

Report on the Cost of Education

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Executive Summary

The following report was prepared by the New Jersey Department of Education (the Department) and Augenblick, Palaich, and Associates, Inc. (APA), a nationally recognized education consulting firm with more than 20 years experience in education policy and school finance. The report describes work undertaken by staff from both organizations over the past several years.

The primary purpose of this report is to calculate the costs New Jersey school districts face in meeting state performance and accountability standards. Costs addressed include:

1. A per-student “base” cost (which reflects only the cost of serving students with no special needs); and
2. Adjustments to the base cost that reflect the added cost of serving special need students (including special education students, at-risk students and English language learners).

To identify these costs, the report used two nationally recognized study approaches. The Department weighed the strengths and weaknesses of each approach, and then selected one – the Professional Judgment Panel (PJP) approach – whose results form the basis of the report’s findings. The tables below identify the median base cost and added cost weights identified using the PJP approach.

These costs reflect the price of putting resources into schools and districts that panels of educators from across the state say are needed for students to meet New Jersey’s academic performance expectations. It is critical to note, however, that panelists only identified a set of resources to be used in a series of *hypothetical* school scenarios and did not specifically examine any existing school or district in the state. It is therefore not appropriate to suggest that any specific resources or programs identified by the panels should be applied in all New Jersey schools. Nor can the report be used to determine which portion of these resources should be paid for at the state or local level.

Instead, the panel recommendations are perhaps best viewed simply in terms of identifying an overall level of funds which should be available to purchase personnel, resources, and programs as individual school or district leaders see fit. The advantage of such an approach is that it gives the flexibility to educators to decide how best to meet the specific needs of their students. These are the professionals who: 1) work with children in classrooms on a daily basis; 2) have the experience and training to make the best decisions possible on the types of resources needed for students to meet state standards; and 3) have the greatest understanding of the unique characteristics of their district and student population that might warrant a different way of deploying resources.

As shown in the tables below, the process used identified a base cost and added weights for students with special needs in both K–8 and K–12 districts. The base cost shown

below is only a median cost. For more information on how this cost might vary by district size or grade span, please see Sections V and VI below.

Median Base Cost for New Jersey’s K–8 and K–12 districts

K – 8	\$7,367
K – 12	\$8,496

Added Cost Weights for Students with Special Needs

	K – 8 Districts	K – 12 Districts
Special Education		
Speech	0.46	0.41
Moderate	1.95	1.42
Severe	7.39	4.08
Extended School Year	0.48	0.42
Preschool Disabled	3.23	2.84
At-Risk	0.63	0.45
LEP	0.81	0.37

Section 1: Introduction

In 2002, the New Jersey Department of Education (Department) began conducting analyses to develop recommendations for a new State education funding law and to determine the cost of providing educational services consistent with the state's Core Curriculum Content Standards (Standards). These analyses followed up on a conference sponsored by the Department that brought together educators from across the state to discuss studies that were being undertaken in other states. These studies use different methodologies to calculate the costs school districts face *in meeting state performance and accountability standards*. Costs addressed by the studies typically include:

1. A “base” cost (which reflects only the cost of serving students with no special needs); and
2. Adjustments to the base cost that reflect the added cost of serving special need students (including special education students, at-risk students and English language learners).

After considering the various methodologies used in other states, the Department decided to utilize two approaches, the Successful School Districts (SSD) approach, and an approach using Professional Judgment Panels (PJP). To conduct these approaches, the Department entered into a contract with Augenblick, Palaich and Associates, Inc. (APA, formerly Augenblick and Myers), a nationally recognized education consulting firm with extensive experience assisting government entities and stakeholder organizations with this type of analysis. APA's John Augenblick and Justin Silverstein were primarily responsible for the work undertaken for the Department.

As discussed in the next section, the underlying assumption of the SSD approach is that a uniform base cost figure can be estimated by examining the basic expenditures of New Jersey school districts that fulfill state education accountability expectations. The underlying assumption of the PJP approach is that all education service delivery costs – including a base cost and adjustments for students with special needs – can be determined by costing out those services that panels of New Jersey educators identify as being needed in hypothetical school districts. Neither of the approaches considers the costs of transportation or capital.

Section II: Methods for Determining the Cost of Education

Over the past ten years, researchers and policy experts have developed several approaches to calculate the resources needed for schools and districts to achieve a particular student performance level. These efforts are designed to identify a cost that has meaning beyond simply reflecting available state revenue. Four approaches have emerged as ways to determine such a cost:

- (1) The successful school district approach (SSD);
- (2) The professional judgment panels approach (PJP);
- (3) The evidence-based approach; and

(4) The cost function approach.

The logic of the successful school district approach (SSD)¹ is that one can identify the cost of providing a quality education by reviewing the expenditures of those school districts in which students are meeting some measurable performance standard. The process begins by developing criteria by which school districts can be evaluated. Data are analyzed to identify the districts that meet the criteria and financial data are used to calculate per pupil regular education expenditures. The median expenditure among the successful districts is deemed the necessary base cost for providing quality educational services to students with no special needs. Importantly, the SSD approach can only identify a base cost. If the full cost of meeting the standard is to be identified, another approach must be used to determine adjustments required for special needs students. The SSD method has been used to estimate the cost of education in a number of states, including Colorado, Kansas, Maryland, Mississippi, Missouri, New York and Ohio.²

The professional judgment panels approach (PJP) begins with the identification of a set of desired performance standards or outcomes and the creation of at least one hypothetical school district. Next, a panel (or multiple panels) of education practitioners are assembled and tasked with answering the question, “What resources do you need to provide students in the hypothetical district(s) the educational opportunities that will allow all of them to meet the specified educational standards?”

The panelists recommend resources for a school district that has no students with special needs. Then they recommend additional resources associated with providing programs and services for special need students. Panelists are instructed to identify resources without regard to their cost; however, the panelists are also told to limit recommendations to only what is necessary to meet the educational outcomes or standards and to refrain from constructing a “dream school.” Once the panelists have completed their work, the cost of the specified resources is determined. The result of this process (known as “costing out”) yields a base per pupil amount for general education as well as the additional cost of providing services to students with special needs. Maryland, Kansas, Oregon and New York are a few states in which the PJP approach has been applied.³

The Evidence-Based approach (EB) represents a third method used to assess educational costs associated with meeting performance standards. This method is similar to PJP in that the resources that are necessary to meet an educational objective are identified and the cost of such resources is determined. The difference between the two methods is how the resources are identified. While the PJP approach relies on the collective judgment of practitioner panels, the EB method utilizes the results of previously existing studies to determine what resources are necessary.

¹ If sufficient data are available, one can conduct the analysis at the school, rather than the district level.

² [A Costing Out Primer](http://www.schoolfunding.info/resource_center/costingoutprimer.php3), published by the National Access Network. The report is available at www.schoolfunding.info/resource_center/costingoutprimer.php3.

³ [A Costing Out Primer](#).

A last approach that has been explored to identify costs associated with meeting education standards is the cost function (or econometric modeling approach). Using complex statistical procedures, this process uses a variety of input data and outcome measures to predict the cost of providing educational services that will yield a specific level of educational outcomes. The approach is based on observed relationships between student performance and district expenditure data after controlling for other factors.

Each of the approaches discussed above has certain advantages and limitations to consider. Of the four methods, SSD is the most easily implemented once the necessary data are available. Additionally, the concept is intuitive and readily understood by a wide range of stakeholders. There is, however, one notable weakness. As previously mentioned, this method is not suitable for determining the additional costs associated with serving students with special needs, and requires that an alternative approach be used to make that determination.⁴

Unlike SSD, the PJP analysis provides both a base cost and the adjustments for special needs students. Because it actively involves school and district personnel, the PJP process is also very transparent. Some have argued, however, that there is not a clear connection between the resources that result from this process and any set of educational outcomes.

