A Statewide Investigation into Meeting the Mandates of No Child Left Behind
A Statewide Investigation into Meeting the Mandates of No Child Left Behind

A report by
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EXECUTIVE SUMMARY

The federal No Child Left Behind (NCLB) legislation was designed to strengthen the achievement of K-12 students across the United States. To help schools improve, their progress must be ascertained and then initiatives implemented that will support improvement efforts.

This study, which was conducted in 2005-2006, provides a comprehensive, data-driven picture of the progress Pennsylvania’s rural and urban schools are making in meeting the NCLB mandates and offers considerations for additional program and policy support for all schools, with particular emphasis on the needs of rural schools.

This study used four data sources: reports from the Pennsylvania Department of Education (PDE); two online surveys, one for principals and one for superintendents throughout Pennsylvania; focus group discussions and interviews with survey respondents; and a summary of interviews of principals of high performing rural schools. The data provide a thorough picture of how Pennsylvania’s schools are succeeding in meeting the NCLB mandates, and the analyses of the data provide a picture of the continuing needs of schools.

The research found that while most schools are currently meeting the NCLB mandates, both rural and urban administrators are very concerned about being able to meet the mandates as the requirements increase in the next few years. They believe 100 percent proficiency by 2014 is unrealistic. The research also found that rural and urban administrators were in agreement as they identified the subgroup of special education students, funding, and meeting proficiency as the three major concerns they face in meeting the NCLB mandates. However, there are some differences between rural and urban school districts in terms of the obstacles they face and the initiatives they are implementing to meet the challenges. More rural schools noted challenges associated with curriculum alignment while more urban schools reported challenges of student diversity and transience. While both rural and urban administrators cited delay in receiving PSSA results as problematic, it was significantly more so for rural schools.

The research revealed a willingness to meet the NCLB mandates and the belief by school administrators that NCLB was having the intended effect of increasing student achievement. Respondents identified PDE’s initiative of identifying assessment anchors as extremely beneficial and an example of meaningful support. The study also found that unless modification occurs, very few schools will be able to meet Adequate Yearly Progress (AYP) requirements as the proficiency scale increases to an absolute 100 percent.

From the study, the researchers developed several policy considerations for state and federal policymakers and educational leaders. For state and federal decision makers, the considerations include the need to: address and modify subgroup accountability, especially in regard to special education; increase funding and make the mechanism for funding more flexible and responsive to local needs; and seriously consider whether 100 percent of students scoring at the proficient level on the same high-stakes test is a realistic goal.

The considerations for rural schools include: offering additional professional development opportunities; forging stronger parent and community relations; and maintaining small schools or restructuring to create communities within schools.

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INTRODUCTION

The impact of the federal No Child Left Behind (NCLB) legislation on schools across the United States is of critical interest to the public and has been a frequent focus of the media (Robelen, 2004). Numerous studies have demonstrated that the public wants schools to be strong and students to perform well, but deciphering conflicting information to establish an accurate picture of educational progress in the commonwealth is difficult.

The goal of this study, which was conducted in 2005-2006, was to provide a comprehensive, data-driven picture of the progress Pennsylvania’s rural and urban schools are making in meeting the mandates of the NCLB legislation, as well as to provide guidelines for additional policy and procedural support so that rural and urban schools can better meet the challenges of educating all students in a safe environment.

The specific objectives of this project were to: describe the progress of Pennsylvania schools in meeting NCLB mandates; identify and analyze the effectiveness of the initiatives that rural and urban schools have implemented to address the challenges of NCLB; recommend policy and procedural changes that would support the continuing efforts to meet NCLB mandates as they become more challenging; and identify the characteristics of high-performing rural schools.

The researchers used the following procedures.
1. Reviewed the existing annual Pennsylvania Department of Education (PDE) data from 2002 to 2005, which describe school and district progress in meeting NCLB mandates including: PDE Academic Achievement Reports; PDE NCLB State Report Cards; PDE NCLB District Report Cards; PDE Highly Qualified Teachers in Pennsylvania Reports; and PDE Persistently Dangerous Schools Reports.
2. Reviewed reports from professional organizations, PDE, legislative bodies, and studies for supporting data and recommendations.
3. Conducted two online surveys, one for superintendents and one for building principals, to gather additional information on programs, initiatives, needs, and problem areas.
4. Conducted regional focus groups to further illuminate the findings of the online survey of both principals and superintendents.
5. Conducted a series of interviews of principals of high performing rural schools.

Rural Schools

To strengthen Pennsylvania’s progress on NCLB mandates, it is important to review issues of both rural and urban schools. According to the Center for Rural Pennsylvania, 243 of Pennsylvania’s 501 school districts are rural. During the 2006-2007 school year, these rural schools served approximately 500,000 public school students. About 50 percent of students are enrolled in elementary schools (K to 6th grade) and 50 percent are enrolled in secondary schools (7th to 12th grade). Between the 2001 and 2007 school years, the number of students in rural districts increased 4 percent.

Two recent reports have started to paint a picture of needs specific to rural schools. Reviewing progress made in improving student achievement in rural Pennsylvania began with the study by the Pennsylvania House Commission on Rural Education. The 2004 report outlined many of the characteristics that put children in rural schools at risk.

