



# Capturing True Student Performance Through Proficiency-Based Grading in Mathematics

## High School Improvement Plan

EDLD 655 University of Oregon, Winter Term 2009



### Introduction

#### Demographic:

This is a rural high school of 303, 7th through 12th grade, students. The district operates a four-day school week, with additional opportunities for students and professional development on Fridays. The economic base relies heavily on working commuter, farmers, wood product mills, and employment opportunities provided by the district.

| Category                       | Percentage |
|--------------------------------|------------|
| Free or Reduced Lunch          | 30.89%     |
| White                          | 84.49%     |
| Hispanic                       | 04.65%     |
| American Indian/Alaskan Native | 02.12%     |
| Asian/Pacific Islander         | 01.41%     |
| Black                          | 00.99%     |
| Declined to Report Ethnicity   | 06.06%     |
| Special Education              | 13.26%     |
| English Language Learners      | 02.68%     |
| Talented and Gifted            | 04.94%     |

#### Staffing:

|                        |          |
|------------------------|----------|
| Administrators         | 02.0 FTE |
| Licensed Staff         | 23.0 FTE |
| Educational Assistants | 05.0 FTE |
| Support Staff          | 07.0 FTE |

### Rationale For Improvement Goal

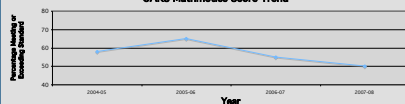
How Ready are Students Who Take College Prep Courses?\*

- Of students who take Algebra I, Algebra II, and Geometry in high school, one in four ends up taking remedial math in college
- Of students who take a math course beyond these three, 17% still need remediation

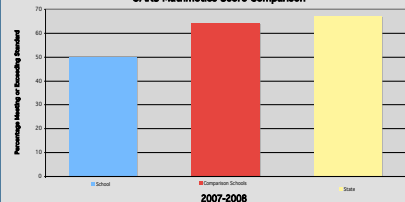
\*Rigor at Risk: Reaffirming Quality in the High School Core Curriculum

The high school GPA is above average, as compared to the state. SAT scores are below average. In analyzing data, all standard areas are discrepant. Math seemed a logical beginning point in the movement to a standard/proficiency-based grading model.

OAKS Mathematics Score Trend



OAKS Mathematics Score Comparison



### School Improvement Goal

By June of 2010, using a proficiency model of grading in mathematics courses, high school students will achieve above average scores compared to the state and other comparison schools, as measured by OAKS state math benchmark assessment scores and SAT scores as reported by the state report card.

The percentage of students meeting or exceeding the OAKS state math benchmarks at the CIM level will increase from the current average of 50.7% to:  
June 2008: 55.0%  
June 2009: 62.0%  
June 2010: 70.0%

### What is Proficiency-Based Grading?

Skills are broken up into essential (those essential to the course and required for credit) and those that are supportive (those that are supportive of the curriculum). Supportive skills are often indicative of a deeper or more complex understanding of the material.

#### Key elements:

**Assesses Students Based on What They Really Know**  
**Directly Linked to State, national, and Industry Standards:**

1. Supports current research regarding student learning.
2. Allows for individual rates of learning but supports all students to achieve proficiency.
3. Requires a minimum grasp of concepts which encourages a more balanced and complete knowledge of the content.
4. Allows students to choose a desired grade and continually work toward it throughout the semester
5. Gives detailed information regarding areas student needs to improve, similar to a personalized tutoring center
6. Provides immediate feedback to the teacher and student about specifically what the student knows and does not know.
7. Allows for focused and reflective learning.

### Is There Larger Support for Proficiency-Based Assessment?

According to the Oregon University System in their rationale for the creation of the PASS proficiency-based college admissions assessment:

"Grades aren't an adequate measurement system. The current system of subject-area requirements and minimum grade point average (GPA) does not help students focus on the knowledge and skills they should be developing to succeed in college, nor does it encourage them to take the most challenging courses. The GPA system encourages students to choose courses that will allow them to obtain the highest grades, rather than those that would most challenge them."

This pattern has been demonstrated in Oregon and the nation, where the average GPA for incoming freshmen has risen consistently. At the national level, more students must take remedial courses in college and typically require six years to obtain a baccalaureate degree. During this same period of time, the OUS GPA requirement for admission has risen four times: from 2.25 in 1988 to the current 3.0."

**Oregon's New Core Standards Structure:**  
New generation of standards that focus on big ideas and key concepts at each grade level  
Standards that are fewer, more focused, & coherent  
Standards that allow teachers to see learning progression from grade to grade  
Standards that help teachers more effectively plan instruction

#### State of Oregon Proficiency-Based System

- Recommendations:**  
Schools Should Offer Credit for proficiency options:
- In class credit
  - Out-of-class credit
  - Credit for prior learning
- Credit for proficiency required elements/criteria:**
- Standards-based
  - Proficiency
  - Sufficiency

### Process for Implementation Of Proficiency-based Grading in Math:

- Curriculum Teams will determine core/power standards that will be used to drive instruction.
- Artificial barriers will be removed from the grading process.
- Course outlines will be written to clearly define the proficiency or each standard.
- Standards will be posted for each lesson.
- Assessment will be designed to accurately measure performance of each standard.
- Rubrics will be developed for each assignment and given to students to guide their planning process.
- Students will be given multiple ways to demonstrate proficiency toward those standards.
- Career related learning standards will be incorporated into the curriculum for each subject as it is brought into the grading model over time.
- Personal traits like timeliness, tardiness, classroom behavior, and appropriate interactions with

### Timeline of the Implementation Process During the first Year:

March 2009: Math Team meets to discuss and finalize power standards.

April 2009: teachers will meet and develop course outline and independent options for proficiency based credit in Algebra I.

Following standard grading from 08/09 course outlines, teachers will begin to teach to power standards and assess on proficiency of the standards using rubrics in all math courses for the remainder of the year.

Over the summer, Title IIA money will be allocated for professional development in the form of time for collaboration in order to calibrate scoring rubrics within the content area.

Administration will add credit by proficiency grading to student handbook and parent information packets and invite community feedback.

Before school begins, student information packets will be sent home explaining other credit by proficiency options, including credit for prior learning and credit for out of class learning.

August 2009: Math teachers will present to school staff at fall inservice.

September 2009: Proficiency based grading begins in Math classes

### Implementation Process for the Second Year:

#### Prior to Semester One, 2009/10:

All teachers will attend a credit by proficiency workshop during the 09/10 academic year. Trainers will be invited to the district on an inservice Friday.

Title IIA dollars will be allocated for 6 days of professional development for all teachers. Teachers will be responsible for developing course outlines based on power standards for their content area.

Essential skills team members will create rubrics for essential skills that are aligned to the Oregon career Related Learning Standards.

#### Prior to Semester Two, 2009/10:

Three staff inservice Friday sessions will be devoted to team collaboration and calibration of scoring rubrics to standard.

Every other staff meeting will be devoted to project based methodology and proficiency models used in other schools.

Data will be shared from the first semester and students will be tracked for incomplete standards.

Recovery systems will be implemented for students needing support for unmet proficiencies.

### Expected Outcomes

- Increase in attendance rates
- Decrease in dropout rates
- Decrease in course failures
- Decrease in office discipline referrals
- Increase in OAKS testing scores
- Increase in SAT scores
- More consistency in GPA across grade levels

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