

How to Grade for Learning

Changing Assessment and Grading: What and Why?

Presented by
Ken O' Connor
Assess for Success Consulting
kenoc@aol.com
www.oconnorgrading.com

© Ken O'Connor, 2014

“Terms (are) frequently used interchangeably, although they (should) have distinct meanings.”

McTighe, J., and Ferrara, S., “Assessing Learning in the Classroom”,
Journal of Quality Learning, December 1995, 11

2

© Ken O'Connor, 2014

What Do These Terms Mean?

MARK(S)/SCORE(S) (marking/scoring)

the number (or letter) "score" given to
any student test or performance

$\frac{7}{10}$ 4
3
2
1

GRADE(S) (grading)

the number (or letter) reported at the
end of a period of time as a summary
statement of student performance

A 91 4 E
B 78 3 G
C 64 2 S
D 57 1 N
F 42

3

© Ken O'Connor, 2014

“Why . . . Would anyone want to change current grading practices?”

The answer is quite simple: grades are so imprecise that they are almost meaningless.”

Marzano, R. J., *Transforming Classroom Grading*,
ASCD, Alexandria, VA, 2000, 1

4

© Ken O'Connor, 2014

How to Grade for Learning

“... (grading) practices are not the result of careful thought or sound evidence, ... rather, they are used because teachers experienced these practices as students and, having little training or experience with other options, continue their use.”

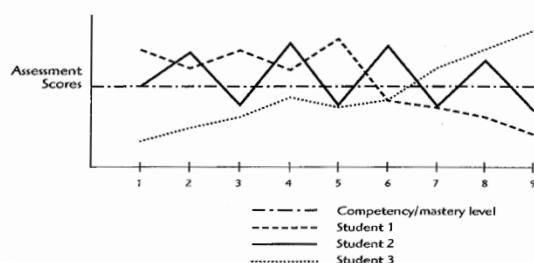
Guskey, Thomas R. (Editor), *Communicating Student Learning: The 1996 ASCD Yearbook*, ASCD, Alexandria, VA, 1996, 20

Result - inaccurate and inconsistent grading practices.

5

© Ken O'Connor, 2014

Parachute Packing Test Scores



O' Connor, K., *How to Grade for Learning*, Third Edition. Corwin, 2009, 31.
From Anne Davies, 2000. Originally developed by Michael Burger

6

© Ken O'Connor, 2014

Science

Task	Score/total possible	Percentage	
<i>Tests (50%)</i>			
Symbols	16/20	80	37%
Matter	0/68 (absent)	0	
Reactions	35/50	70	
<i>Daily Work (25%)</i>			
Assignment	10/10	100	88%
Homework	9/10	90	
Homework	9/10	90	
Atom quiz	9/10	90	
Moles quiz	5/8	62.5	
Homework	9/10	90	
<i>Lab Work (25%)</i>			
MP/BP	18/20	90	86%
Supuration	20/24	83.3	
Reactions	7/10	70	
Periodicity Check	10/10	100	

O' Connor, K., *How to Grade for Learning*, Third Edition. Corwin, 2009, 27.

7

© Ken O'Connor, 2014

Changes in Assessment, Grading and Reporting

1. Achievement separated from behavior.
2. Grades based on learning goals not assessment methods.
3. Levels of achievement not points and percentages.
4. Not all scores used to determine grades.

8

© Ken O'Connor, 2014

How to Grade for Learning

1. Achievement separated from behavior.

9

© Ken O'Connor, 2014

“... grades often reflect a combination of achievement, progress, and other factors.

... this tendency to collapse several independent elements into a single grade may blur their meaning.”

Bailey, J. and McTighe, J., “Reporting Achievement at the Secondary School Level: What and How?”, in T. R. Guskey, (Ed.) *Communicating Student Learning: ASCD Yearbook 1996*, ASCD, Alexandria, VA, 1996, 121

10

© Ken O'Connor, 2014

“the primary purpose of ... grades ... (is) to *communicate student achievement* to students, parents, school administrators, post-secondary institutions and employers.”