<table>
<thead>
<tr>
<th>School Type</th>
<th>State</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>892,914</td>
<td>250,945</td>
<td>641,969</td>
</tr>
<tr>
<td>% of Total</td>
<td>51%</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>% Change, 2001-2007</td>
<td>-6%</td>
<td>-8%</td>
<td>-5%</td>
</tr>
<tr>
<td>Secondary School</td>
<td>846,281</td>
<td>248,110</td>
<td>598,171</td>
</tr>
<tr>
<td>% of Total</td>
<td>49%</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>% Change, 2001-2007</td>
<td>3%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>1,739,195</td>
<td>499,055</td>
<td>1,240,140</td>
</tr>
<tr>
<td>% of Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% Change, 2001-2007</td>
<td>-2%</td>
<td>-4%</td>
<td>-1%</td>
</tr>
</tbody>
</table>
for not attaining high levels of achievement, such as poor prenatal care, low birth weight, poverty, and lack of parental education (House Commission on Rural Education [HCRE], 2004).

The 2004 Mid-continent Research for Education and Learning (McREL) Rural Advisory survey also noted several challenges regarding NCLB in rural areas. These include school size, funding, teacher quality, local control, and community and parent attitude (Arnold, 2004).

The assessment of severely cognitively disabled students and those with limited English proficiency is also beginning to surface as a significant issue in rural schools (Kusler, 2004).

**Overview of NCLB Mandates**

The passage of federal law H.R. 1 No Child Left Behind of 2001 has increased the challenge for school districts throughout the United States to deliver high quality education for all students. NCLB brought two new measures to education: all students must achieve at a proficient level and all stakeholders, educators, students and parents will be held accountable to meet that goal.

To meet the mandates of NCLB, Pennsylvania must assess student academic achievement, participation in the assessments, and graduation rates for grades 9 through 12. In addition, schools must meet standards for the number of highly qualified teachers they employ (PDE, 2004) and school safety. NCLB requires that all states choose an additional indicator for all elementary and middle schools. Pennsylvania chose to measure the attendance rate in grades 1 through 8. For academic achievement, in addition to total student average scores in each building on academic assessments, subgroup average scores are measured and reported. Subgroups, as defined by NCLB, are socio-economic status, race/ethnicity, special education, limited English proficient, and migrant worker status. All scores are shared with the public and not meeting designated benchmarks carries consequences that increase in severity with continued lack of improvement (see Table 2).

Current data reflected in PDE’s State Report Card indicate that Pennsylvania has not been successful at meeting the challenges of ensuring that all groups of students are learning at the rates they should. Pennsylvania faces a large achievement gap among specific subgroups (PDE, 2005b).

**Table 2: Pennsylvania Accountability Requirements**

<table>
<thead>
<tr>
<th>Pennsylvania Accountability Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement</strong>: Assessed in grades 3, 5, 8, &amp; 11 by PSSA; 94.5 percent of the student population must participate in the testing.</td>
</tr>
<tr>
<td>Mathematics - Starting point in 2001-2002 is 35 percent proficiency; AYP threshold increases incrementally until 2014.</td>
</tr>
<tr>
<td>Reading - Starting point in 2001-2002 is 45 percent proficiency; AYP threshold increases incrementally until 2014.</td>
</tr>
<tr>
<td>Science - Starting 2007-08.</td>
</tr>
<tr>
<td><strong>Graduation Rate</strong></td>
</tr>
<tr>
<td>Minimum of 80 percent of 12th graders who begin the school year.</td>
</tr>
<tr>
<td><strong>Highly Qualified Teachers</strong></td>
</tr>
<tr>
<td>Hold full or intern certification.</td>
</tr>
<tr>
<td>Completed the content area as a major.</td>
</tr>
<tr>
<td>Passed the Praxis II Content area test(s).</td>
</tr>
<tr>
<td>Completed or enrolled in teacher education coursework.</td>
</tr>
<tr>
<td>Earned a bachelor's degree.</td>
</tr>
<tr>
<td><strong>Attendance</strong></td>
</tr>
<tr>
<td><strong>School Safety</strong></td>
</tr>
<tr>
<td>Schools must report annually the number and type of dangerous incidents occurring on-site. Being cited as persistently dangerous depends on the size of school population and numbers of incidents.</td>
</tr>
</tbody>
</table>

* Based on information gathered from www.pde.state.pa.us
RESULTS

Data Analysis on Meeting the NCLB Mandates

All Pennsylvania schools, rural and urban, must meet the NCLB mandates in five areas: academic achievement, graduation/attendance rates, participation, school safety, and highly qualified teachers. A review of the PDE generated reports of Pennsylvania schools’ performance in the areas of academic achievement, participation, student attendance, graduation, and safety has, in general, demonstrated positive trends. However, one area, the achievement gap among subgroups, is an immediate concern, and several areas related to student achievement in subgroups are problematic and deserve attention. A brief summary of the findings, including the progress of rural schools according to each element required by NCLB follows.

Academic Achievement

NCLB mandates that all students must be proficient in reading, writing and mathematics by 2014. To be proficient, students must score at either the Proficient or Advanced level on the PSSA. Pennsylvania’s approved plan to achieve that goal is outlined in Table 3, which describes the minimum acceptable percentage of students scoring at the proficient level in the PSSA, the state developed standardized tests.

Pennsylvania students have met the required proficiency levels at the 5th, 8th, and 11th grade levels in both mathematics and reading for each of the reported years (PDE, 2005b). As seen in Table 2, in 2008 the percentage of students who must be proficient increases from the current 54 percent in reading and 45 percent in mathematics to 63 percent and 56 percent respectively. At this new rate only two areas in 2004-2005, 5th and 8th grade mathematics, would meet the new required levels.

