

## EXECUTIVE DIRECTOR SOUNDS OFF

On Thursday, March 6<sup>th</sup> the Commission on Education Improvement received the first “draft” on the work being conducted by adequacy consultants Picus and Associates as they begin to determine what it will take for “Funding Schools Adequately in North Dakota: Resources to Double Student Performance”. The document was lengthy as was the discussion on its overview during the Commission meeting. The Governor’s office has just gotten a PDF file of draft of the Picus “Funding Schools Adequately in North Dakota: Resources to Double Student Performance” document to our office so that it is now available to members via the NDCEL website.

It is important, however, that a synopsis of the draft recommendations also be made available to NDCEL members. This article is intended to do that by providing you a brief-bulleted overview of the recommendations made by the consultants at the March 6<sup>th</sup> Commission meeting. Members are asked to review these recommendations, see how they would impact their individual schools, and are then encouraged to provide feedback to our office and Commission members with their observations and recommendations.

### **“Funding Schools Adequately in North Dakota: Resources to Double Student Performance” Draft Recommendations**

#### **Definition of Adequacy:**

The proposed definition of education adequacy which serves as a basis for identifying the resources required for adequate funding is:

- a. The expectations included in North Dakota’s Academic Standards, which define what all North Dakota students should be taught.
- b. The standards included in the state’s testing system, which include a definition of what would be considered a proficient score for each test. The goal over time is to have all, or all but the students with the most severe and profound disabilities, perform at or above proficiency on the tests (with the proficiency standard calibrated overtime to those of NAEP), and to boost the percentage of those performing at the advanced levels – particularly in mathematics and science. For purposes of this study, **the goal is provide resources adequate for schools to double student performance in North Dakota over the next 4-6 years.**
- c. Sufficient funding to insure that the resources identified in the resource matrix contained in Table 1 of this report are included in the base expenditure figure as well as appropriate categorical programs or students weights.

Full implementation of this definition of an adequate education program with the proposed resources will require that each school rethink, if not restructure, its entire educational program and reallocate all current and any new resources to this restructured and more effective educational program. Such a system also will work best if it is accompanied by a clear accountability and monitoring program.

#### **General Recommendations**

##### **Preschool:**

Consider funding preschool for 3 and 4 year olds, at least for children from families with an income at or below 200 percent of the poverty level.

- Staff classes at one teacher and one teacher assistant for each pre-school class of 15-20 students.

- Fund either full day preschool programs which provide more impacts than half-day programs or comprehensive half-day programs focused on pre-literacy, pre-numeracy skills and appropriate social skills.
- Include preschool students in a district's pupil count for state aid purposes.
- Costs analysis will be separated out from over all cost because preschool is not included in ND's education clause.

#### **Student Count for Calculation State Aid:**

Continue use of ADM student count for the aid formula

- Use one pupil count for all elements of the program including determining property wealth per pupil, calculating state aid, or calculating any other element of the state aid system such as the Equity Payment.
- If foundation program is adopted as part of the adequacy recommendations the state is urged to use a count of students in the school and districts where they actually attend and simplify tuition payments except for placement of students with severe and profound disabilities.
- Continue use of the pupil counts from the previous year to calculate state aid payments.

#### **Full Day Kindergarten:**

- Continue implementation of full day kindergarten as begun in the 2008-09 school year
- Continue funding full day kindergarten by as full 1.0 student in the formula.

#### **School District Size:**

Recommendations provide resources for prototypical school units of 432 elementary students (K-5), 450 middle school students (6-8) and 600 high school students (9-12).

- Allow for using a whole number for teachers (as opposed to partial FTEs) to facilitate staffing discussions
- Costs out the various recommendations for prototypical schools in a prototypical district of 3,828 students which would have four 432 student elementary schools (K-5), two 450 student middle schools (6-8) and two 600 student high schools (9-12).
- Assumes 288-300 students at each grade level.
- Costs out various recommendations for district of 600 students.
- Costs out various recommendations for districts with less than 185 students.
- Compare their approach to small school adjustments with the current state weights for elementary and high school districts.
- Districts with less than 185 students, unless it is a necessary and isolated, might need to operate at a higher cost level than the state is willing to cover beyond the 1.25 weighting factor.
- Clear distinction between the use of the word "school" and the word "district". The word "school" refers to a building where students are educated. The word "district" refers to the entity that would include all schools in the district plus the central office and any other service unit (operations, maintenance, transportation).
- Report will reference "schools" as distinct from districts.