Bailey, J. and McTighe, J., “Reporting Achievement at the Secondary School Level: What and How?”, in T. R. Guskey, (Ed.) *Communicating Student Learning: ASCD Yearbook 1996*, ASCD, Alexandria, VA, 1996, 120

11

© Ken O'Connor, 2014

“Drive”

by Daniel Pink

Motivation 1.0 - the ancient drive to survive

Motivation 2.0 - rewarding good work with pay, benefits and promotions

- centres on “Type X behavior” where people are motivated mostly by external rewards.

Motivation 3.0 - the main motivators are the freedom to do what you want, the opportunity to take a challenge and fulfillment by the purpose of the undertaking

- what Pink calls “Type I behavior”

12

© Ken O'Connor, 2014

How to Grade for Learning

Quotes from “Drive”

1. “Routine, not-so-interesting jobs require direction; non-routine, more interesting work depends on self-direction.” (32)
2. “An incentive designed to clarify thinking and sharpen creativity ended up clouding thinking and dulling creativity. Why? Rewards, by their very nature, narrow our focus.” (44)
3. “By neglecting the ingredients of genuine motivation — autonomy, mastery, and purpose — they limit what each of us can achieve.” (49)

Daniel Pink, 2009, *Drive*, Riverhead Books, New York

13

© Ken O'Connor, 2014

“All kids start out as curious self-directed Type I’s. But many of them end up as disengaged, compliant Type X’s. . . .

If we want to equip young people for the new world of work - and more important, if we want them to lead satisfying lives - we need to break Motivation 2.0’s grip on education and parenting. . . .

Unfortunately, as with business, *there is a mismatch between what science knows and what schools do. . . . We’re bribing students into compliance instead of challenging them into engagement.*”

Daniel Pink, 2009, *Drive*, Riverhead Books, New York, 174

14

© Ken O'Connor, 2014

Pink believes it is time for a “full scale upgrade” to Motivation 3.0 - intrinsic rewards that play to the intrinsic satisfaction of the activity.

Source- review by Richard Eisenberg in USA Today, January 25, 2010

15

© Ken O'Connor, 2014

Responsibility – “the state or fact of being responsible, answerable, or accountable for something within one’s power, management or choice.” (Dictionary.com)

Compliance – “a. the act or process of complying to a desire, demand, proposal, or regimen or to coercion; b. conformity in fulfilling official requirements.” (Merriam-Webster Online Dictionary)

16

© Ken O'Connor, 2014

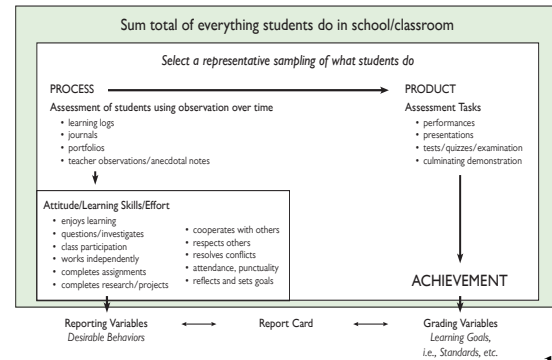
How to Grade for Learning

“No studies support the use of low grades or marks as punishments. Instead of prompting greater effort, low grades more often cause students to withdraw from learning.”

Guskey, T. R. and Bailey, J., *Developing Grading and Reporting Systems for Student Learning*, Corwin Press, 2001, 34-35