Highly Qualified Teachers

As Pennsylvania prepares for the increasing accountability measures for employing only highly qualified teachers, schools appear to be positioned well in regard to this requirement. Still struggling are high poverty districts where 8 percent of teachers were not qualified in 2004, representing a 3 percent increase over the previous year. This trend is in opposition to that of low poverty schools, where a slight increase resulted in 99 percent of the teachers being highly qualified in 2004. Overwhelmingly, highly qualified teachers are teaching rural students. Only 321 teachers out of 35,969 holding emergency certificates were employed in 2003-2004 by rural schools. Two issues are worthy of further attention: several large, high growth rural districts in Northeastern Pennsylvania had large numbers of emergency certified teachers and there were small rural districts that had small numbers of emergency certified teachers but because of the size of the district, a high percentage were instructional staff.

School Safety

Pennsylvania schools’ safety record has continued to improve with only 10 Philadelphia high schools being cited in 2005-2006 as persistently dangerous. No rural schools had been included on the persistently dangerous list since its inception, and all the targeted schools were located in high poverty areas. No schools with student populations under 1,000 were cited in 2005-2006.

Table 3: PSSA Required Proficiency Percentages (PDE, 2006)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient in Reading</td>
<td>45</td>
<td>54</td>
<td>63</td>
<td>72</td>
<td>61</td>
<td>91</td>
<td>100</td>
</tr>
<tr>
<td>Percent Proficient in Reading</td>
<td>35</td>
<td>45</td>
<td>56</td>
<td>67</td>
<td>78</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>
Attendance and Graduation Rates
In 2004, Pennsylvania lowered the compliance levels for attendance and graduation to 80 percent and 90 percent, respectively. Pennsylvania schools were meeting the mandates in all but one area: graduation rates for Black, Latino/Hispanic, Limited English Proficient, Migrant, and Economically Disadvantaged subgroups all fall below the 80 percent mandate. Only three rural high schools did not meet the graduation mandate in 2003; therefore, rural schools appeared to be on target for meeting the NCLB graduation requirement.

Participation Rate
Pennsylvania districts are demonstrating particularly positive results regarding participation in the assessments. In 2004-2005, all districts met the mandate. The building percentage, while still extremely good, declined from the 2003-2004 (95 percent) statistic to the 2004-2005 statistic (88 percent).

Academic Achievement
A review of the academic progress of Pennsylvania’s students showed a positive trend toward proficiency. Rural students (69 percent) outperformed urban students (66 percent) overall in reading and mathematics at every grade level. However, a wide gap in achievement levels between white students and some subgroups existed. Analysis showed a pattern of rural students performing better in the elementary grades in mathematics with urban students doing better in mathematics in the secondary grades. Both groups showed strong performances in the elementary grades, but by 11th grade only a little more than half the students in both groups were achieving at the proficient level or higher in mathematics. Although this troubling statistic is consistent with national trends, this decline in mathematics achievement is problematic. Finally, although student achievement is improving, it is not improving at a rate that will allow most districts, if any, to achieve 100 percent proficiency by 2014.

Adequate Yearly Progress
Almost 92 percent of rural schools made adequate yearly progress (AYP) in 2004, and no rural schools were in Corrective Action. Approximately 76 percent of urban schools made AYP and 4 percent were in Corrective Action. By the 2006-2007 school year, 74 percent of schools overall were achieving AYP.

Data Analysis Summary
A review of the available data from 2002 to 2005 portrayed rural Pennsylvania schools as performing well in safety, employing highly qualified teachers, participating in testing, graduation and attendance rates, and demonstrating academic growth. Pennsylvania’s urban schools were not faring as well but were generally performing positively. However, graduation rates and academic achievement for identified subgroups were areas of concern. Critical to the process will be the systematic review of existing policies and practices on the state and local levels to establish congruence with evidence-based practice. For example, the increasing body of research supporting small schools and the funding policies and procedures for building new schools should be examined. Also critical will be an analysis of the practices, policies, characteristics, and needs of the school districts to determine congruence with research-based recommendations. Specific recommendations based on the literature and the results from this research are in the final discussion section.

Research: Online Survey, Focus Groups, and Interviews
To gain a comprehensive perspective on the progress Pennsylvania schools were making in meeting the NCLB mandates, the researchers collected data on the challenges and initiatives associated with meeting the mandates using online surveys and follow-up focus groups. Two online surveys were conducted, one for superintendents and one for building principals. Four focus groups meetings and five interviews were conducted to gather additional information from principals; and two focus group conference calls with superintendents were conducted by the researchers as well.

Online Surveys
The researchers began by identifying the major issues related to the study and used advisory groups of school administrators and education professors to refine and pilot the online survey instruments. The district level survey for superintendents contained eight questions with one open-ended response. The school level survey for the principals consisted of 13 questions with one open-ended response.
District Level Survey

The district level survey was sent to all Pennsylvania school district superintendents using their school email address. After screening for invalid responses, 272 valid surveys were received, for a response rate of 54 percent.

Approximately 48 percent of Pennsylvania’s school districts are classified as rural by the Center for Rural Pennsylvania (2004). The completed surveys reflected this with 49 percent of the responses coming from rural districts and 51 percent from urban districts. Considering the rural/urban variable, there were no differences between urban/rural districts and years as superintendent, or urban/rural districts and years as superintendent in the current district. Thus, there is an equal number of rural and urban districts represented in the data, the years of superinten-

dent experience are similar, and the success in meeting AYP are similar.

Challenges to Meet NCLB Mandates. Superintendents were asked to choose from a list of 10 challenges to meeting the mandates of NCLB and indicate all that applied to their districts. Rural districts reported challenges to meeting mandates on curricular alignment (47 percent vs. 33 percent) and governance structure (28 percent vs. 17 percent) significantly more often than urban districts. Only one challenge, community support, (22 percent vs. 11 percent) was reported significantly more by urban districts (see Table 4).

