Topics

Background

Recommendations

1. Math and Science Initiative
2. Leadership
3. Experts
4. Aligned Model
5. Higher Ed
6. Increased Opportunities
7. Professional Development
8. Public Awareness
Background

NMSBA Math & Science 2005
Students At or Above Proficiency

<table>
<thead>
<tr>
<th>Grade</th>
<th>Math</th>
<th>Science</th>
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<tbody>
<tr>
<td>Grade 3</td>
<td>43%</td>
<td>77%</td>
</tr>
<tr>
<td>Grade 4</td>
<td>39%</td>
<td>52%</td>
</tr>
<tr>
<td>Grade 5</td>
<td>27%</td>
<td>41%</td>
</tr>
<tr>
<td>Grade 6</td>
<td>21%</td>
<td>30%</td>
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<tr>
<td>Grade 7</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>Grade 8</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>Grade 9</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Grade 11</td>
<td></td>
<td>30%</td>
</tr>
</tbody>
</table>
Gadsden Math Initiative

Grade 4 & 8 Students Scoring At or Above Proficiency in Mathematics
CTBS in 2000 vs NMSBA in 2005

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Gadsden ISD</td>
<td>19%</td>
<td>35%</td>
<td>7%</td>
<td>22%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>35%</td>
<td>39%</td>
<td>24%</td>
<td>24%</td>
</tr>
</tbody>
</table>
Understanding the Pipeline in NM

Elementary and Middle

High School

Some College

4 year degree

Estimated 5,000 new graduates each year stay in NM - less than 50% of our graduates³

29,906 9th graders

18,031 H.S. diplomas

3,724

6,727

10,638 enroll in College

50% drop out after 1st year

Less than 35% of NM 9th graders will complete college with a degree sufficient to meet entry level requirements for today's high technology industries. Approximately 20% are in Math, Science or Engineering.

Note: 1. Graduation data from school year 2000
2. Data from http://www.higheredinfo.org and the Urban Institute for Education Policy Center
3. Estimated graduates remaining in state based upon anecdotal information from Universities
Recommendation #1

State Math and Science Initiative

Consistency in Teaching

Standards
- Student Learning
- Assessment
Recommendation #2

State and Local Leadership

Annual Recommendations to the New Mexico Legislature
Recommendation #3

Experts in Math and Science

Work With Schools

Ongoing Partnerships

Content And Pedagogy

Math and Science Unit in the Public Education Department
Recommendation #4

NM Math and Science Education Model

State Provides Technical and Financial Assistance to Districts Adopting the Model

Flexible and Fluid

Align Math and Science Curriculum
Recommendation #5

Increase Rigor in Higher Education

Recruit Teachers

Quality Math & Science Courses

Increase the Number of Credit Hours
Recommendation #6

Increased Opportunities

- Internships
- Family Activities
- Expanded Lab And Field Work
- Student-identified Research
Recommendation #7

Professional Development (PD)

Allow Time

Comprehensive And Ongoing

National PD Standards
Recommendation #8

Public Awareness

Interest and Enthusiasm in Math and Science

Info Campaign

Support Outreach