17

© Ken O'Connor, 2014



O'Connor, K. *How to Grade for Learning*. Third Edition. Corwin. 2009, 40

18

© Ken O'Connor, 2014

The Winnipeg School Division Student Effort & Behaviour Report Grade 7 - 8									
Home Room Teacher:		Student Name:							
Grade: 07									
Key to Terms		Excellent 4		Good 3		Needs Improvement 2		Unsatisfactory 1	
Organizational Skills		Consistently sets goals. Organizes and manages information and uses time effectively.		Usually sets goals, collects and organizes information and uses time effectively.		Frequently sets limitations in setting goals, organizing information and using time effectively.		Rarely sets goals, information disorganized and frequently wastes time.	
Homework		Consistently completes homework.		Usually completes homework.		Frequently does not complete homework.		Rarely completes homework.	
Assignments		Consistently brings materials and completes assignments.		Usually brings materials and completes assignments.		Frequently tends to be unprepared to complete assignments.		Rarely brings materials and completes assignments.	
Citizenship		Consistently respects the rights of others.		Usually respects the rights of others.		Frequently needs teacher guidance or intervention.		Rarely demonstrates respectful behavior.	
Teamwork		Consistently participates well in classroom activities.		Usually participates well in classroom activities.		Sometimes participates well in classroom activities.		Rarely participates in classroom activities.	
Interpersonal Skills		Consistently resolves conflict in constructive manner.		Usually resolves conflict in constructive manner.		Frequently needs teacher guidance to resolve conflict.		Rarely resolves conflict appropriately.	
ART 7 Visual, C		TERM 1 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 2 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 3 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 4 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills	
PETS 7 Physical, T		TERM 1 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 2 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 3 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 4 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills	
SCIENCE 7 Physical, C		TERM 1 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 2 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 3 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 4 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills	
SOCIAL STUDY 7 Physical, T		TERM 1 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 2 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 3 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills		TERM 4 Organizational Skills Homework Assignments Citizenship Teamwork Interpersonal Skills	

O'Connor, K. *A Repair Kit for Grading*. Second Edition. Pearson ATI, 2011, 19

19

© Ken O'Connor, 2014

2. Grades based on learning goals not assessment methods.

20

© Ken O'Connor, 2014

How to Grade for Learning

Traditional Guideline For Grading

1.	Evaluation Category	Expected % Range
1.	Quizzes/Tests/Exams	20-30%
2.	Written Assignments	15-25%
3.	Creative or explanatory paragraphs, essays, notes, organizers, writing folios or portfolios	15-25%
4.	Oral Presentations or Demonstrations	10-20%
5.	Brief or more formal presentations or demonstrations, role-playing, debates, skits etc.	5-15%
6.	Projects/Assignments	5-15%
	Research tasks, hands-on projects, video or audio tape productions, analysis of issues etc.	70-130%
	Co-operative Group Learning	
	Evaluation of the process and skills learned as an individual and as a group member	
	Independent Learning	
	Individual organizational skills, contributions to class activities and discussions, homework, notebooks	

21

© Ken O'Connor, 2014

“The principal limitation of any grading system that requires the teacher to assign one number or letter to represent . . . learning is that one symbol can convey only one meaning. . . .
One symbol cannot do justice to the different degrees of learning a student acquires across all learning outcomes.”

Tombari, M and Borich, G. *Authentic Assessment in the Classroom*, Prentice Hall, 1999, 213

22

© Ken O'Connor, 2014

French	????
Reading	A
Writing	A
Speaking	F
Culture	A

23

© Ken O'Connor, 2014

Summary of Evidence for Pilot Certification

Student: _____

		Achievement Evidence															
Assessments	15/9	23/9															D I S P O S I T
Competencies	T A K E O F F	PA															
Takeoffs	14/20	2															
In the air		1															
Landings	19/20	4															
????????																	
Comments:																	
																Final Grade	

24

© Ken O'Connor, 2014

How to Grade for Learning

Common Core Math Grade 5									
Student: _____		ACHIEVEMENT EVIDENCE							
Strands	Assessments						Strengths, Areas for Improvement/ Observations	Summary	
	10/1 Test	10/15 PA	11/7 PA	11/18 PA	12/8 PA	12/17 Test			
Operations and Algebraic Thinking (3)	3 (17/20)	3		3	3	3 (17/20)		3	
Number and Operations in Base Ten (7)					1			NA	
Number and Operations – Fractions (7)	2 (15/20)		4	2	2	2 (15/20)		2	
Measurement and Data (5)	4 (19/20)	4	4	1		4 (19/20)		4	
Geometry (4)		1	2	3	4	4 (20/20)		4	
Comments: _____									