Initiatives to Meet NCLB Mandates. Superintendents were given a list of 10 initiatives and asked to indicate all that were currently being implemented to meet NCLB mandates in their districts.

### Table 4. Percent of Rural and Urban Superintendents Identifying Specific Challenges to Meeting NCLB Mandates (in Descending Order of Total Percent)

<table>
<thead>
<tr>
<th>Source</th>
<th>Challenge</th>
<th>Rural (N=134)</th>
<th>Urban (N=138)</th>
<th>Total (N=272)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sub-group Mandates</td>
<td>Yes</td>
<td>83</td>
<td>85</td>
<td>84</td>
</tr>
<tr>
<td>2. Funding</td>
<td>Yes</td>
<td>81</td>
<td>78</td>
<td>79</td>
</tr>
<tr>
<td>3. High Stakes Test</td>
<td>Yes</td>
<td>63</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>4. Data Management</td>
<td>Yes</td>
<td>58</td>
<td>54</td>
<td>56</td>
</tr>
<tr>
<td>5. Student Attitude towards Tests</td>
<td>Yes</td>
<td>52</td>
<td>54</td>
<td>53</td>
</tr>
<tr>
<td>6. Curricular Alignment</td>
<td>Yes</td>
<td>47</td>
<td>35</td>
<td>41</td>
</tr>
<tr>
<td>7. Teacher Attitude towards Tests</td>
<td>Yes</td>
<td>33</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>8. Parent Attitude towards Tests</td>
<td>Yes</td>
<td>26</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>9. Governance Structure</td>
<td>Yes</td>
<td>28</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>10. Community Support</td>
<td>Yes</td>
<td>11</td>
<td>22</td>
<td>16</td>
</tr>
</tbody>
</table>

### Table 5. Percent of Rural and Urban Districts Reporting Purposes of Initiatives to Meet NCLB Mandates (in Descending Order of Total Percent)

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Initiative</th>
<th>Rural (N=134)</th>
<th>Urban (N=138)</th>
<th>Total (N=272)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Offering Staff Development &amp; Training Programs</td>
<td>Yes</td>
<td>99.3</td>
<td>94.9</td>
<td>97.1</td>
</tr>
<tr>
<td>2. Realigning/adjusting Curriculum</td>
<td>Yes</td>
<td>97.8</td>
<td>91.3</td>
<td>94.5</td>
</tr>
<tr>
<td>3. Internal Academic Support Programs for Students</td>
<td>Yes</td>
<td>91.0</td>
<td>94.9</td>
<td>93.0</td>
</tr>
<tr>
<td>4. Making More Data-Driven Decisions</td>
<td>Yes</td>
<td>89.6</td>
<td>94.2</td>
<td>91.9</td>
</tr>
<tr>
<td>5. Enhancing Communication with Parents</td>
<td>Yes</td>
<td>74.6</td>
<td>79.7</td>
<td>77.2</td>
</tr>
<tr>
<td>6. Seeking Funding</td>
<td>Yes</td>
<td>72.4</td>
<td>68.1</td>
<td>70.2</td>
</tr>
<tr>
<td>7. External Academic Support Programs for Students</td>
<td>Yes</td>
<td>53.0</td>
<td>63.0</td>
<td>58.1</td>
</tr>
<tr>
<td>8. Student Incentives for Testing</td>
<td>Yes</td>
<td>47.0</td>
<td>48.6</td>
<td>47.8</td>
</tr>
<tr>
<td>9. Seeking Community Support</td>
<td>Yes</td>
<td>37.3</td>
<td>55.1</td>
<td>46.3</td>
</tr>
<tr>
<td>10. Adjusting School Calendar</td>
<td>Yes</td>
<td>20.1</td>
<td>38.4</td>
<td>29.4</td>
</tr>
</tbody>
</table>
Rural districts reported significantly more than urban districts that they were implementing the initiatives of staff development (99 percent vs. 94 percent) and realigning the curriculum (98 percent vs. 91 percent). Seeking community support and adjusting school calendars were reported as being implemented significantly more often by urban districts than rural districts (see Table 5).

**Summary of Responses on District Survey.** According to the superintendents, districts clearly are challenged by the subgroup requirements and funding needs in trying to meet No Child Left Behind mandates. More rural districts than urban districts are confronted with the challenge of realigning the curriculum and are reporting more initiatives to address this challenge. In addition, more urban districts reported challenges related to gaining support from the community and are implementing initiatives to gain support. To address the challenges, most districts are providing teacher training programs, revising the curriculum, developing support programs for students, and making more data-driven decisions.

**District Level Survey Open Responses.** The final question on the online survey to school district superintendents asked for their opinion as to the most significant obstacle facing their districts in meeting NCLB mandates.

Two issues surfaced as critical for all superintendents: funding and subgroup achievement. Funding is problematic with particular concern about unfunded mandates. Superintendents wrote that they wanted to implement new programs to support student learning but did not have additional funds to do so. Typical of the lament was one superintendent’s comment: “The cost of implementing a successful remediation program after school and in the summer for a rural district of over 200 square miles. Transportation of students is a concern. Many parents are unable to transport students and the school districts can’t afford costs.”

The second issue for all superintendents was the concern over subgroup achievement. Comments were categorized in one of two ways: ethical concerns or meeting proficiency. Ethical concerns highlighted dilemmas about meeting the needs of individuals, including those with individual education plans (IEPs), while assessing all students in the same way. Specifically, superintendents described their concern about putting students with disabilities in standardized testing situations where the students would be tested on their chronological age level rather than their developmental level, which almost always would lead to less than proficient scores. The inflexibility of certain policies, for example testing English language learners within one year of their arrival in the United States, was also problematic. Meeting proficiency focused on the unrealistic requirement for subgroups. One superintendent’s response, “With a high population of ESL (English as a Second Language) and LD (Learning Disabled) students, the subgroup expectation is unrealistic and unfair, to both the students and the districts,” captured the concerns of many leaders.