### **Recommendations for the Personnel Elements in the Prototypical School**

#### **Core Teachers/Class Size:**

Prototypical school will be resourced for class sizes of 15 for grades K-3 and 25 for grades 4-12.

- K-5 elementary schools would have an average class size of 18 which will be the number referenced for elementary schools.
- Funding of class size recommendation would be last recommendation to be phased-in.
- Elementary school (432 students) would receive 25 core teachers, middle school (450 students) 18 core teachers and high school (600 students) 24 core teachers.
- Core teachers include: the grade (or multi-grade) teacher at the elementary schools and mathematics, science, reading/English/language arts, social studies and possibly foreign languages at the middle and high schools.
- *Core teachers are not the only teaching staff in these schools as there are variety of additional teachers recommended in late sections for all school levels.*

### **Fractional Teacher Units and Grouping Students for Instruction:**

Formula would trigger just the additional fraction (class size is 19 instead of recommended 18 at elementary level).

- Considers multi-age approach, which also allows for differential placement of students according to their developmental progress, for elementary schools to even out class sizes.

### **Specialist Teachers and Planning and Preparation Time/Collaborative Professional Development**

Elementary (K-5) and middle School (6-8) would receive an additional 20% of the number of core teachers for “specialist” teachers (art, music, library skills, physical education, health, and career technical education).

- Provide each teacher one period a day for collaborative planning and professional development focused on the school’s curriculum requires an additional staff allocation for both specialist and elective classes at 20% of core teacher ratio.
- 20% formula provides an additional 4.8 FTE specialists for a prototypical elementary school of 432 students and 3.6 FTE specialists for the prototypical middle school of 450 students.
- Specialist and elective teachers for high schools to be resourced assuming high schools having four 90-minute class block schedule.
- High school (9-12) core teachers would provide instruction for three of the 90-minute blocks and have one 90 minute block for collaborative planning and professional development focused on the school’s curriculum.
- High schools (9-12) receive an additional 33% of the number of core teachers for “specialist” teachers (art, music, library skills, physical education, health, and career technical education) to provide core teachers with a “block” for planning and preparation.
- 33% formula provides an additional 8.0 FTE specialist/elective teachers for a prototypical high school of 600 students.
- Recommended total teaching staff of core plus specialist teachers for the prototypical schools would be: elementary (K-5: 432 students) - 28.8 FTE; middle school (6-8: 450 students) - 21.6 FTE; high school (9-12: 600 students) – 34.0 FTE.
- See Table 2 for 3,828 student district, 600 student district, 185 student district (prorates) and 185 student district (possible).
- *These are not the only professional staff or the only teaching staff for each school. A variety of additional staff are recommended in the set of recommendations that follow.*

### **Instructional Coaches/School-Based Coaches/Mentors**

Comprehensive school design along with previous evidenced-based adequacy studies call for school-based instructional coaches (sometimes called mentors, site coaches, curriculum specialists, or lead teachers).

- Evidence suggests allocating 1.0 FTE instructional coach for every 200 students.
- Translates into the following number of instructional coaches for the prototypical schools: elementary (K-5: 432 students) - 2.20 FTE instructional coaches; middle school (6-8: 450 students) – 2.25 FTE instructional coaches; high school (9-12: 600 students) – 3.0 FTE instructional coaches.
- For small schools instructional coach FTE for a 108 student elementary school  $1/4^{\text{th}}$  size of prototypical would be = 0.50 FTE instructional coach and for a 150 student middle school and high school  $1/3^{\text{rd}}$  the size of a middle school prototypical and  $1/6^{\text{th}}$  the size of a high school prototypical would be = .075 FTE instructional coach.
- See Table 2 for 3,828 student district, 600 student district, 185 student district (prorated) and 185 student district (possible).

### **Strategies for Struggling Students**

Schools should design a sequence of additional effective strategies for struggling students (those who must work harder and who need more time to meet state standards).

- Specific cost-based extra help programs for struggling students would include: tutoring which is immediate and intensive; sheltered English and ESL instruction; extended day programs for academic tutoring; summer school for students needing help to achieve performance standards; and a “census” approach to fund special education.
- One on one and small group tutoring should: intervene immediately when a student is trying to learn; be explicitly tied to specific learning problem evidenced; when provided by a trained professional, provide the precise and appropriate substantive help to the student need to overcome the learning challenge; and, remedy short-term learning problems.