The EB approach attempts to rely on research that links specific educational programs to student outcomes. However, there is no clear consensus among studies regarding the efficacy of any specific set of educational reforms working for all students in all districts. The research used to justify certain resources also does not link these resources to the educational objectives or performance standards of any specific state. Additionally, the approach does not address a number of costs that districts face in providing education services such as operations and maintenance.

The cost function methodology seeks to link performance and spending data. The method suffers from two important shortcomings. First, the approach relies on large amounts of specific data that is often not readily available. Second, the procedure involves the use of complex statistical techniques that are not readily understood by the parties who would be directly impacted by the results.

Given the relative strengths and weaknesses of each approach, the Department decided to implement two methods, SSD and PJP. The following sections of this report explain the implementation of each method in more detail.

Section III: Successful School Districts

The SSD methodology is conceptually straightforward and can be readily implemented if certain data are available. The cost of providing quality educational services is determined by identifying districts that have met some predetermined level of student

⁴ “Calculation of the Cost of an Adequate Education in Maryland in 1999 – 2000 Using Two Different Analytic Approaches” Augenblick and Myers, Inc., September 2001.

performance and examining the base cost expenditures in these districts. In this study, the median basic expenditure per pupil among these successful districts is considered to be the base cost for all districts. The analysis is limited to K – 8 and K – 12 school districts in order to align the costs with those obtained using the PJP methodology.

Three steps were required to carry out the SSD analysis in New Jersey. First, measurable criteria for defining “success” were developed. Second, analysis was conducted to determine which school districts satisfied the chosen criteria. Third, fiscal data was analyzed to determine the base spending of identified successful school districts. The base cost derived from the SSD methodology was derived from all districts that satisfied the success criteria.

In establishing the criteria for defining a successful district, the analysis focused on student performance on the four State assessments administered during the 2004 – 2005 school year.⁵ While it is understood that such exams do not measure all of the benefits schools impart on their students, there are at least three key reasons why these represent the best parameters for measuring school district success:

- 1) ***Student performance on these exams is a direct measure of districts’ ability to educate students to the CCCS.*** The State exams are designed to assess students’ mastery of the CCCS at a given point in the academic career. This is consistent with the objective of determining the cost of providing educational services that meet the State’s Standards.
- 2) ***The measures are uniform for all districts and are not based on self-reported data.*** Other available student performance measures are based on self-reported data that are not routinely verified by the Department and do not allow for systematic comparisons across districts. Using State assessment scores ensures that all districts are compared to a standard using the same rubric.
- 3) ***The standards for success have already been established and are known by school district officials.*** N. J. A. C. 6A:8-4.4 specifies the proficiency rates school districts are to achieve in order to meet the adequate yearly progress (AYP) thresholds required under the State’s *No Child Left Behind* plan. Table 1 summarizes the AYP thresholds applied to the 2004–05 school year assessments.

**Table 1
Required Proficiency Rates on State Assessments: 2004 – 2005 School Year**

	Language Arts	Mathematics
NJ ASK3	75	62
NJ ASK4	75	62
GEPA	66	49
HSPA	79	64

⁵ The four State assessments are the New Jersey Assessment of Knowledge and Skills for third and fourth grade (NJ ASK3 and NJ ASK4), the Grade Eight Proficiency Assessment (GEPA) and the High School Proficiency Assessment (HSPA).

Given that the success criteria are defined, available data was evaluated to determine which districts met the standards. This analysis utilized the districts' assessment data as summarized in the 2005 *New Jersey School Report Card* (the downloadable databases are available at <http://education.state.nj.us/rc/rc05/database.htm>). Districts were considered successful if the proficiency rate for the total student population was greater than or equal to the proficiency rate thresholds shown in Table 1 for all tests administered in the school district. Any test data that were suppressed for confidentiality reasons did not impact a district's potential success status.

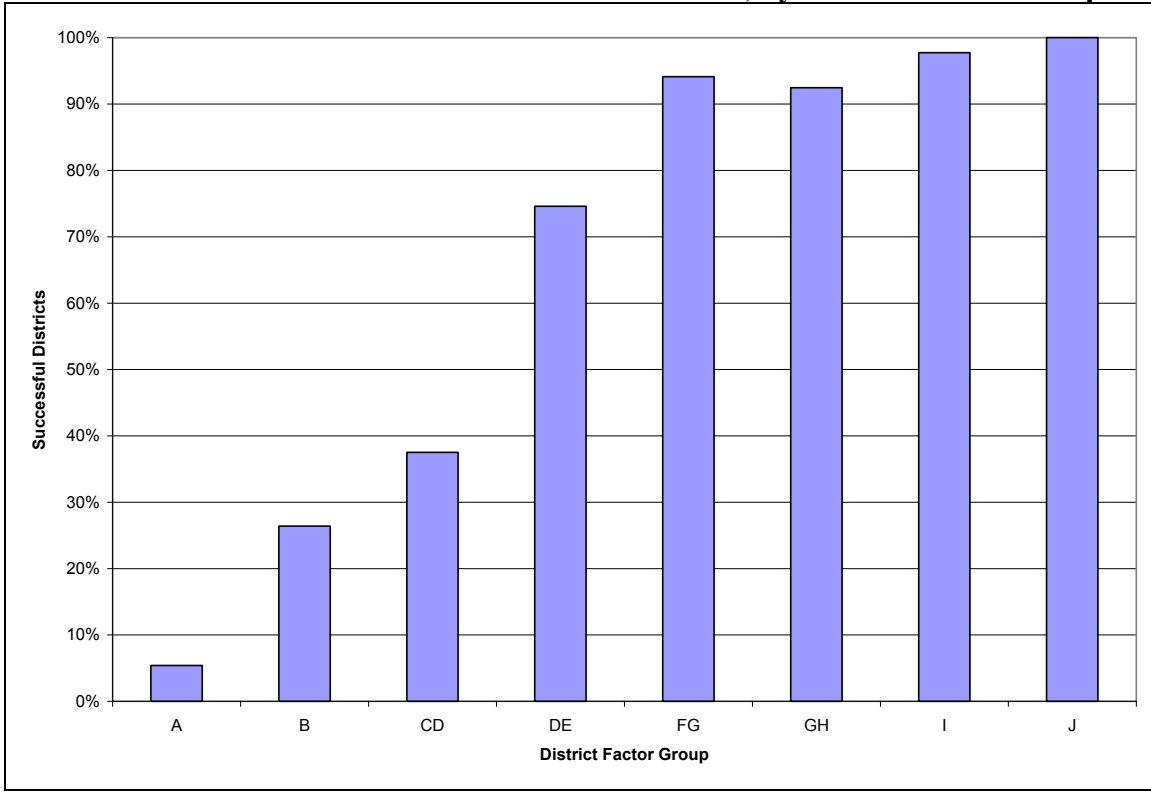
It should be noted that these data are different in two key respects relative to the information used to determine whether or not a district is in need of improvement under NCLB. First, the report card data used in this analysis provide test scores when at least 11 students were tested. For purposes of determining AYP status, there must be at least 20 valid test scores. Second, the report card data include all students who sat for the exam in a given district, while the AYP determination omits students who were not continuously enrolled in the school for the past year. The result of these differences is that the criteria used to identify successful districts are more stringent than those used to determine a district's AYP status. Districts are more likely to be assessed since the number of students needed to be included in the analysis is lower. Additionally, the inclusion of students who are in the school for less than one year makes attaining the threshold more challenging (since this is a group that typically does not perform as well on State assessments as students who have not transferred schools in the past year).

