to rule the universe.”

Feedback vs Assessment

Feedback: Holding up a mirror to students, showing them what they did and comparing it what they should have done – There’s no evaluative component!

Assessment: Gathering data so we can make a decision

Greatest Impact on Student Success:

Formative feedback

Two Ways to Begin Using
Descriptive Feedback:

- “Point and Describe”
(from *Teaching with Love & Logic*, Jim Fay, David Funk)

- “Goal, Status, and Plan for the Goal”
 1. Identify the objective/goal/standard/outcome
 2. Identify where the student is in relation to the goal (Status)
 3. Identify what needs to happen in order to close the gap

Effective Protocol for Data Analysis
and Descriptive Feedback found in many Schools:
Here’s What, So What, Now What

1. Here’s What: (*data, factual statements, no commentary*)

2. So What: (*Interpretation of data, what patterns/insights do we perceive, what does the data say to us?*)

3. Now What: (*Plan of action, including new questions, next steps*)

Item	Topic or Proficiency	Right	Wrong	Simple Mistake?	Really Don't Understand
1	Dividing fractions		✓		✓
2	Dividing Fractions		✓		✓
3	Multiplying Fractions		✓	✓	
4	Multiplying fractions	✓			
5	Reducing to Smpilst trms	✓			
6	Reducing to Smpilst trms	✓			
7	Reciprocals	✓			
8	Reciprocals		✓	✓	
9	Reciprocals		✓	✓	

Date

Mr./Mrs./Miss _____,

I understand....

I need assistance in....

I suggestion the following four steps for me to take in order to learn these content and skills:

Sincerely,

Teacher Action	Result on Student Achievement
Just telling students # correct and incorrect	Negative influence on achievement
Clarifying the scoring criteria	Increase of 16 percentile points
Providing explanations as to why their responses are correct or incorrect	Increase of 20 percentile points
Asking students to continue responding to an assessment until they correctly answer the items	Increase of 20 percentile points
Graphically portraying student achievement	Increase of 26 percentile points

-- Marzano, CAGTW, pgs 5-6

A child is attempting to ride a bicycle, and the bike falls over. Another child, learning to walk, loses her balance and lands on her bottom. A baby's green peas slide off his spoon as he moves it toward his mouth. How do their parents respond? Good parents don't say, "You fail, you're not able to meet bicycling standards," "I'll develop a rubric for walking without falling," or, "We need a Common Core curriculum to help you keep your food in your spoon."[They] simply say, "Try again."

- Richard L. Curwin, *Education Leadership*, ASCD, September 2014, p.38

Students should be allowed to re-do assessments until they achieve acceptable mastery, and they should be given full credit for having achieved such.

Perspective that Changes our Thinking:

A ‘D’ is a coward’s ‘F.’ The student failed, but you didn’t have enough guts to tell him.”

-- Doug Reeves

- A
- B
- C
- I, IP, NE, or NTY

Once we cross over into D and F(E) zones, does it really matter? We’ll do the same two things: Personally investigate and take corrective action

If we do not allow students to re-do work, we deny the growth mindset so vital to student maturation, and we are declaring to the student:

- This assignment had no legitimate educational value.
- It's okay if you don't do this work.
- It's okay if you don't learn this content or skill.

None of these is acceptable to the highly accomplished, professional educator.

If an "F" on a project really motivated students to work harder and achieve, retention rates would have dropped by now. They haven't; they've increased. We need to do something more than repeatedly document failure.

Recovering in full from a failure teaches more than being labeled for failure ever could teach.

It's a false assumption that giving a student an "F" or wagging an admonishing finger from afar builds moral fiber, self-discipline, competence, and integrity.

Re-Do's & Re-Takes: Are They Okay?