- Certified teacher tutoring resources should be provided at the rate of 1.0 FTE position for every 100 at-risk students as determined by free and reduced lunch count. This recommendation will be turned into both a dollar per at-risk figure and into a pupil weight based on at-risk student counts.

### **English Language Learner (ELL) Students**

ELL students need some additional help that include a combination of small classes, PD for teachers to help them teach “sheltered English classes, and “reception” centers for districts with numbers of ELL students who arrive at different times during the school year.

- Certified teacher tutoring resources should be provided at the rate of 1.0FTE position for every 100 ELL students. This recommendation will be turned into both a dollar per ELL student figure and into a pupil weight based on ELL student counts.
- Most ELL students would also be included in at-risk student counts which would make available additional tutoring, extended day, and summer school resources for ELL students (*would trigger initial 1.0 tutor position, extended day resources plus 1.0 teacher position*).

### **Extended-Day Programs**

Extended-day program should be included in the set of extra help strategies for North Dakota.

- Resources would be used to provide students in all elementary and secondary schools additional help to meet academic performance standards during the school year but after the school day.
- Resourced at 50% the at-risk student count because not all at-risk students will need to or will attend.
- Staffed at 1.0 FTE teacher position for every 15 eligible students (50% of at-risk pupil count)
- Paid at 25% of position’s annual salary to offer 2 ½ to 3 hour extended-day program 5 days/week.
- State would require districts to track students participating in programs, their pre- and post- test scores, and the specific nature of the programs provided to develop a knowledge base about which after-school program structures have the most impact on student learning.

### **Summer School**

ND school prototypes include a summer school provision for 50% of all at-risk students in grades K-12.

- Resource program for 8 weeks in length, 6 hour days, with class size of 15 students.
- 6 hour day would allow 4 hours for instruction in reading and mathematics and 2 hours in other academics, with specific academic focus different for high school students (making up failed courses, etc.)
- 6 hour day would also allow for 2 hours of non-academic activities.
- Resourced at the cost of each FTE at 25% of their annual salary.
- 50% at-risk student need cost estimate should be monitored over time to determine correct estimates of at-risk students who need a summer school program.

### **Overall Recommendations for Most At-Risk Students**

Provide a sequenced set of connected and structured programs that begin in early elementary grades and continue all the way through high school levels.

- Most academically deficient at-risk students receive one-on-one tutoring and the next group receives intensive and explicit instruction in groups of 3-5.
- Students still struggling to meet proficiency standards would then receive an extended day program which includes an academic focus.
- Students needing even more help than listed above would be offered a summer school program which is structured and focused on academics (reading & mathematics for elementary/middle school students, failed course options for high school students).
- State should develop monitoring and reporting requirements for receipt of these funds.
- Schools would be required to identify students receiving any and all interventions, and data should be kept on student performance when they enter and exit programs as well as reporting data on program structure and content.

### **Alternative Schools**

North Dakota should consider modifying its extra weight for Alternative High Schools at a rate commensurate with the staffing ratios that follow:

- Keep Alternative High Schools small ranging in size from 24-48 students;
- Each Alternative High School would have one assistant principal position plus 3 teacher positions;
- A 48 student Alternative High School would have one assistant principal position plus 6 teacher positions;
- Teachers would be the only staff for the school and the school would decide how to allocate positions across various functional roles.
- State should develop very clear guidelines for what qualifies as an Alternative High School so that it makes it inappropriate for any typical high school to declare all their students are at-risk and be claimed as an Alternative High School.

### **Special Education**

North Dakota should continue to embrace the Response to Intervention (RTI) model as a statewide strategy for meeting the needs of all students.

- Continue with the census approach to funding special education services for higher incidence and lower cost services for students with disabilities.
- State should reimburse districts for 100% of extra costs for students with the most severe disabilities, minus Federal Title VIb and Medicare funds for students.
- Special education extra staff for the census approach be 1.0 teacher position and 0.5 aide for every 150 ADM students.
- Translates into the following number special ed teachers and aids for the prototypical schools: elementary and middle school (432 students) – 3.0 FTE teachers & 1.5 aides and high school (576 students) – 4.0 FTE teachers & 2.0 aides.
- Costing analysis will recalibrate the weight for such students using the above staffing formula for students with mild and moderate disabilities as well as an estimate of the revenues needed for the state to fully cover the resources needed for “high cost” special education students.