West Greene Elementary School 2013-2014 Standards-Based Report Card

Student Name: _____

White: 1st Nine Weeks, Yellow: 2nd Nine Weeks, Pink: 3rd Nine Weeks, Gold: 4th Nine Weeks

Grade Level: Fourth

Teacher's Name: _____

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication			
2. Communication			
3. Communication			
4. Communication			

Academic Performance Indicators in Content Areas	1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
Reading: Standard				
Writing: Standard				
Math: Standard				
Science: Standard				
History: Standard				
Art: Standard				
Music: Standard				
Physical Education: Standard				
Foreign Language: Standard				

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication			
2. Communication			
3. Communication			
4. Communication			

Writing Level	1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication				
2. Communication				
3. Communication				
4. Communication				

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication			
2. Communication			
3. Communication			
4. Communication			

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication			
2. Communication			
3. Communication			
4. Communication			

1 st Nine Weeks	2 nd Nine Weeks	3 rd Nine Weeks	4 th Nine Weeks
1. Communication			
2. Communication			
3. Communication			
4. Communication			

26

3. Levels of achievement not points and percentages.

“Performance standards specify ‘how good is good enough.’ They relate to issues of assessment that gauge the degree to which content standards have been attained. . . . They are indices of quality that specify how adept or competent a student demonstration should be.”

Kendall, J., and R. Marzano, *Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education*, First Edition, McREL, 1997, 16-17

How to Grade for Learning

O' Connor, K.,
How to Grade for Learning, Third Edition, Corwin, 2002, 712

Performance Standards

How good is good enough?

Traditional School approaches

A	90-100% - Outstanding	Excellent
B	80-89% - Above Average	Good
C	70-79% - Average	Satisfactory
D	60-69% - Below Average	Poor
F	<60% - Failing	Unacceptable

Standards-based approaches
(Should be described by levels and linked to a symbol)

Advanced	Above standard
Proficient	Meets standard
Developing	Below but approaching standard
Beginning	Well below standard

29

© Ken O'Connor, 2014

Greene County, NC

Academic Performance Indicators for Content Areas	
Exceeds Standard	+
Meets Standard	=
Progressing Toward Standard	^
Not Yet Making Sufficient Progress	-
Not Assessed This Marking Period	n

International School Prague
Beginning, Developing, Proficient – two levels for each.

Medford High School

Achievement Grades	
MAS	Mastery
ADV	Advanced
MTS	Meets
APP	Approaching
Beg	Beginning
NA	Not Assessed
*	Modified (SPED / ELL)

30

© Ken O'Connor, 2014

4. Not all scores used to determine grades.

31

© Ken O'Connor, 2014

Diagnostic - assessment which takes place prior to instruction; designed to determine a student's attitude, skills or knowledge in order to identify student needs.

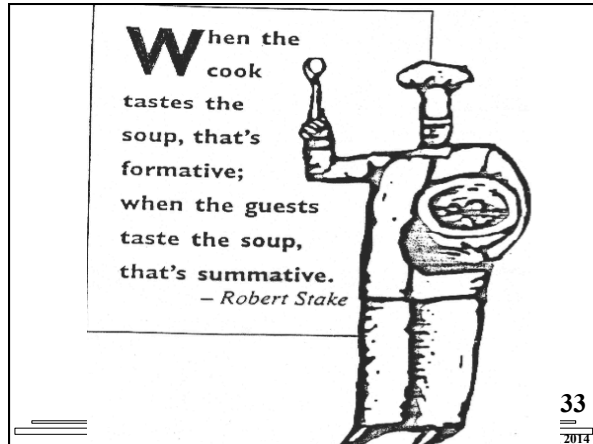
Formative - Assessment designed to provide direction for improvement and/or adjustment to a program for individual students or for a whole class, e.g. observation, quizzes, homework, instructional questions, initial drafts/attempts.