A review of the assessment data from the 2004 – 2005 school year identified 305 New Jersey school districts in which the total student population successfully met the established criteria. The 305 districts represented 69 percent of the K–8 or K–12 districts included in the analysis (these districts, as well as the districts' per pupil basic education expenditures for the 2004–05 school year, are listed in Appendix 1).⁶ Nearly three-quarters of K–8 districts and 64 percent of K–12 districts were classified as successful using this procedure. Figure 2 shows the percent of districts in each DFG classification that were classified as successful.

Once the successful districts were identified, enrollment and financial data were used to determine the basic spending per student for each district. Specifically, the data from the October 2004 Application for State School Aid (ASSA) were used to provide a count of students on roll in the relevant districts. The fiscal year 2005 audit summary data provided all of the expenditures incurred by districts. It was necessary to omit expenditures that were not related to basic student education or which tended to vary greatly from one year to the next (such as legal judgments against the school district). Additionally, capital and transportation costs were excluded. Appendix 2 provides a listing of the line items that were incorporated into the analysis.

⁶ One district was omitted due to an insufficient number of students taking all tests administered in the district that year.

Figure 2
Percent of School Districts Classified as Successful, by District Factor Group



Having identified the pertinent expenditures, the basic expenditures per pupil in each successful district was calculated and the median expenditure across districts was defined as the overall “base cost.” Table 2 shows these figures for K–8 and K–12 districts.

Table 2
Cost of Education Using Successful School District Methodology

	K – 8 Districts	K – 12 Districts
Median Per Pupil Expenditure	\$8,004	\$8,493
Number of Districts	164	141

Section IV: Professional Judgment Panel

The PJP method involves asking a panel (or multiple panels) of education practitioners to identify the resources necessary to educate students in a hypothetical school district to a specific educational standard. There are three stages involved when utilizing this approach. First, one must develop a number of hypothetical school districts that reflect the actual demographics of school districts in the state. Second, panels consisting of education professionals are assembled to determine what resources would be needed in the hypothetical school districts to obtain a specific set of academic outcomes. In the third stage, the resources identified as necessary by the panelists are “costed out.” The

resulting dollar amounts represent the cost of providing educational services consistent with the identified Standard.

Stage 1: Developing the Hypothetical School Districts

In the first stage of the process, the Department provided APA with detailed information regarding the size of New Jersey school districts and key student characteristics (such as the percent of students who are low-income, special education classified or exhibit limited English proficiency)⁷. As APA requested, districts were arrayed based on their total enrollment and placed into quintiles with approximately an equal number of students. For example, quintile 1 contained the 341 smallest school districts and had approximately 267,000 students. Since quintile 2 included larger districts, a similar number of students was obtained with only 106 districts. Table 3.A summarizes information relating to the quintiles and the percent of students in each who were low-income or limited English proficient. Table 3.B contains data related to the special education classification rates within each group. More detailed data (not shown) provided similar information by district grade span within each quintile.

**Table 3.A
School District Characteristics, by Quintile**

	# students	# districts	% Low Income	% LEP
Quintile 1	267,235.5	341	10.7	2.3
Quintile 2	268,120.5	106	11.9	2.5
Quintile 3	265,135.0	56	16.1	3.5
Quintile 4	262,585.5	33	22.0	5.5
Quintile 5	275,675.5	15	47.8	7.3

**Table 3.B
School District Special Education Distribution, by Quintile**

	% Tier II	% Tier III	% Tier IV	% Total
Quintile 1	8.1	3.3	1.7	13.1
Quintile 2	7.9	3.6	1.7	13.2
Quintile 3	8.5	3.3	1.6	13.4
Quintile 4	8.1	3.0	1.6	12.7
Quintile 5	8.0	3.6	1.8	13.4

After reviewing the data, APA requested additional demographic information for six district groupings: 1) K–8 districts with enrollment less than 350 students, 2) K–8 districts with enrollment between 350 and 600 students, 3) K–12 districts with enrollment

⁷ For the purpose of this analysis, low-income, special education and limited English proficiency data were obtained from the districts’ Application for State School Aid. The Special Education Annual Data Report was used to obtain information on the number of students who only receive speech therapy services.

less than 1,300 students, 4) K–12 districts with enrollment between 1,300 and 3,999 students, 5) K–12 districts with enrollment between 4,000 and 7,999 students, and 6) K–12 districts with at least 8,000 students. The information provided across the six groups, as shown in Appendix 3, included the number of school districts in the category, the total number of students and average enrollment, the average number of schools and school size, and the percent of students classified as low-income, limited English proficient or special education.

After analyzing the data, six hypothetical school districts were created, as shown in Table 4. One may notice that the grade spans included do not cover the full range of district grade spans that actually exist in New Jersey. This is because it was determined that it would be unnecessary to specify models for all extant district grade configurations. Since the resources are to be developed at the school level, it was decided that the resources could be rearranged afterwards to estimate the cost associated with other grade spans not included in the PJP analysis. This process is discussed in more detail in Section V of this report.

Stage 2: Professional Judgment Panel Meetings

Having developed the six hypothetical districts, the next stage was to assemble panelists to determine what resources were needed to provide all New Jersey students with the opportunity to meet the state’s performance standards. Three rounds of panel meetings were held:

1. In the first round, Department personnel provided recommendations of the resources needed in the six hypothetical schools.
2. During the second round multiple panels, representing various types of school districts throughout the state, reviewed and modified the resources identified in round one.
3. The third round used one panel of district-level policy makers from various school districts to provide a final set of recommendations.

Members of APA staff facilitated all panel meetings. The first panel meeting took place at the Department headquarters in Trenton from January 21 to 23, 2003. Seven Department employees were selected to participate in the panel based on their previous experience in school districts and expertise in education administration or other specific program area (such as special education). A list of participants and their job titles at the time the meeting was conducted is provided in Appendix 6.

The panelists were first given background materials and instructions that included key information about the process. They also received an abridged version of the Standards, required proficiency rates on the state assessments, and other graduation, school day, and school year requirements. These documents are included in Appendix 4. Next, the panelists began identifying the resources that would allow each hypothetical district to provide its students with the opportunity to achieve the Standards. The panelists’

Table 4
Characteristics of Hypothetical School Districts

	K – 8 Districts		Small	K – 12 Districts		
	Very Small	Small		Moderate	Large	Very Large
Enrollment Range	Less than 350	350 - 600	Less than 1,300	1,300 – 3,999	4,000 – 7,999	At least 8,000
Hypothetical District Enrollment	225	495	1,040	2,470	5,330	13,520
Number of Hypothetical Schools						
K – 5				3	6	15
6 – 8				1	2	5
9 – 12			1	1	1	3
Other	1 (k – 8)	1 (K – 8)	1 (K – 8)			
Hypothetical School Enrollment						
K – 5				380*	410*	416*
6 – 8				570**	615**	624**
9 – 12			320	760	1,640	1,387
Other	225	495	720			
Percent of Low-Income Students						
Low	10%	10%	10%	10%	10%	10%
Moderate	20%	20%	20%	20%	20%	20%
High					40%	40%
Very High						60%
Percent of Special Education Students						
Mild	4.0%	3.3%	2.6%	2.4%	2.0%	1.8%
Moderate	12.4%	11.5%	12.5%	11.2%	11.8%	11.0%
Severe	1.5%	1.8%	1.9%	1.7%	1.6%	1.7%
Percent LEP Students	1.2%	1.3%	2.8%	3.2%	4.4%	7.1%

* To reduce respondent burden, the panelists were asked to develop resources for a K – 5 school with 400 students.