### **Gifted and Talented**

Needs of North Dakota’s gifted and talented students should be met.

- Services can be provided with modest additional funding at a rate of \$25/ADM to create programs for gifted and talented which would include purchasing access to the Renzulli Learning Program.

### **Career and Technical Education**

Consultants need additional briefing on the approach North Dakota has adopted and is at this time beyond the scope of this report.

### **Substitute Teachers**

Each prototypical school in a prototypical district receive an amount equal to 10 days per teacher for all teachers listed in the previous sections (core and specialist teachers, instructional coaches, tutors, special education, alternative high schools, etc.).

- Funded at \$125/day plus FCIA & state retirement benefits (\$134.56/day).
- Intended for each district to have a “pot” of money approximately equal to 10 substitute days for all teachers to cover classrooms when teachers are on sick leave. Does not cover PD or activity leave.

### **Student Support/Family Outreach**

Provide one teacher position for every 100 at-risk students for each prototypical school in the prototypical district for pupil support service.

- Provide additional guidance counselor positions for the prototypical middle and high school models based on ASCA standards. This translates to: 1.8 guidance counselors for the prototypical 432 student middle school and 2.4 guidance counselors for the prototypical 567 student high school.
- See Table 2 for 3,828 student district, 600 student district, 185 student district (prorated) and 185 student district (possible).



- Recommendation would allow schools and districts to allocate FTE across guidance counselors, nurses, and social workers in a way that best meets such needs from the perspective of the district and school.
- Provide for substantial and adequate resources for parent outreach and involvement as well as counseling for students.
- Under this model an all poverty school would be provided 4.3 staff for elementary (432 students) and the same staff plus 1.8 counselors at the middle school and 5.8 positions plus and additional 2.5 counselors at the prototypic all poverty high school.
- Provide enough resources to create and deploy the ambitious and comprehensive parent involvement and outreach programs that are part of the comprehensive school designs: Success for All and the Comer School Development Program.

### **Aides**

Recommend funding of 2.0 FTE aide positions provided in the prototypical elementary and middle school and 3.0 FTE aide positions for the prototypical high school.

- Schools or districts could decide to use resources, including those recommended for at-risk students, for Farkas-type reading tutors.

### **Librarians**

Recommend 1.0 FTE librarian for each prototypical school.

### **Principal**

Each school in the prototypical district should be provided a principal position.

- Each prototypical middle school should have a 0.5 assistant principal and the high school a 1.0 assistant principal.

### **Effect Sizes of Major Recommendations**

The recommendations are based on identified “effect sizes”, which is the amount of a standard deviation in higher performance that the program produces for student who participate in the program versus those who did not, of the programmatic proposals.

- An effect size of 1.0 indicates the average student’s performance would move from the 50<sup>th</sup> to the 83<sup>rd</sup> percentile.
- An effect size greater than 0.25 as significant and .50 as substantial.
- Do not add effect size for multiple strategies as effect sizes are identified for just individual programs.
- See the “Estimated Effect Sizes of Major Recommendations” used in this study by going to the NDCEL website.

### **Intensive Professional Development**

Resources needed (based on documented research) to deploy effective professional development (PD) which is key to transforming all the resources recommended into student learning are:

- Extend the number of teacher days by 8 days to provide a total of 10 for intensive summer institutes.
- Instructional coaches would included earlier would provide the instructional coaching.
- Collaborative work should be conducted during the planning and preparation time to improve curriculum and instructional programs.
- \$100/student or about \$43,200 in the prototypical elementary and middle school and \$57,000 for the prototypical high school would be needed for trainer and miscellaneous professional development costs.

Service delivery is a major challenge for North Dakota’s many small school districts.

- Larger district programs could take the PD resources recommended and design and implement new and effective PD activities.
- State will need to address how PD structures can be created for the many smaller districts and may want use the newly formed REAs to deliver PD programs.

### **Technology and Equipment**

Study concludes that technology, if used correctly, is important for preparing the student for both postsecondary education and the workforce, can increase student motivation to learn, positively impacts student achievement, and opens a new world of resources for schools an their students.