Summative - Assessment/evaluation designed to provide information to be used in making judgment about a student's achievement at the end of a sequence of instruction, e.g. final drafts/attempts, tests, exams, assignments, projects, performances.

32

© Ken O'Connor, 2014

How to Grade for Learning



“The thrust of formative assessment is toward improving learning and instruction. Therefore, the information should not be used for assigning “marks” as the assessment often occurs before students have had full opportunities to learn content or develop skills.”

Manitoba Education and Training, *Reporting on Student Progress and Achievement: A Policy Handbook for Teachers, Administrators and Parents*. Winnipeg, 1997, 9

34

© Ken O'Connor, 2014

Students should be assessed or checked on everything (or almost everything) they do

BUT

everything that is assessed and/or checked does not need a score

AND

every score should not be included in the grade.

35

© Ken O'Connor, 2014

Firm evidence shows that formative assessment is an essential component of classroom work and that its development can raise standards of achievement, Mr. Black and Mr. Wiliam point out. Indeed, they know of no other way of raising standards for which such a strong prima facie case can be made.

Black, P. and Wiliam, D. “Inside the Black Box,” *Kappan*, October 1998, 139

36

© Ken O'Connor, 2014

How to Grade for Learning

"The research indicates that improving learning through assessment depends on five, deceptively simple, key factors:

- *The provision of effective feedback to students*
- *The active involvement of students in their own learning*
- *Adjusting teaching to take account of the results of assessment*
- *A recognition of the profound influence assessment has on the motivation and self-esteem of students, both of which are crucial influences on learning*
- *The need for students to be able to assess themselves and understand how to improve"*

37

© Ken O'Connor, 2014

From a presentation by Dylan Wiliam - "Inside the Black Box"

Kinds of feedback

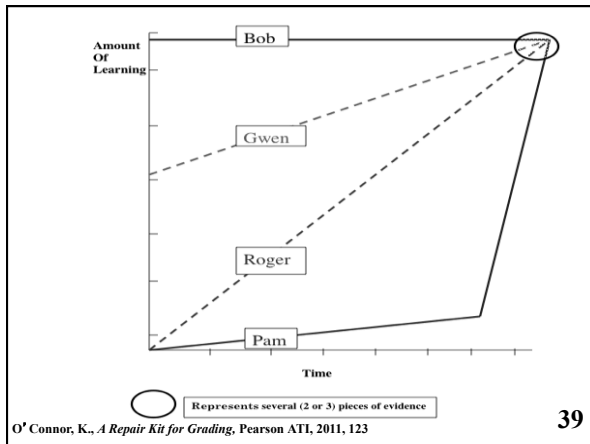
- 264 low and high ability year 7 pupils in 12 classes in 4 schools; analysis of 132 students at top and bottom of each class
- Same teaching, same aims, same teachers, same class work
- Three kinds of feedback: marks, comments, marks+comments

Feedback	Gain
marks	none
comments	30%
both	none

Butler, R. Br. *J. Educ. Psychol.* 1988, 58 1-14

38

© Ken O'Connor, 2014



O'Connor, K., *A Repair Kit for Grading*, Pearson ATI, 2011, 123

39

Conditions for Reassessment

Always - evidence of "correctives"
- full credit for reassessment

Optional - opportunity cost



40

© Ken O'Connor, 2014

How to Grade for Learning

[illegible]

Grades are broken when they -

- include ingredients that distort achievement
- arise from low quality or poorly organized evidence
- are derived from inappropriate number crunching, and when they
- do not support the learning process.

42

© Ken O'Connor, 2014

**“ . . . the primary purpose of classroom assessment is
to inform teaching and improve learning,
not to sort and select students or to justify a
grade.”**

McTighe, J. and Ferrara, S. "Performance-Based Assessment in the Classroom", Pennsylvania ASCD

43

© Ken O'Connor, 2014

Grades

should come from

**a
body
of
evidence** + **performance
standards** + **principles
/guidelines**

i.e., professional judgment

NOT

just a numerical, mechanical exercise

44

© Ken O'Connor, 2014