Thomas Edison

Pilot training United States Air Force Training Manual

- b. *Minimum Academic Performance* — The minimum acceptable score on any phase exam or End-of-Course exam is 85 percent. Should a student receive less than the minimum acceptable score, the instructor will remediate the student and a second, different exam for that phase will be administered. Unsatisfactory performance will be referred to the appropriate military authority.
- c. *Minimum Demonstration/Performance Test Standard* — The minimum acceptable performance on any demonstration/performance test will be measured against the course standard and the required proficiency level for events requiring a demonstration/performance test.
- d. *Minimum Hour Requirement* — There is no minimum hour/event/sortie requirement for graduation.
- e. *Instructor Responsibilities* — Instructors are responsible for training accomplishment; however, students should monitor their own training and develop mission profiles when appropriate.

F.A.I.L.

First Attempt in Learning

From Youtube.com:

Dr. Tae Skateboarding

(Ted Talk)

<http://www.youtube.com/watch?v=LHfo17ikSpY>

**Helpful Procedures and Policies
for Re-Do's and Re-Takes**

- Always, "...at teacher discretion."
 - Don't hide behind the factory model of schooling that perpetuates curriculum by age, perfect mastery on everyone's part by a particular calendar date.
 - As appropriate, students write letters explaining what was different between the first and subsequent attempts, and what they learned about themselves as learners.
 - Re-do's and re-takes must be within reason, and teachers decide what's reasonable.
-
- Identify a day by which time this will be accomplished or the grade is permanent, which, of course, may be adjusted at any point by the teacher.
 - With the student, create a calendar of completion that will help them accomplish the re-do. If student doesn't follow through on the learning plan, he writes letters of apology. There must be re-learning, or learning for the first time, before the re-assessing.
 - Require the student to submit original version with the re-done version so you and he can keep track of his development.
 - If a student is repeatedly asking for re-doing work, something's up. Investigate your approach and the child's situation.

- C, B, and B+ students get to re-do just as much as D and F students do. Do not stand in the way of a child seeking excellence.
- If report cards are due and there's not time to re-teach before re-assessing, record the lower grade, then work with the student in the next marking period, and if he presents new evidence of proficiency, submit a grade-change report form, changing the grade on the transcript from the previous marking period.
- Reserve the right to give alternative versions and ask follow-up questions to see if they've really mastered the material.
- Require parents to sign the original attempt.

- It's okay to let students, "bank," sections of the assessment/assignment that are done well.
- No-re-do's the last week of the grading period.
- Replace the previous grade with the new one, do NOT average them together.
- Sometimes the greater gift is to deny the option.
- Choose your battles. Push for re-doing the material that is transformative, leveraging, fundamental.

10 Practices to Avoid in a Differentiated Classroom
[They Dilute a Grade's Validity and Effectiveness]

- Penalizing students' multiple attempts at mastery
- Grading practice (daily homework) as students come to know concepts [Feedback, not grading, is needed]
- Withholding assistance (not scaffolding or differentiating) in the learning when it's needed
- Group grades
- Incorporating non-academic factors (behavior, attendance, and effort)

- Assessing students in ways that do not accurately indicate students' mastery (student responses are hindered by the assessment format)
- Grading on a curve
- Allowing Extra Credit
- Defining supposedly criterion-based grades in terms of norm-referenced descriptions ("above average," "average", etc.)
- Recording zeroes on the 100.0 scale for work not done

0 or 50 (or 60)?

100-pt. Scale:

0, 100, 100, 100, 100, 100 -- 83% (C+)

60, 100, 100, 100, 100, 100 -- 93% (B+)

When working with students, do we choose the most hurtful, unrecoverable end of the "F" range, or the most constructive, recoverable end of the "F" range?

Be clear: Students are not getting points for having done nothing. The student still gets an F. We're simply equalizing the influence of the each grade in the overall grade and responding in a way that leads to learning.

Imagine the Reverse...

$$A = 100 - 40$$

$$B = 39 - 30$$

$$C = 29 - 20$$

$$D = 19 - 10$$

$$F = 9 - 0$$

What if we reversed the proportional influences of the grades? That "A" would have a huge, yet undue, inflationary effect on the overall grade. Just as we wouldn't want an "A" to have an inaccurate effect, we don't want an "F" grade to have such an undue, deflationary, and inaccurate effect. Keeping zeroes on a 100-pt. scale is just as absurd as the scale seen here.