** To reduce respondent burden, the panelists were asked to develop resources for a 6 – 8 school with 600 students.

recommendations included: 1) the resources needed assuming that none of the students possessed any special needs; and 2) additional resources for students who receive special education services, come from low-income families, or demonstrate limited English proficiency.

For the second round of panels, nominations for PJP participants were solicited. The Department sent letters to various education-related organizations requesting names of individuals to be included (the organizations from which nominations were requested are listed in Appendix 5). Upon receiving nominations, the Department contacted the individuals regarding their availability for the two-day meeting. After receiving responses from the nominated individuals, the Department developed a final list of invitations. The decision regarding who among the available nominees should be included on the panels was based on the desire to include a diversity of panelists along three dimensions: 1) current or previous work experience in specific positions (e.g., superintendents, principals, teachers, business administrators, special education, at-risk education, and English language learner specialists), 2) experience in school districts with different demographics (urban versus suburban and small versus large), and 3) experience working in different geographic areas of the state. Appendix 6 contains a list of those who were invited and their affiliation at the time that the meeting occurred.

The second panel meeting took place February 20-21, 2003, at the Holiday Inn in Jamesburg, NJ. The participants were divided into five groups: one group focused on the two K–8 models while the other four each focused on one of the K–12 hypothetical districts. In addition to the same instructions that were provided to the first panel members, this group also received a copy of the spreadsheets containing the resources recommended by the first panelists. Rather than specifying the resources in a vacuum, the groups reviewed and modified the original set of recommendations. Again, the resulting spreadsheets are not included in this report but are available from the Department upon request. Appendix 7 provides a list of the individuals who were invited to participate in the meeting and their affiliation at that time.

The Department convened a final group of panelists from school districts to review and modify the results from the second round (the invitees are listed in Appendix 8). In a meeting held at DOE headquarters on March 11-12, 2003, the panel received the same instructions and background material as the previous panel, as well as the spreadsheets completed from the second round of the process. This group made modifications that represented the final set of recommendations to be used to determine the cost of providing educational services to meet the Standards.

Appendix 9 contains the final series of tables that list the resources for each hypothetical district. The tables show the detailed resources for each district. The final hypothetical districts have resources for general education (which includes gifted and talented programs) special education, programs for at-risk students, and individuals with limited English proficiency as well as central office administration services.

Stage 3: Costing-Out Analysis

The third stage of the PJP work involved determining the cost of the resources specified by the panelists. The participants specified certain resources, such as instructional supplies and

materials, in terms of a per-pupil cost. Personnel resources, however, were expressed in full-time equivalent (FTE) terms. Calculating the cost of personnel required using some estimate of the salaries and benefits associated with each FTE position. Appendix 10 lists the salaries⁸ and benefits associated with the various personnel used to calculate the educational cost (benefits equal 20 percent of the salary). It should be noted that salary costs for certificated staff (such as teachers, administrators and student support personnel) is based on the median salary increased by 1.5 percent to account for differences observed between teachers' salaries in New Jersey and nearby states. Table 5 summarizes the costs that were derived using the final set of resources specified.

Table 5
Base and Additional Costs in Hypothetical School Districts

	V. Small K - 8	Small K - 8	Small K - 12	Moderate K - 12	Large K - 12	Very Large K - 12
District Level Costs						
District Administration	2,299	1,481	971	529	529	372
Operations & Maintenance	642	513	562	494	463	469
Other	112	111	117	263	328	286
Total General Education Costs						
School Level	7,004	5,758	7,126	6,928	6,816	6,889
Instruction	4,967	4,746	5,456	5,305	5,252	5,266
Support	1,397	721	912	916	888	909
School Administration	606	275	741	672	637	674
Operations & Maintenance	33	15	17	35	39	41
District Level Costs	3,054	2,105	1,649	1,286	1,320	1,126
Total Base Costs⁹	10,057	7,863	8,775	8,215	8,136	8,016
Additional Costs for Special Needs						
Special Education						
Mild	4,487	2,855	1,203	3,552	3,027	3,337
Moderate	16,495	14,113	11,452	12,978	10,974	11,455
Severe	69,840	47,179	30,657	37,018	33,459	33,881
Preschool Disabled	25,705	24,729	19,261	22,709	24,328	27,437
Extended School Year	3,698	3,839	3,569	3,697	3,269	3,421
Limited English Proficiency	8,570	4,335	3,386	2,751	2,792	3,381
Low-Income Students						
Low Concentration	4,218	4,882	4,266	3,732	3,607	3,690
Moderate Concentration	5,464	5,126	4,266	3,783	3,708	3,752
High Concentration					3,772	4,127
Very High Concentration						2,930

⁸ The median salary observed in current data for each position was used in the costing-out process. The median is a preferred measure relative to the mean because it is less likely to be positively or negatively skewed by outlying observations.

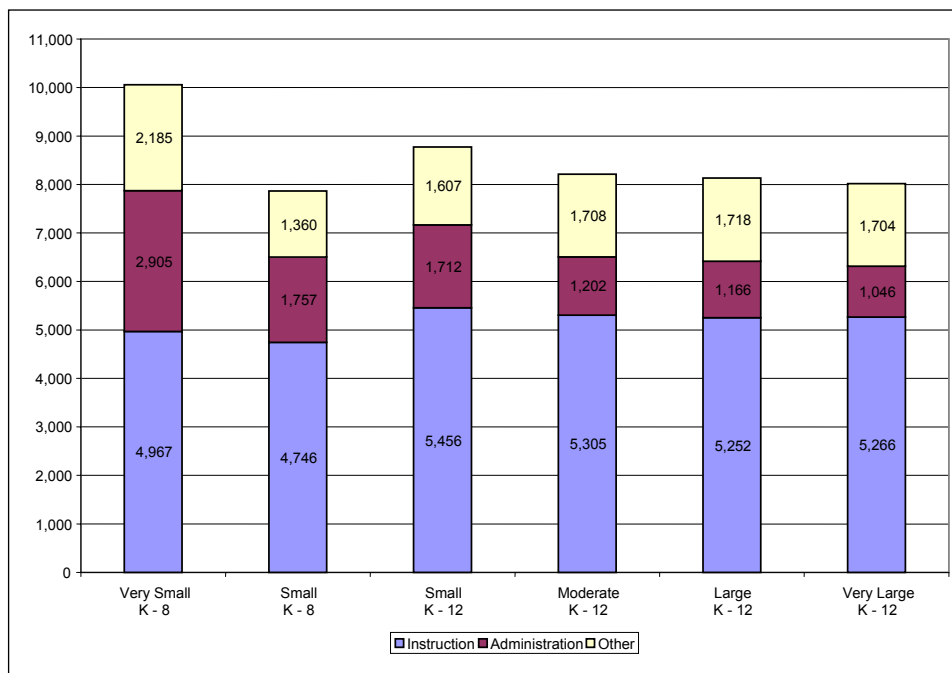
⁹ Total base costs may not equal the sum of total general education cost and district level cost due to rounding.

Section V: Application of PJP Results

The PJP results can be used to determine a base cost and adjustments for special needs students for every district in the state. Generally, APA uses the results of the PJP panels as they are identified by the panelists. In New Jersey, however, the Department felt an adjustment to the results was needed to avoid supporting inefficiencies created by poor economies of scale in very small school districts. These inefficiencies are displayed in Figure 3. Figure 3 apportions the total base cost of the six model school districts into three broader categories: instruction, administration and other.¹⁰ The figure reflects the lack of economies of scale in the smallest hypothetical districts, where approximately one quarter of the total estimated base cost is consumed by administrative expenditures. By comparison, administration accounts for only 15.5 percent of the base cost in the larger K–12 districts.