Although there are several differences between the comments of rural and urban superintendents, there was only one that was significant: high-stakes testing.

In summary, superintendents desire changes in the funding process as well as additional funding. The second most significant obstacle is the area of subgroup achievement, particularly special education. There was a common refrain that the requirements for students with IEPs are unrealistic, and a fairer way to measure individual student progress that is consistent with the student’s IEP needs to be enacted. The need to be more flexible and concern over a “one-size fits all” curriculum and accountability system is a cohesive theme of the open-ended responses, representing the opinions of both rural and urban superintendents.

**School Level Survey**

There were 1,217 valid principal responses out of a possible 3,005 to the School Level Survey for a return rate of 40 percent. The principals supplied demographic data and responded to questions concerning challenges in meeting the mandates of NCLB and initiatives that their schools had implemented to address specific requirements. Elementary and middle level principals answered six, two-part questions including one about student attendance. High school principals answered six, two-part questions including one about graduation rates.

Fifty-three percent of the respondent principals were at the elementary or intermediate level, 19 percent at the middle or junior high level, and 24 percent at the high school level. The return rate reflects the percentage of each level of schools in Pennsylvania: 55 percent at the elementary level, 19 percent at the middle/junior high level, and 22 percent at the high school level. Eighty-four percent of the respondents indicated their school had made AYP in the 2003-2004 school year, which is similar to the 81 percent the state reported as having made AYP that school year. Thus, it
appears that the respondents are a representative sample of Pennsylvania principals in terms of school level, making AYP, and years of experience.

Summary of Responses on School Survey. Rural schools were challenged to meet participation rates more than urban schools because of lack of student incentives, negative student attitudes towards tests, vacation, and health-related absences. Compared to urban schools, rural schools reported significantly less reliance on initiatives to track subgroups, seek community support, and adjust the school’s calendar as a means to increase participation rates.

With the mandate to increase PSSA scores, rural schools were more likely to indicate delays in receiving test results as an obstacle than were urban schools. They also reported more challenges than urban schools in terms of lack of parental concern for testing. Concerning initiatives to increase PSSA scores, rural schools indicated greater incidence than did urban schools of modifying the curriculum based on test data and using computer based instruction.

Generally, the challenges to increase subgroup achievement were more varied than the other two NCLB mandate categories. The pattern of variation was similar for rural and urban schools. However, rural schools reported more frequently than urban schools on the challenge of lack of parent interest. An interesting discrepancy existed between the rural superintendents’ positive perception of community support and rural principals’ negative perception of parental interest. Perhaps the superintendents viewed community support in a broader sense than the principals. In regard to frequency of initiative use, rural schools relied on curriculum revision much more often than did urban schools.

The challenges among elementary, middle, and junior high schools to meet school attendance rates were modest in frequency. Parent and student attitudes and student transience were the more common challenges. More rural schools seem to be plagued with negative attitudes among parents and were less subjected to transience than urban schools. Offering breakfast and attendance awards were popular incentives for all, but occurred at a higher rate in rural schools while urban schools used attendance officers more. These programs are generally low-cost or funded through grants; therefore, these initiatives fall within the reach of many districts.

Student attendance and parent and student attitudes are common challenges to high schools when trying to increase graduation rates, with parental attitude being a more significant problem for rural schools. The initiatives in the majority of the districts focus on the curriculum and connecting parents and students to the school.

The fact that high schools, despite national criticism, do not perceive lack of a challenging curriculum to be a challenge, yet commonly use initiatives to increase curriculum relevance is an issue needing further exploration. The popularity of using tutoring to increase graduation rates seems a common solution, but may be a more traditional approach, grounded in more mastery of subject matter, when student attitude, connection, and course relevance may also be important areas of focus.

Open Responses on School Survey. Eighty-one percent of the principals completing the survey responded to the open-ended question identifying the most critical concern they have with the NCLB mandates. Of the 994 responses, 36 percent were from rural principals, 62 percent were from urban respondents and 2 percent could not be categorized as either rural or urban. A content analysis of the responses produced 15 categories.

Analysis of Overall Open Responses on School Survey. The issue of subgroups was identified as the most critical challenge of meeting the NCLB mandates by 40 percent of all respondents. Within this category, two-thirds of the respondents specified special education as the major concern. The ELL issue was similar to the special education one in that the principals did not think it was fair to test students in a language they could not read or understand well.

The second most critical issue was meeting proficiency. The first subcategory, unrealistic goals, focuses on the idea that the mandates are unrealistic in regard to all students being proficient, one-size-fits-all tests, and the influence of the home environment. Principals were very concerned about the expectations of “100 percent proficiency by 2014.” There was a general feeling that there should be some recognition of the individuality that exists in both students and schools.

The third most frequently identified critical issue was funding, identified by 176 (18 percent) of the respondents.

The other categories were identified as concerns in much fewer numbers than special education, meeting proficiency and funding.
Analysis of Rural/Urban Open Responses on School Survey. There were four categories where there were significant differences between rural and urban responses. The special education and ESL/ELL categories were cited significantly more by urban school principals than rural principals. This building level finding was consistent with the superintendents’ open response. This does not seem to be as great an issue for rural schools as for urban schools, most likely because rural schools do not have the large numbers of special education students and there needs to be at least 40 students to define a subgroup. Therefore, disaggregating scores for those subgroups is not necessary, making it easier for districts to make AYP. There was also a significant difference in the rural/urban expected responses for the category of stress/pressure. Significantly more rural schools were concerned with the issue of stress and pressure on their students and teachers. Perhaps it is connected to the smaller size of rural schools and the principals’ familiarity with the students, teachers, and parents as individuals. The fourth category that had a significant difference between the rural and urban responses was meeting proficiency. Significantly more rural respondents considered this a critical concern than did their urban counterparts.

