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

High School Improvement Plan

EDLD 655 University of Oregon, Winter Term 2009

**Introduction**

Demographic:
- Total 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 varies heavily on working farms, forest, wood product mills, and employment opportunities provided by the district.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>46.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23.7%</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>13.7%</td>
</tr>
<tr>
<td>Declined to Report Ethnicity</td>
<td>9.7%</td>
</tr>
<tr>
<td>Special Education</td>
<td>17.5%</td>
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<tr>
<td>English Language Learners</td>
<td>17.5%</td>
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<tr>
<td>Licensed执教</td>
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<tr>
<td>Bachelor's Degree</td>
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<tr>
<td>Master's Degree</td>
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<tr>
<td>Doctoral Degree</td>
<td>20.0%</td>
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<tr>
<td>Technical Degree</td>
<td>15.0%</td>
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<tr>
<td>Other</td>
<td>15.0%</td>
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</tbody>
</table>

**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.

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

**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 benchmark at the CM level will increase from the current average of 50.7% to:
- June 2008: 60.01%
- June 2009: 62.00%
- June 2010: 70.00%

**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:
  - Assess students based on what they really know.
  - Directly linked to state, national, and industry standards:
    - Supports current research regarding student learning.
    - Allows for individual rates of learning but supports all students to achieve proficiency.
    - Gives detailed information regarding areas student needs to improve, similar to a personalized tutoring center.
    - Provides immediate feedback to the teacher and student about specifically what the student knows and does not know.
    - Allows for focused and reflective learning.

**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 timelessness, 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 transcript and 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

**Bibliography of Readings on Credit by Proficiency as a Model for Grading:**

- Guiseley, Thomas R., Bailey, Jane, M., Developing Grading and Reporting Systems for Student learning, Corwin.

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For more information on this subject or for answers to specific questions related to the implementation process, see the school administrator or Mathematics curriculum team members at the high school.