The Department felt that a core objective of this exercise was to determine not only the cost of meeting the Standards but to do so in an efficient manner. The total base costs of the very small and small K–8 districts were therefore adjusted so that administration equals 15.5 percent of the total base cost (matching the percentage of administrative cost in the larger K–12 districts). This yielded a revised base cost of \$8,460 and \$7,223, respectively. This adjustment was made by the Department and does not follow APA’s general PJP procedures.

Figure 3
Distribution of Costs in Hypothetical School Districts

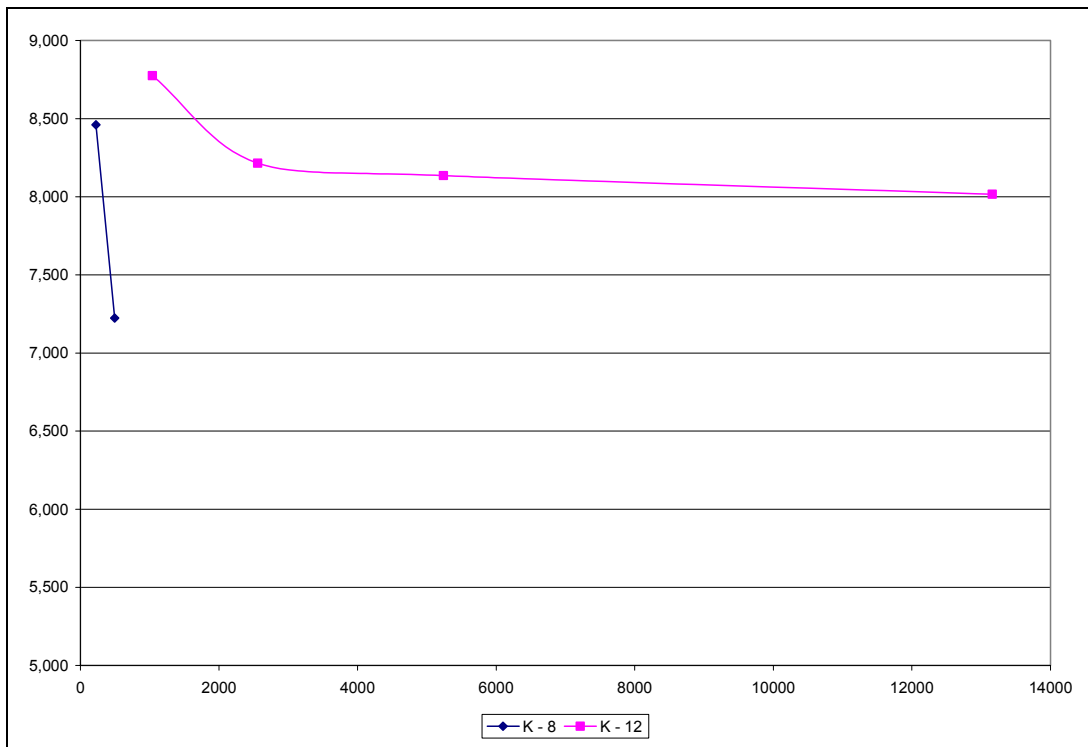


¹⁰ For the purposes of this analysis, instructional and administrative expenditures are defined in a manner consistent with the Uniform Chart of Accounts for New Jersey Public Schools. This document can be found at <http://www.nj.gov/njded/finance/fp/af/coa/coa.pdf>.

Next, a series of formulas was developed to calculate the base per pupil cost for all school districts. It was not possible to simply assign every district one of the six base cost figures. As Figure 4 shows, economies of scale exist that should be accounted for when applying a base cost to a school district. To accommodate these differences, a series of equations were developed to account for the differences in costs based on size of district. The K–8 and K–12 figures are treated separately. The resulting equations were as follows:

- (1) K – 8 districts, less than 500 students: $[(4.581*(500-ENR))+\$7,223]$
- (2) K – 8 districts, 500+ students: $\$7,223-[0.369*(ENR-500)]$
- (3) K – 12 districts, less than 1,000 students: $[0.369*(1,000-ENR)]+\$8,775$
- (4) K – 12 districts, 1,000 – 2,500 students: $\$8,215 - [0.369*(ENR-1,000)]$
- (5) K – 12 districts, 2,500 – 13,500 students: $\$8,136 - [0.019*(ENR-2,500)]$
- (6) K – 12 districts, more than 13,500 students: $\$8,016$

Figure 4
Base Costs in Hypothetical School Districts,
Including Small District Adjustment



Next, base cost figures were developed for districts with grade configurations not covered by the six hypothetical models included in the PJP analysis. Specifically, there were school districts serving grades K–6, grades 7–12 and grades 9–12 for which base cost figures had to be derived from the results already obtained. Since the panelists identified resources at the school level, it

was possible to isolate the cost associated with specific grade spans and apply the base figures to these districts.

Given the number of grades that overlap between a K–6 school district and the K–8 hypothetical district, the K–8 base cost was applied to the former grade span without any additional adjustment. Data from the moderate, large, and very large K–12 districts were used to identify the base cost in three discrete grade spans (the small K–12 hypothetical could not be used for this purpose because it did not contain separate elementary and middle schools).

Table 6 shows how the data from the three hypothetical districts were used to develop an additional cost weight for districts operating grades 7–12 and 9–12. The total base costs (including school and district-level costs) associated with each grade span were derived from the original PJP results. These results are displayed in the section of Table 6 titled “Base Cost.”

Table 6
Grade Span Base Cost in Moderate, Large and Very Large K through 12 Hypothetical Districts

	Moderate K - 12	Large K - 12	Very Large K - 12	
Base Cost				
K – 5	7,558	7,592	7,399	
6 – 8	8,000	8,034	7,840	
9 – 12	9,420	9,006	9,032	
K – 12	8,215	8,136	8,016	
Derived Base Cost				
7 – 12	8,931	8,671	8,621	
9 – 12	9,420	9,006	9,032	
Ratio to K – 12 Cost				Average
7 – 12	1.09	1.07	1.08	1.08
9 – 12	1.15	1.11	1.13	1.13

The base cost for a school district serving grades 7–12 was determined by calculating the weighted average base cost for the corresponding grades. For example, using the data from the moderate K–12 district, the base cost for students in grades 6–8 and 9–12 are \$8,000 and \$9,420, respectively. The weighted average of these two figures (after accounting for the number of students at each grade level in the hypothetical school district) is \$8,931. This calculation was replicated for the other two hypothetical districts and the results are shown in the section labeled “Derived Base Cost.” The base figure for districts serving grades 9–12 is identical to the cost of educating high school students in the hypothetical K–12 districts.

The ratio of these derived base costs to the K–12 base costs was calculated in each of the three models. The average across these three ratios represents the additional weight to be applied to students enrolled in school districts that only operate the higher grades; the additional weight for students in districts operating grades 7–12 is 0.08 while the high school district weight is 0.13. These weights were multiplied by the base costs derived from equations 3 through 6 above to yield the base costs for these school districts.

Next, a weight was developed to account for the additional cost of students educated in county vocational school districts. In determining an additional weight to account for the higher cost, the objective was to adjust for factors not already considered elsewhere in the cost determination. For example, because of the smaller class sizes required and the more costly supplies and materials needed in vocational schools, additional costs need to be added to the basic expenditure.

Table 7 contains the average per pupil expenditures in county vocational school districts and other districts in the state that serve the high school grades only. Three specific cost areas, general education, administration and maintenance (which account for 72 percent of the total expenditures), were identified as areas in which county vocational districts, by their very nature, were likely to incur higher expenses. The total difference between high school and county vocational school districts’ expenditures was divided by the total expenditure in high school districts to provide an additional weight used to determine the base cost figure for county vocational districts. This weight was applied to the equations 3 through 6 in addition to the high school grade span weight discussed previously.