Superintendent Focus Group/Conference Call Interviews
Superintendents were asked to be part of focus groups held by conference call. There were two group discussions involving seven superintendents: three superintendents were from rural districts, and four were from urban districts, with district size varying from under 500 to over 15,000.

The discussions with the superintendents yielded the following recommendations:
- Report school and district PSSA results in the spring of each year.
- Change subgroup (special education) achievement measures to reflect the student’s functional level.
- Judge achievement according to progress and growth of individual student.
- Adjust funding to be locally controlled per local needs.
- Include funding opportunities to provide for proactive initiatives.
- Review communication channels at PDE and recommend ways to be more responsive and consistent with information and answers.
- Make assessment high-stakes for students and parents, not just schools.
- Initiate all-day, compulsory kindergarten for readiness for school.

Principal Focus Groups/Interviews
To support the wide-scale survey of Pennsylvania building principals, four focus groups and five interviews were held during July and August 2005. There were 20 building principals involved. Eight were from high schools, seven from middle schools and five from elementary schools. Fourteen were from rural districts and six from urban ones. The number of participants in each group ranged from three to five. Two groups were comprised solely of rural principals; the other three were mixed.

The building level principals’ recommendations related to NCLB represent a rural perspective as 70 percent of the respondents were from rural schools. Administrators’ recommendations are as follows.
- The requirements for highly qualified teachers in problematic areas, such as special education, ELL, and alternative education, need to be implemented over a longer period of time than currently outlined.
- The reporting of PSSA results needs to occur in the spring of each year so that implementation of remedial programs can occur and students be scheduled appropriately.
- The subgroup of special education students needs to be provided with testing accommodations and content testing in accordance with their IEPs.
- Remediation programs designed to fit the school/community profile need fiscal support at a full funding level.
- Accountability needs to extend to students and parents via school district policies imposing curricular and graduation requirements for proficiency.
- Recognition that all schools, communities, and children are different and that they have different needs relative to achievement of academic proficiency. The concept of accountability needs to stay; micro-management does not.
A Statewide Investigation into Meeting the Mandates of No Child Left Behind

Comparison of Rural Schools in Meeting AYP Mandates

A second level of analysis of the data focused solely on rural schools to have a clearer picture of the differences between rural schools that are making AYP and ones that are not. When rural schools at all building levels were separated into those making AYP and those that are not, the following relationships were evident.

- None of the initiatives chosen by schools to increase PSSA participation had a relationship to AYP. In other words, schools that made AYP were no more likely to have used particular initiatives than schools not making AYP. There appeared to be no pattern of initiatives relating to making AYP.
- Of the seven initiatives implemented to increase PSSA achievement, only two, hiring more staff and direct teaching of test-taking skills, were more related to not making AYP than statistically expected. Therefore, there was a significant negative relationship between making AYP and hiring additional staff and direct teaching of test-taking skills.
- Of the eight initiatives for increasing subgroup achievement in rural schools on the PSSA, only one, assigning teachers as English and mathematics coaches, had a relationship to AYP. Although it was expected that hiring coaches would be related to making AYP, there was, in fact, a negative relationship between hiring coaches and making AYP.
- For rural elementary and middle schools, only one of the eight initiatives regarding increasing attendance rates and making AYP had a relationship. Modifying vacation policies had a negative relationship to making AYP. In other words, schools that made AYP did not report modifying vacation policies as often as expected.
- For rural high schools, one initiative, increasing curriculum relevancy, which was intended to raise graduation rates, had a negative relationship with making AYP.
- A positive relationship did exist across all grade levels in one instance – having Title I funding and making AYP was positively related.

Based on this data, it seems useful for educational stakeholders to consider some assumptions. Rural schools that are making AYP appear to be avoiding reactive, add-on initiatives. They do not seem to be employing additional staff, devoting instructional time solely to teaching test-taking skills, or reassigning teachers as coaches. They are aligning curriculum with state-identified assessment anchors, providing targeted professional development in the areas of effective instructional practices and data-driven decision-making, and providing evidence-based remediation programs. The positive relationship to federally funded Title I, a program with a long history of successful intervention with economically disadvantaged students, is a good example of a way to close the achievement gap for a targeted group. The rural schools that are making AYP seem to be clearly focused on the larger, systemic solutions rather than piecemeal initiatives. In addition, preliminary data appear to show a relationship between length of time in the principal’s position at that school and making AYP, which would suggest that stable leadership enhances the rural school’s ability to make meaningful change to meet its goals.

Commonalities of High Performing Rural Schools Making AYP

The online survey indicated initiatives rural schools have implemented to meet NCLB mandates. To further uncover possible common factors that exist among high performing rural schools, the researchers identified a selected, random sample of rural schools that had fully met all the components of AYP. Nineteen principals, who represented all three building levels, elementary, middle and high school throughout Pennsylvania, were contacted. They were asked to identify what initiatives had been implemented that they believed were instrumental in their schools’ success. Fourteen of the schools had no identified subgroups; five had one subgroup, students with low socioeconomic status. Most of the schools were small with a student population range.