- Provide each school with \$250/student to keep local technology working and updated and for schools to purchase (or lease) computers, servers and software, including security, instructional and management software, in order to have an overall ratio of one computer to every 2 to 3 students.
- A 1 to 3 ratio is sufficient to provide every teacher, the principal, and other key school level staff with a computer and to have an actual ratio of about one computer for every 3 to 4 students.
- Funding would allow for the technology needed for schools to access distance learning programs and for students to access the new and evolving web-based testing programs.
- States applying the \$250/student concluded that they could get newer equipment which would reduce their maintenance costs.
- Recommend incorporating maintenance costs in lease agreements or the purchasing of 24 hour maintenance plans.

### **Instructional Materials and Formative Assessments**

Recommend North Dakota include \$145, \$145, and \$180 per pupil for instructional materials, books, supplies including library resources for elementary, middle, and high schools respectively.

- \$25/pupil should be added to these totals to districts and schools to purchase materials for the ongoing support for a range of formative assessment tools which would allow districts to apply to a variety of formative assessment tools.

### **Student Activities**

Recommend North Dakota include at the district level an amount equal to \$200-\$250 per pupil for student activities.

### **Central Office Expenditures**

Recommend that the central office staffing be based on the following identified resources for the 3,500 student prototypical

- The average per pupil figure to resource the central office is \$600 which includes \$300 per pupil for miscellaneous expenses such as legal expenses, insurance, materials and supplies, board of education expenses and other central office functions.
- The proposed Central Office Staffing for a District with 3,500 Students is as follows:

<u>Superintendent Office</u>	<u>Business Office</u>	<u>Curriculum and Pupil Support</u>	<u>Technology</u>	<u>Operations and Maintenance</u>
<b>Administrative</b> 1 Superintendent 1 Asst. Super.	1 Business Manger 1 HR Manager	1 Director Sp Ed 1 Direct Pupil Srvcs	1 Director of Technology	
<b>Professional</b>		1 Psychologist		1 Director of Maintenance/Operations
<b>Clerical</b> 2 Secretaries	1 Payroll Clerk 1 Accts Payable Clerk 1 Secretary	3 Secretaries		1 Secretary

### **Operations and Maintenance**

This function will for now include a statewide average carry forward amount per pupil for the 2006-2007 school year which was \$851/pupil.

- This study does not include or analyze transportation, food services, debt service, or capital construction costs.

### **Recommended Resources for the North Dakota Prototypical Schools (Tables Listed are Linked to the NDCEL Website)**

As a part of the adequacy study for North Dakota, the consultants developed a model to estimate the cost of education. Their draft recommendations for resources in North Dakota are included in [Table 1](#). [Table 2](#) summarizes the school-level personnel resources generated for the three prototypical districts with 3, 828 students, 600 students, and 185 students.

In determining the cost of the final recommendations the consultants will:

- Apply the salary and benefit data provided by the NDDPI (Table 3) to the personnel resources generated by the adequacy model for the prototypical elementary, middle and high school in the three prototypical districts listed in Table 2.
- Use the prototypical school district which has a total of 3,828 students which has 288-300 students in each grade in the following school configuration: four 432 student elementary (K-5) schools; two 450 middle (6-8) schools; and, two 600 student high (9-12) schools.
- Use the North Dakota percentages of special needs students which are 41.3% Free and Reduced Lunch (FRL) (based on percent of students in K-5 and K-6 schools who are eligible for FRL), 5.3% English Language Learners, 14.1% special education with 2.0% of the 14.1% estimated as high cost special education (0.28% of entire population of students).
- Provide the same level of resources in the 600 student districts by simply pro-rating the resources in the 3,828 student district to that of a 600 pupil district using the ratio of 600/3,828.
- Pro-rate, for most positions, the 185 pupil district, but will keep some positions such as principal and librarian at 1.0 which is above the pro-rated level.
- Present a second column for the 185 student district with different possible staffing levels.

*The consultants want the Education Improvement Commission to discuss these staffing levels to determine the degree to which they would be adequate for districts of these two sizes – 600 and 185 students.*

This is a very long but important “Executive Director Sounds Off” article for the NDCEL membership to read and analyze. Please review the document carefully and then provide the Commission members and this office feedback on your thoughts and reactions. It would be great to be able to provide that information to the consultants and Commission members at the next commission meeting. Finally, members are reminded again to take the time to read the entire draft of the Picus “Funding Schools Adequately in North Dakota: Resources to Double Student Performance” report that was given to the Commission for review on March 6<sup>th</sup>. This document provides the research and rationale for all of the recommendations that the consultants have made as listed in this article.