Table 7
Per Pupil Expenditures in County Vocational and High School Districts

	County Vocational Districts	High School Districts	Difference
General Education	4,702	4,518	184
Administration	1,982	1,098	884
Maintenance	2,258	1,309	949
Total of Selected Exp.	8,942	6,925	2,017
Total Exp.	12,498	9,780	
Selected Expenditures as a % of Total HS District Expenditures			20.6%

Table 5 has already shown the base costs derived from the PJP resources as well as the additional costs per pupil associated with special needs students. These additional costs are expressed in weights relative to the base cost figures in Table 8.

To make the data in Table 8 usable in a state funding formula, the results must be studied to determine the appropriate special need student weights to use for all districts. In some states, the results lend themselves to creating different weights based on district size and type. As seen in table 8, the weights for New Jersey’s districts are first broken out by type of district (K–8 or K–12).

Table 8
Weight of Special Education, Limited English Proficiency and At-Risk Programs Relative to Base Cost in Hypothetical School Districts

	Very Small K – 8	Small K – 8	Small K – 12	Moderate K – 12	Large K – 12	Very Large K – 12
Special Education						
Speech	0.53	0.40	0.14	0.43	0.37	0.42
Moderate	1.95	1.95	1.31	1.58	1.35	1.43
Severe	8.26	6.53	3.49	4.51	4.11	4.23
Ext. School Year	0.44	0.53	0.41	0.45	0.40	0.43
Prek Disabled	3.04	3.42	2.20	2.76	2.99	3.42
At-Risk						
10%	0.50	0.68	0.49	0.45	0.44	0.46
20%	0.65	0.71	0.49	0.46	0.46	0.47
40%					0.46	0.51
60%						0.37
LEP	1.01	0.60	0.39	0.33	0.34	0.42

The weights for New Jersey’s K–8 and K–12 districts differed enough – for all special need student categories – that they were examined separately. Specifically, we looked to see if there was any variation within the two separate types based on district size. What we found was that district size did not significantly impact the weights. Since this was the case, we took the average of the weights in the K–8 and K–12 school districts; the resulting final weights are shown in Table 9. It should be noted that the weight shown for speech students in the small K–12 district is substantially lower than the corresponding program in other hypothetical districts. To avoid depressing the final weight for K–12 districts, only the results for the three larger K–12 hypotheticals were used to determine the averages.

Table 9
Final Weights for Special Education, Limited English Proficiency and At-Risk Programs

	K – 8 Districts	K – 12 Districts
Special Education		
Speech	0.46	0.41
Moderate	1.95	1.42
Severe	7.39	4.08
Extended School Year	0.48	0.42
Preschool Disabled	3.23	2.84
At-Risk	0.63	0.45
LEP	0.81	0.37

As seen in Table 8, the at-risk weights were not only examined by district type and size, but the concentration of at-risk students was also addressed. The results did not lead us to create a

concentration factor either by district type or size. We again simply took the average of all the weights within a district type to create an at-risk weight. Though all the weights for at-risk were used in creating the K–12 average it would be possible to drop the low figure of .37 and create a higher weight of .47 for the K–12 at-risk weight.

The base cost per pupil and adjustments for special needs students assume that all school districts can hire similarly qualified personnel for the same salary. There are at least two factors beyond a school district’s control that may cause this assumption to be inaccurate. First, the cost of living in a certain region can influence salary demands. A potential employee may demand a higher salary to work in a school district in which the surrounding housing market is more expensive. Second, a teacher may also require additional compensation to work in a more challenging environment.¹¹

This concern was addressed by including the Geographic Cost of Education Index (GCEI) developed by Dr. Jay Chambers for the National Center for Education Statistics.¹² The GCEI uses detailed data on local community, school district and individual teacher characteristics to estimate the impact of factors beyond a school district’s control to measure the differential salary requirements across districts. The analysis resulted in the development of a cost index for each school district in the country (where the national average of the index equals 1). For implementation purposes, New Jersey school districts were taken from the publicly available data. The GCEI was rescaled such that the average for all New Jersey school districts equals one.

VI: Comparing SSD and PJP Results

Having implemented both the SSD and PJP methodologies, a decision had to be made regarding which set of results (or combination of the results) should be used as the cost basis for meeting New Jersey’s education Standards. Table 10 compares the results of the two methods. For these purposes, the PJP figures reflect the median district’s base cost after applying the formulas included in equations 1 through 6. There is essentially no cost difference in K–12 districts when the two methods are used. In the case of K–8 districts, the base cost derived from the SSD method is approximately 9 percent higher than that observed from PJP. This difference is likely caused in part by the reduction in administrative expenditures in the smallest districts.

Table 10
SSD and PJP Base Cost Comparison

	SSD	PJP	Difference	% Difference
K – 8	8,004	7,367	637	8.6
K – 12	8,493	8,496	-3	0.0

¹¹ William J. Fowler, Jr. and David H. Monk, *A Primer for Making Cost Adjustments in Education*, U. S. Department of Education, Office of Educational Research and Improvement, March 2001.

¹² A detailed discussion of the GCEI is beyond the scope of this report. Readers who would like to read more information can access a copy of Chambers’ report at <http://nces.ed.gov/pubs98/9804.pdf> (last accessed on November 16, 2006).

For three reasons, it was decided that the PJP results would be used as the basis for defining the cost of education. First, PJP determines the cost of providing both general education services as well as the additional services that are required by students with special needs. Second, the PJP method accounts for the different economies of scale experienced by districts of different sizes. Third, PJP is a more public process that incorporates input from those individuals responsible for educating students to the Standards.

Section VII: Comparing Current and PJP Based Expenditures

After determining the base cost and the additional weights for providing services to students with special needs, districts' enrollment data were utilized to determine districts' budgetary needs based on their specific student population and the corresponding costs. For purposes of this analysis, the budget deemed necessary to provide students with educational opportunities consistent with the Standards is called the **program cost (PC)**. Appendix 11 provides a more detailed description of the data that were utilized to calculate the districts' PC as well as their expenditures on items consistent with the contents of the program cost.

In the aggregate, school districts currently spend an amount consistent with the PC that has been calculated based on the PJP recommendations. Districts spent \$15.6 billion on the programs and services that were included by the panelists. This is 0.9 percent less than the \$15.8 billion total PC for all school districts. As Table 11 shows, New Jersey is unique in this respect. In many states where similar studies have been conducted, there is a more substantial difference between overall current expenditures and the costs identified through the PJP process.

Table 11
Actual Expenditures and Program Costs in Various Professional Judgment Analyses

State / Adequacy Estimate	Actual Expenditure Relative to Adequacy
Kansas ¹³	-8.1%
Maine ¹⁴	-11.0%
Maryland ¹⁵	-48.7%
New Jersey	-0.9%
New York – Method 1 ¹⁶	-17.4%
New York – Method 2	-19.3%
New York – Method 3	-20.5%
New York – Method 4	-24.0%
South Dakota ¹⁷	-37.5%
Wisconsin ¹⁸	-32.8%

¹³ “Calculation of the Cost of a Suitable Education in Kansas in 2000-2001 Using Two Different Analytic Approaches,” May 2002.