The most common initiative was the implementation of remediation structures and strategies including tutoring. The methods for remediation were varied, but consistently the programs involved determining where students were weak and immediately remediating in a targeted way, based on the curriculum aligned to the assessment anchors. A critical factor in successful remediation programs was flexibility, in terms of how and when the remediation was delivered, particularly in the summer and in the high schools. For example, students who are working or involved in activities after school needed remediation to be offered before or during school as opposed to the traditional after-school structure. The second most common initiative was the align-
ing of curriculum with the state assessment anchors. Two additional consistent steps were the adoption of a data-driven decision-making process and focused professional development. Several specific areas were targeted, such as literacy activities across the curriculum, differentiated instruction and using assessment information to plan instruction. Elementary and middle level principals identified parent involvement programs and initiatives emphasizing the needs of the child as critical. The initiatives varied from considering time of day for specific types of academic content to asynchronous, web-based tutoring. Many were “home-grown” rather than commercial or government-sponsored, and principals commented on the importance of the “buy-in” that comes with internally-developed initiatives. “We did it on our own!” was a common refrain. Many of the schools had received external funding through state or federal grants that they used to support new initiatives. Many schools also stretched their own budgets to fund initiatives.

Most of these elements could be adapted by other schools; a few may be inherent to their individual context. The characteristics can provide guideposts for struggling schools that need to determine how to most effectively expend their limited resources. The researchers found the administrators in this study eager to share their successes and frustrations, enthusiastic about the stakeholders who share in their efforts, and cautiously optimistic about the improvement process. Clearly, they were deeply invested in the instructional successes of their schools. They wanted a statewide culture where successes were recognized and rewarded with the resources necessary to sustain and enhance their schools’ progress. They wanted opportunities to share with others and gain ideas from other high-performing schools.

**CONCLUSIONS**

Schools and districts throughout Pennsylvania have been working to meet the mandates of NCLB, and the majority have been succeeding. Through the analyses of multiple data sources, four major obstacles and four initiatives linked to meeting the mandates were identified for both rural and urban schools. In addition, some similarities and differences between rural schools and urban schools were identified. Finally, a profile of successful rural schools in meeting the mandates of NCLB emerged.

It is clear that the special education subgroup, funding, unrealistic goals of proficiency, and untimely reporting of PSSA results are the major obstacles faced by rural and urban districts. It appears there is a fundamental difference between what the school administrators and policy makers believe in terms of the special education subgroup and the 2014 goal of 100 percent of students meeting proficiency at their chronological grade level. The K-12 administrators face the dilemma of being held responsible for the achievement of a group of students who, under the federal special education law, have different expectations and requirements. Schools have conflicting
mandates they must meet, and administrators are recommending a realistic progress model be adopted.

The two obstacles, funding and timely reporting of results, are of a different nature. It is critical to have adequate and flexible funding streams to provide effective programs and to report test results in a timely manner so schools can react appropriately. These appear to be able to be overcome with a collaborative effort by all stakeholders.

To overcome the obstacles they are encountering, most schools and districts are choosing the initiatives of aligning curriculum, offering remediation, training teachers, and making data-driven decisions. Aligning curriculum, training teachers, and making data-driven decisions are often linked. For example, a district may require its teachers to attend a series of staff development sessions where they are analyzing PSSA results and then making changes in their school’s curriculum based on the standards. Some schools are scheduling data analysis sessions during the school day as part of the planning process. For the most part, these initiatives are ones that can be accomplished within the current organizational and financial structures of the schools. Remediation, often in the form of tutoring, is the one exception as many schools are using funding provided by the government. However, many schools are eligible for only limited funding, so they must supplement funding through the regular budget.

The more successful schools seem to focus more on preventative strategies, with the result that less extensive remediation is necessary. It would be beneficial for districts that are currently making AYP to have their efforts supported so they can continue to make progress, particularly as the required proficiency levels increase.

Though rural and urban districts voiced many of the same concerns, two issues surfaced that are worthy of emphasis. Rural schools appear to be focused on two subgroups, economically disadvantaged and special education, whereas urban schools appear to be more focused on the broad spectrum of subgroups. This difference would impact the way funding streams are categorized. Secondly, rural schools have limited layers of administrative and support staff, but urban schools have complex infrastructures. This difference impacts the agility of rural schools; therefore, it is particularly critical for rural schools to receive test results and new mandates in a timely manner.

Finally, in studying highly successful rural schools in terms of making AYP, a picture emerged that should be further studied and refined. The defining features of these schools are that they are small, have an effective instructional leader, have taken proactive rather than reactive measures, have parental support, and have at most one subgroup, the economically disadvantaged. If these findings are supported, then policy-makers must seriously consider how to change schools from large scale to small scale, encourage stable leadership, involve parents more, and fund proactive measures. In the ensuing years, attention must be focused on subgroups because they are often the reason schools are not making AYP. Serious consideration must be given as to why a particular subgroup is not making adequate progress, and prescriptive remedies put in place. This may well be the key to Pennsylvania’s success in 2014.

**POLICY CONSIDERATIONS**

The first five considerations focus on all schools, rural and urban, while the last is specifically for rural schools. The targeted agencies appear in parentheses following each consideration.

1. *Subgroup accountability, especially in regard to special education, needs to be addressed and modified.* (PDE)

   All elements of the study reflected great concern over the issue of subgroup achievement and accountability. The progress data reveal that across Pennsylvania subgroups are struggling to meet the proficient levels. Research suggests that small schools with a personalized atmosphere and culturally responsive curriculum and instruction can make a difference in subgroup achievement. Large, regional schools do not generally support these elements, and implementation of these effective practices would involve a change process that would evolve over extended time. Since this is such a significant issue for all of Pennsylvania, it is critical that a full review of applicable policies be analyzed for congruence with the needs.
In terms of special education students, the achievement data review, and feedback from all levels of administrators indicate a need to modify the way students with IEPs are assessed. Students should participate in the assessment at their functional levels so that their actual progress from year to year can be monitored. In addition, these students need all the accommodations that they receive in their daily classes. Further, schools’ and districts’ accountability measures need to be revised to document yearly progress of special education students’ achievement at their functional levels. Schools need, and appear willing, to be held accountable to teach for continued gain; however, the system needs to be realistic and congruent with other special education laws. The approval by the U.S. Department of Education for 10 states to consider an individual progress model for special education students may lend support for this recommendation.