100	4
90	3
80	2
70	1
60	0
50	-1
40	-2
30	-3
20	-4
10	-5
0	-6

Consider the Correlation

A (0) on a 100-pt. scale is a (-6) on a 4-pt. scale. If a student does no work, he should get nothing, not something worse than nothing. How instructive is it to tell a student that he earned six times less than absolute failure? Choose to be instructive, not punitive.

[Based on an idea by Doug Reeves, *The Learning Leader*, ASCD, 2006]

Temperature Readings for Norfolk, VA:

85, 87, 88, 84, 0 ← ('Forgot to take the reading)

Average: 68.8 degrees

This is inaccurate for what really happened, and therefore, unusable.

Clarification:

When we're talking about converting zeroes to 50's or higher, we're referring to zeroes earned on major projects and assessments, not homework, as well as anything graded on a 100-point scale. It's okay to give zeroes on homework or on small scales, such as a 4.0 scale. Zeroes recorded for homework assignments do not refer to final, accurate declarations of mastery, and those zeroes don't have the undue influence on small grading scales.

Grading Late Work

- One whole letter grade down for each day late is punitive. It does not teach students, and it removes hope.
- A few points off for each day late is instructive; there's hope.
- Yes, the world beyond school is like this.

Helpful Consideration for Dealing with Student's Late Work:

Is it chronic....

...or is it occasional?

We respond differently, depending on which one it is.

Summative Assessments

Student: _____

Standards/ Outcomes	XYZ Test, part 1	PQR Project	EFG Observ.	XYZ Test, part 2	GHI Perf. Task	Most Consistent Level
1.1 [Descriptor]		3.5			3.5	<u>3.5</u>
1.2 [Descriptor]	2.5	5.0	4.5	4.5		<u>4.5</u>
1.3 [Descriptor]		4.5	3.5	3.0	3.5	<u>3.5</u>
1.4 [Descriptor]	3.5			3.5		<u>3.5</u>
1.5 [Descriptor]	2.0			1.5		<u>1.75</u>

**Gradebooks and Report Cards in the Differentiated Classroom:
Ten Important Attributes**

1. Everything is clearly communicated, easily understood
2. Use an entire page per student
3. Set up according to Standards/Outcomes
4. Disaggregate!
5. No averaging – Determine grades based on central tendency, trend, mode

**Gradebooks and Report Cards in the Differentiated Classroom:
Ten Important Attributes**

6. Behavior/Effort/Attendance separated from Academic Performance
7. Grades/Marks are as accurate as possible
8. Some students may have more marks/grades than others
9. Scales/Rubric Descriptors readily available, even summarized as possible
10. Grades/marks revisable

Responsive Report Formats

Adjusted Curriculum Approach:

Grade the student against his own progression, but indicate that the grade reflects an adjusted curriculum. Place an asterisk next to the grade or check a box on the report card indicating such, and include a narrative comment in the cumulative folder that explains the adjustments.

Responsive Report Formats

Progression and Standards Approach:

Grade the student with two grades, one indicating his performance with the standards and another indicating his own progression. A, B, C, D, or F indicates the student's progress against state standards, while 3, 2, or 1 indicates his personal progression.

Responsive Report Formats

Multiple Categories Within Subjects Approach:

Divide the grade into its component pieces. For example, a "B" in Science class can be subdivided into specific standards or benchmarks such as, "Demonstrates proper lab procedure," "Successfully employs the scientific method," or "Uses proper nomenclature and/or taxonomic references."

The more we try to aggregate into a single symbol, the less reliable that symbol is as a true expression of what a student knows and is able to do.