¹⁴ Equity and Adequacy in Funding to Improve Learning for All Children

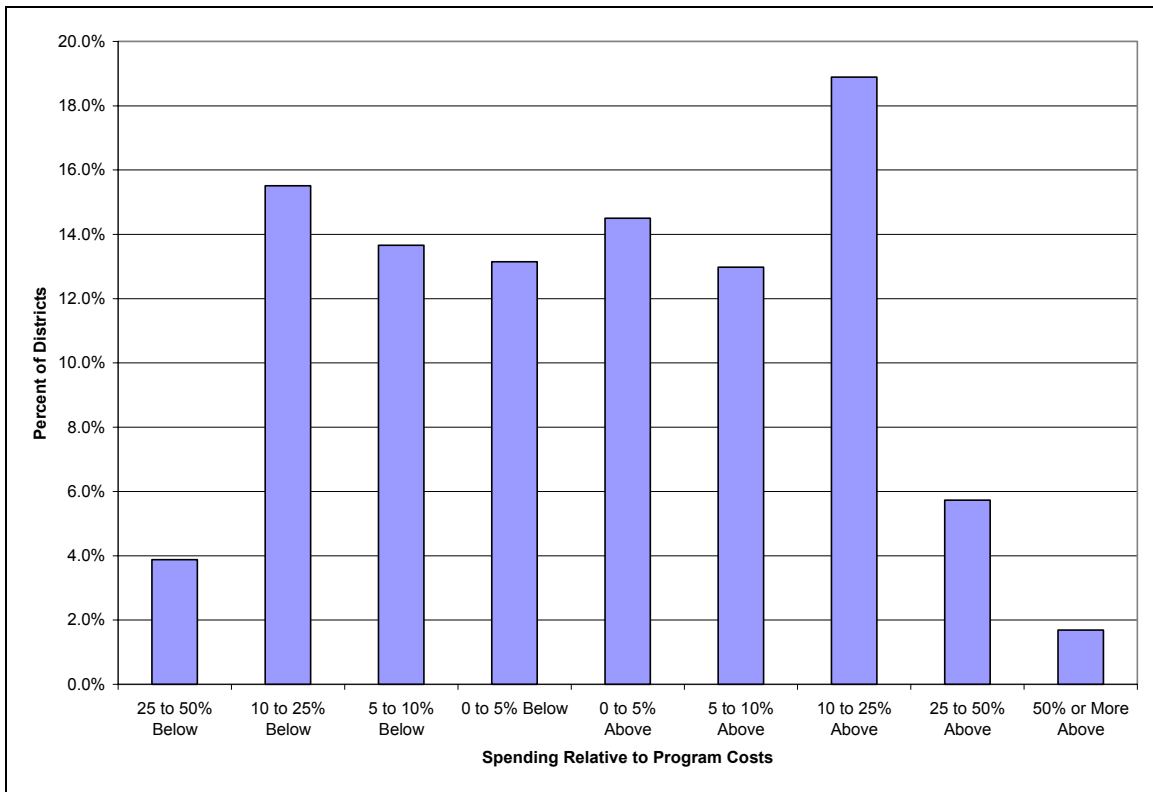
¹⁵ “Calculation of the Cost of an Adequate Education in Maryland in 1999 – 2000 Using Two Different Analytic Approaches,” September 2001.

¹⁶ “The New York Adequacy Study: Determining the Cost of Providing All Children in New York and Adequate Education” Volume 2 – Technical Appendices, March 2004

¹⁷ “Estimating the Cost of an Adequate Education in South Dakota,” Augenblick, Palaich and Associates, Inc, January 17, 2006, Table V-1B.

As Figure 5 shows, the aggregate figure masks the wide variation observed when one compares individual districts' actual expenditures to PC. Just under half of all school districts (46 percent) have actual expenditures less than PC. More than a quarter of all districts spend within +/- 5 percent of PC while a majority (54 percent) of districts spends within +/- 10 percent.

Figure 5
District Actual Expenditures Relative to Program Cost



Overall, the PC identified through the professional judgment process are perhaps best viewed in terms of identifying an overall level of funds that should be available to purchase personnel, resources, and programs as individual school or district leaders see fit. The advantage of such an approach is that it gives the flexibility to educators to decide how best to meet the specific needs of their students. These are the professionals who: 1) work with children in classrooms on a daily basis; 2) have the experience and training to make the best decisions possible on the types of resources needed for students to meet state standards; and 3) have the greatest understanding of the unique characteristics of their district and student population that might warrant a different way of deploying resources.

¹⁸ "Funding Our Future: An Adequacy Model for Wisconsin School Finance" Institute for Wisconsin's Future, June 2002

Appendix 1
School Districts Included in Successful School Districts Analysis

K through 8 Districts

County	District	Per Pupil Regular Educ. Expend.	DFG
Atlantic	Brigantine City	\$7,871	CD
Atlantic	Estell Manor City	\$8,619	DE
Atlantic	Hamilton Twp	\$5,614	CD
Atlantic	Linwood City	\$7,410	GH
Atlantic	Margate City	\$12,571	DE
Atlantic	Mullica Twp	\$6,764	B
Atlantic	Northfield City	\$6,408	DE
Atlantic	Port Republic City	\$11,411	FG
Atlantic	Weymouth Twp	\$6,836	B
Bergen	Allendale Boro	\$7,822	I
Bergen	Alpine Boro	\$18,382	I
Bergen	Carlstadt Boro	\$12,035	DE
Bergen	Closter Boro	\$7,836	I
Bergen	Demarest Boro	\$8,740	I
Bergen	East Rutherford Boro	\$10,591	CD
Bergen	Englewood Cliffs Boro	\$13,222	I
Bergen	Franklin Lakes Boro	\$9,889	I
Bergen	Harrington Park Boro	\$7,513	I
Bergen	Haworth Boro	\$8,775	I
Bergen	Hillsdale Boro	\$7,889	GH
Bergen	Ho Ho Kus Boro	\$8,795	J
Bergen	Little Ferry Boro	\$6,052	CD
Bergen	Maywood Boro	\$8,176	FG
Bergen	Montvale Boro	\$8,569	I
Bergen	Moonachie Boro	\$12,228	B
Bergen	Northvale Boro	\$7,640	FG
Bergen	Norwood Boro	\$7,587	I
Bergen	Oakland Boro	\$8,801	I
Bergen	Old Tappan Boro	\$7,720	I
Bergen	River Vale Twp	\$8,594	I
Bergen	Rochelle Park Twp	\$10,402	FG
Bergen	South Hackensack Twp	\$9,089	CD
Bergen	Upper Saddle River Boro	\$9,553	J
Bergen	Woodcliff Lake Boro	\$8,629	J
Bergen	Wyckoff Twp	\$7,993	I
Burlington	Eastampton Twp	\$6,284	FG
Burlington	Evesham Twp	\$7,490	I
Burlington	Hainesport Twp	\$7,658	FG
Burlington	Lumberton Twp	\$6,263	FG
Burlington	Medford Lakes Boro	\$7,158	I