2. To fully meet the mandates of NCLB, funding amounts need to be increased and mechanisms for funding need to be more flexible and responsive to local needs. (Pennsylvania Legislature and PDE)

A review of the progress data, analysis of the literature on funding and its effects, and the data from all levels of administrators suggest that adequate funding is a critical problem. The major concern is that meeting the mandates with the static levels of funding is causing school districts to eliminate meaningful, productive programs, such as the arts, in order to add appropriate, new initiatives to meet the mandates. Administrators indicated that they know what programs and changes would benefit their students but do not have the resources to implement them. There is frustration in the field that is supported by research and data that funding in Pennsylvania is not equitable, which translates into not all Pennsylvania students having equal access to curriculum and instructional supports beneficial to meeting NCLB mandates.

In addition, the district and building administrators were clear about having diverse needs and wanting funding streams to reflect those needs. Money tied to specific initiatives can be problematic in that districts apply for the aid rather than always choosing the most appropriate treatment for their needs. A concern was raised over two areas of funding in particular, Title I and special education. The need for accurate and current data for determining amounts was recommended. Finally, schools that are currently making AYP, yet must continue to improve in order to meet the mandates of 2014, are finding that they are not eligible to secure additional funds to implement new initiatives.

3. Serious consideration needs to occur in both the state and federal government as to whether 100 percent of students scoring at proficient on one high-stakes test is a realistic goal.

Three areas contribute to this recommendation. Concern was expressed that one test does not give an accurate picture of what a student has achieved. The last decade has seen a resurgence of interest in assessment research, which does not support “one-size fits all” assessment. Schools have worked diligently to include a variety of on-going assessments that are authentic and focused on real world skills. High-stakes testing as a sole measure of a student’s level of achievement is the antithesis of this research.

Secondly, schools are faced with students arriving daily with significant burdens ranging from depression to substance abuse to homelessness. These issues must also be addressed by society and not assigned solely to schools and educators. Every day these issues affect student learning as well as student motivation to focus on high stakes assessment. Services and resources must be available in all geographic regions of the commonwealth, or the goal of all students being proficient academically will never be within reach.

The issue of subgroup achievement is the major problem in Pennsylvania. Supports for all students so that the recommendations in the literature can be a reality are imperative. Finally, the dissonance between special education performance and the expectation that special education students learn just like every other student needs to be resolved. The educators responding in this study welcomed accountability, and the data on performance suggest that schools are taking the mandates seriously. However, when faced with the impossible, evidence-based practice tells us that motivation declines.

4. The accuracy and timeliness of information disseminated from the Pennsylvania Department of Education needs to be improved and communication channels need to be more responsive. (PDE)

A wealth of information exists about student achievement, graduation, attendance, school safety, teacher demographics, and participation rates but was often difficult to locate and was found only through
extensive searching. Sometimes information was not current, and in some cases, such as the number of school buildings, the data were contradictory. Occasionally questions surfaced as to the methods and for what purposes the data were generated and disseminated. For example, specific concerns were raised regarding the way graduation rates are calculated using initial 12th grade enrollment compared to June graduation. This does not take into consideration students who drop out of school in 9th to 11th grades. This made the collection, synthesis, and analysis more problematic than it should have been. All information needs to be user-friendly, accurate, and current so that school personnel, parents, and other interested stakeholders can use it to make timely, informed decisions.

Administrators at all levels were concerned with the timeliness of the dissemination of achievement results. A common thread is having either a faster turnaround time on test results or administering the tests in the fall so that students can be more effectively counseled and scheduled. It is imperative that the results be disseminated by the spring semester, particularly in rural schools, which often do not have the infrastructure to be immediately responsive.

Finally, administrators at all levels shared concern that the regulations and procedures related to NCLB mandates are not stable, and there is a lack of consistency in response from PDE. It is recommended that key personnel provide consistency and timeliness of response. Developing the assessment anchors was clearly a meaningful and successful initiative; schools would welcome other such supports.

5. The state should review policies to determine congruence with research and be proactive in supporting the following for all districts (PDE, Pennsylvania Department of Health):
   • all-day kindergarten;
   • small schools;
   • use of an individual student tracking system;
   • resources that address societal problems that impact student safety and achievement;
   • evidence-based remediation strategies; and
   • data-gathering to determine new initiatives to aid schools in meeting NCLB mandates.

6. Rural schools districts have additional needs for both financial and resource support to use the recommendations found in valid and reliable studies. (Pennsylvania Legislature, PDE)

The related literature review and responses from the rural administrators surveys and interviews indicate that schools are on target at identifying productive initiatives; however, it is becoming increasingly difficult to find the resources to implement them. Therefore, certain initiatives can be more easily accomplished in some districts. Rural schools need to have resources identified and supported by the state in the following areas:
   • professional development including the topics of data-driven decision-making, curriculum alignment, and working with subgroups, especially special education students;
   • forging stronger parent and community relations;
   • evidence-based remediation strategies;
   • maintaining small schools or restructuring to create learning communities within schools; and
   • developing a resource list of exemplary rural schools.
CITED REFERENCES


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