Report Cards without Grades

Course: English 9	Standard Descriptor	Standards Rating			
		(1)	(2)	(3)	(4)
Standard 1	Usage/Punct/Spelling	-----2.5			
Standard 2	Analysis of Literature	-----1.75			
Standard 3	Six + 1 Traits of Writing	-----3.25			
Standard 4	Reading Comprehension	-----3.25			
Standard 5	Listening/Speaking	-----2.0			
Standard 6	Research Skills	-----4.0			

Additional Comments from Teachers:

Health and Maturity Records for the Grading Period:

Grading Inclusion Students

Question #1:

“Are the standards set for the whole class also developmentally appropriate for this student?”

- If they are appropriate, proceed to Question #2.
- If they are not appropriate, identify which standards are appropriate, making sure they are as close as possible to the original standards. Then go to question #2.

Grading Inclusion Students

Question #2:

“Will these learning experiences (processes) we’re using with the general class work with the inclusion student as well?”

- If they will work, then proceed to Question #3.
- If they will not work, identify alternative pathways to learning that will work. Then go to Question #3.

Grading Inclusion Students

Question #3:

“Will this assessment instrument we’re using to get an accurate rendering of what general education students know and are able to do regarding the standard also provide an accurate rendering of what this inclusion student knows and is able to do regarding the same standard?”

- If the instrument will provide an accurate rendering of the inclusion student’s mastery, then use it just as you do with the rest of the class.
- If it will not provide an accurate rendering of the inclusion student’s mastery, then identify a product that will provide that accuracy, and make sure it holds the student accountable for the same universal factors as your are asking of the other students.

Education Leadership (ASCD)
February 2010 | Volume 67 | Number 5
Meeting Students Where They Are Pages
Grading Exceptional Learners
Lee Ann Jung and Thomas R. Guskey

*The next four
slides’ content
can be found
in this article.*

For more details, see:

Office of Civil Rights. (2008, October 17). Dear colleague letter: Report cards and transcripts for students with disabilities. Available:
www.ed.gov/about/offices/list/ocr/letters/colleague-20081017.html

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“**Myth 2: Report cards cannot identify the student’s status as an exceptional learner.**”

“**Fact:** According to guidance recently provided by the U.S. Department of Education’s Office of Civil Rights (2008), a student’s IEP, 504, or ELL status can appear on report cards (which communicate information about a student’s achievement to the student, parents, and teachers) but not on transcripts (which are shared with third parties—other schools, employers, and institutes of higher education) (Freedman, 2000). Even on report cards, however, schools must carefully review whether such information is necessary.”

“Myth 3: Transcripts cannot identify the curriculum as being modified.

“Fact: This is perhaps the most common of all reporting myths. Under the Individuals with Disabilities Education Act (IDEA) of 1997 and 2004, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, transcripts cannot identify students as qualifying for special services or accommodations— supports that provide access to the general curriculum but do not fundamentally alter the learning goal or grade-level standard. However, schools can legally note curriculum modifications—changes that fundamentally alter the learning goal or grade-level expectation (Freedman, 2000, 2005).”

Three types of learning criteria related to standards (see Guskey, 2006):

“**Product** criteria address what students know and are able to do at a particular point in time. They relate to students' specific achievements or level of proficiency as demonstrated by final examinations; final reports, projects, exhibits, or portfolios; or other overall assessments of learning.”

“**Process** criteria relate to students' behaviors in reaching their current level of achievement and proficiency. They include elements such as effort, behavior, class participation, punctuality in turning in assignments, and work habits. They also might include evidence from daily work, regular classroom quizzes, and homework.

“**Progress** criteria consider how much students improve or gain from their learning experiences. These criteria focus on how far students have advanced, rather than where they are. Other names for progress criteria include learning gain, value-added learning, and educational growth.”



Check out the FREE Website for Perspective and Practicality on Assessment and Grading Issues!

www.stenhouse.com/fiae

1. Two new, substantial study guides for *Fair Isn't Always Equal*
2. Q&A's - abbreviated versions of correspondence with teachers and administrators
3. Video and audio podcasts on assessment and grading issues
4. Testimonials from educators
5. Articles that support the book's main themes



Also, check out ASCD's *Education Leadership* November 2011 issue Vol. 69, Number 3 Theme: Effective Grading Practices Single Issue: \$7.00, 1-800-933-2723 www.ascd.org

Among the articles:

- Susan M. Brookhart on starting the conversation about the purpose of grades
- Rick Wormeli on how to make redos and retakes work
- Thomas R. Guskey on overcoming obstacles to grading reform
- Robert Marzano on making the most of standards-based grading
- Ken O'Connor and Rick Wormeli on characteristics of effective grading
- Cathy Vatterott on breaking the homework grading addiction
- Alfie Kohn on why we should end grading instead of trying to improve it



New Resource on Grading:

"The Grading System We Need to Have"

http://blogs.edweek.org/teachers/classroom_qa_with_larry_ferlazzo/2014/05/response_the_grading_system_we_need_to_have.html

Response to a parent of an AP student when his teachers started doing re-assessments for full credit in their AP classes:

<http://www.stenhouse.com/html/fiae-grading.htm>

http://www.adams12.org/files/learning_services/Wormeli_Response.pdf

Principal's Blog as he worked with faculty on Re-do's and SBG:

<http://blog.stenhouse.com/archives/2013/03/21/profiles-of-effective-pd-initiatives-owen-j-roberts-middle-school/>

Former AP Teacher,
now Building Administrator,
Reed Gillespie



Responses to Re-Do Concerns:

<http://www.reedgillespie.blogspot.com/2013/04/redos-and-retakes.html>

12 Practical Steps to Conducting Re-do's:

<http://www.reedgillespie.blogspot.com/2013/04/12-steps-to-creating-successful-redo.html>

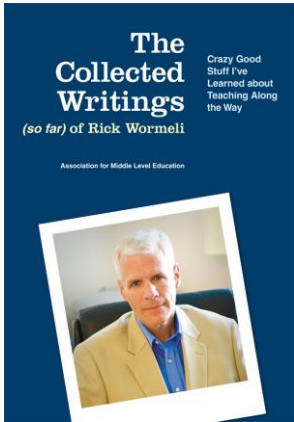
Particularly Helpful: The Work of High School Teacher, now District Leader, Matt Townsley

"What is the Difference between Standards-Based Grading (or Reporting) and Competency-Based Education?"

<http://www.competencyworks.org/analysis/what-is-the-difference-between-standards-based-grading/>

And,

www.sbgvideos.org



Great Books on Feedback, Assessment, and Grading:

- *Elements of Grading* (Reeves)
- *How to Give Feedback to Your Students* (Brookhart)
- *Balanced Assessment, From Formative to Summative* (Burke)
- *Grading Smarter, Not Harder* (Dueck)
- *Grading* (Brookhart)
- *How to Grade for Learning* (O'Connor)
- *A Repair Kit for Grading: 15 Fixes for Broken Grades* (O'Connor)
- *Fair Isn't Always Equal* (Wormeli)

- *Checking for Understanding: Formative Assessment Techniques for your Classroom* (Fisher and Frey)
- *Transforming Classroom Grading* (Marzano)
- *Classroom Assessment and Grading that Work* (Marzano)
- *How to Assess Higher-Order Thinking Skills in your Classroom* (Brookhart)
- *Grading Exceptional and Struggling Students: RTI, ELL, IEP* (Guskey, Jung)
- *On Your Mark: Challenging the Conventions of Grading and Reporting* (Guskey)

Three particularly helpful books I just read and I highly recommend:

- Keeley, Page. *Science Formative Assessment: 75 Practical Strategies for Linking Assessment, Instruction, and Learning*, Corwin Press, NSTA Press, 2008
- Brookhart, Susan. *How to Assess Higher-Order Thinking Skills in your Classroom*, ASCD, 2010
- *Alternatives to Grading Student Writing*, Stephen Tchudi, Editor, NCTE, 1997