County	District	Per Pupil Regular	
		Educ. Expend.	DFG
Burlington	Medford Twp	\$7,534	I
Burlington	Mount Laurel Twp	\$7,364	I
Burlington	Pemberton Borough	\$10,576	CD
Burlington	Riverton	\$9,370	GH
Burlington	Shamong Twp	\$7,695	GH
Burlington	Southampton Twp	\$8,262	DE
Burlington	Tabernacle Twp	\$8,015	GH
Burlington	Washington Twp	\$10,219	A
Burlington	Westampton	\$7,473	GH
Burlington	Woodland Twp	\$11,004	DE
Camden	Bellmawr Boro	\$5,909	B
Camden	Berlin Boro	\$6,191	DE
Camden	Brooklawn Boro	\$7,277	B
Camden	Gloucester Twp	\$6,547	DE
Camden	Merchantville Boro	\$7,360	DE
Camden	Mount Ephraim Boro	\$6,171	CD
Camden	Somerdale Boro	\$6,279	CD
Camden	Stratford Boro	\$6,490	DE
Camden	Voorhees Twp	\$7,831	I
Cape May	Avalon Boro	\$23,679	FG
Cape May	Dennis Twp	\$6,589	CD
Cape May	Sea Isle City	\$17,952	B
Cape May	Stone Harbor Boro	\$16,442	FG
Cape May	Upper Twp	\$7,200	FG
Cape May	Wildwood Crest Boro	\$12,475	B
Cumberland	Greenwich Twp	\$9,309	CD
Cumberland	Stow Creek Twp	\$7,847	CD
Gloucester	Logan Twp	\$8,814	FG
Hunterdon	Alexandria Twp	\$7,505	GH
Hunterdon	Bethlehem Twp	\$8,469	I
Hunterdon	Califon Boro	\$10,528	I
Hunterdon	Clinton Town	\$7,244	I
Hunterdon	Clinton Twp	\$7,182	I
Hunterdon	Delaware Twp	\$8,288	GH
Hunterdon	East Amwell Twp	\$8,340	I
Hunterdon	Flemington-Raritan Reg	\$7,349	I
Hunterdon	Franklin Twp	\$8,312	I
Hunterdon	Frenchtown Boro	\$11,876	FG
Hunterdon	High Bridge Boro	\$8,592	GH
Hunterdon	Holland Twp	\$7,462	FG
Hunterdon	Kingwood Twp	\$6,674	FG
Hunterdon	Lebanon Twp	\$8,510	I
Hunterdon	Milford Boro	\$9,798	FG
Hunterdon	Readington Twp	\$8,097	I
Hunterdon	Tewksbury Twp	\$9,184	J

County	District	Per Pupil Regular	
		Educ. Expend.	DFG
Hunterdon	Union Twp	\$8,377	GH
Middlesex	Cranbury Twp	\$10,550	J
Middlesex	Milltown Boro	\$7,985	FG
Monmouth	Belmar Boro	\$8,193	CD
Monmouth	Brielle Boro	\$7,130	GH
Monmouth	Colts Neck Twp	\$7,894	I
Monmouth	Deal Boro	\$10,957	
Monmouth	Eatontown Boro	\$9,165	FG
Monmouth	Fair Haven Boro	\$7,055	I
Monmouth	Farmingdale Boro	\$11,084	DE
Monmouth	Freehold Twp	\$6,733	GH
Monmouth	Howell Twp	\$7,359	FG
Monmouth	Little Silver Boro	\$8,270	J
Monmouth	Manalapan-Englishtown Reg	\$6,768	GH
Monmouth	Marlboro Twp	\$7,175	I
Monmouth	Millstone Twp	\$6,614	I
Monmouth	Monmouth Beach Boro	\$7,515	I
Monmouth	Neptune City	\$6,663	CD
Monmouth	Oceanport Boro	\$7,166	GH
Monmouth	Rumson Boro	\$7,833	J
Monmouth	Sea Girt Boro	\$11,547	I
Monmouth	Shrewsbury Boro	\$7,467	I
Monmouth	Spring Lake Boro	\$9,928	I
Monmouth	Spring Lake Heights Boro	\$7,833	FG
Monmouth	Tinton Falls	\$7,540	GH
Monmouth	West Long Branch Boro	\$7,171	FG
Morris	Boonton Twp	\$7,911	I
Morris	Chester Twp	\$8,583	J
Morris	Denville Twp	\$6,477	I
Morris	East Hanover Twp	\$8,878	GH
Morris	Florham Park Boro	\$8,410	I
Morris	Hanover Twp	\$8,767	I
Morris	Harding Township	\$11,727	J
Morris	Lincoln Park Boro	\$7,732	FG
Morris	Long Hill Twp	\$7,584	I
Morris	Mendham Boro	\$8,758	J
Morris	Mendham Twp	\$8,742	J
Morris	Morris Plains Boro	\$10,256	I
Morris	Netcong Boro	\$9,108	DE
Morris	Riverdale Boro	\$9,155	FG
Morris	Rockaway Boro	\$7,219	FG
Morris	Rockaway Twp	\$8,872	I
Morris	Washington Twp	\$7,293	I
Ocean	Bay Head Boro	\$12,312	I
Ocean	Lavallette Boro	\$11,265	DE

County	District	Per Pupil Regular	
		Educ. Expend.	DFG
Passaic	Bloomingtondale Boro	\$8,559	FG
Passaic	Little Falls Twp	\$7,404	FG
Passaic	North Haledon Boro	\$6,726	FG
Passaic	Ringwood Boro	\$7,974	GH
Passaic	Totowa Boro	\$8,152	CD
Passaic	West Paterson Boro	\$7,972	DE
Salem	Alloway Twp	\$6,262	DE
Salem	Mannington Twp	\$7,638	CD
Salem	Quinton Twp	\$7,189	A
Somerset	Bedminster Twp	\$10,290	I
Somerset	Branchburg Twp	\$8,710	I
Somerset	Green Brook Twp	\$8,448	GH
Somerset	Warren Twp	\$8,977	I
Somerset	Watchung Boro	\$8,899	I
Sussex	Andover Reg	\$8,227	FG
Sussex	Byram Twp	\$6,501	I
Sussex	Frankford Twp	\$8,419	FG
Sussex	Green Twp	\$7,455	I
Sussex	Hardyston Twp	\$7,756	FG
Sussex	Lafayette Twp	\$7,425	GH
Sussex	Montague Twp	\$8,270	B
Sussex	Stanhope Boro	\$6,970	GH
Sussex	Sussex-Wantage Regional	\$7,310	DE
Union	Garwood Boro	\$8,884	DE
Union	Mountainside Boro	\$8,277	I
Union	Winfield Twp	\$12,985	B
Warren	Alpha Boro	\$8,480	B
Warren	Great Meadows Regional	\$7,595	GH
Warren	Greenwich Twp	\$5,669	I
Warren	Harmony Twp	\$8,572	DE
Warren	Hope Twp	\$9,293	FG
Warren	Lopatcong Twp	\$7,066	DE
Warren	Pohatcong Twp	\$7,965	DE
Warren	White Twp	\$8,649	DE

K through 12 Districts

County	District	Per Pupil Regular Ed. Expend.	DFG
Bergen	Bergenfield Boro	\$7,884	FG
Bergen	Bogota Boro	\$8,565	DE
Bergen	Cresskill Boro	\$8,485	I
Bergen	Dumont Boro	\$8,987	FG
Bergen	Emerson Boro	\$9,072	GH
Bergen	Fair Lawn Boro	\$9,174	GH
Bergen	Fort Lee Boro	\$9,458	FG
Bergen	Glen Rock Boro	\$9,606	J
Bergen	Hasbrouck Heights Boro	\$8,871	FG
Bergen	Leonia Boro	\$8,930	GH
Bergen	Lodi Borough	\$7,932	B
Bergen	Lyndhurst Twp	\$8,757	DE
Bergen	Mahwah Twp	\$9,185	I
Bergen	Midland Park Boro	\$9,040	GH
Bergen	New Milford Boro	\$8,149	FG
Bergen	Paramus Boro	\$9,595	GH
Bergen	Park Ridge Boro	\$9,143	I
Bergen	Ramsey Boro	\$8,825	I
Bergen	Ridgefield Boro	\$5,998	DE
Bergen	Ridgefield Park Twp	\$8,173	DE
Bergen	Ridgewood Village	\$9,041	J
Bergen	Rutherford Boro	\$8,988	GH
Bergen	Saddle Brook Twp	\$7,933	DE
Bergen	Teaneck Twp	\$10,781	GH
Bergen	Tenafly Boro	\$10,267	I
Bergen	Waldwick Boro	\$8,719	GH
Bergen	Westwood Regional	\$8,692	GH
Bergen	Wood Ridge Boro	\$7,855	FG
Burlington	Bordentown Regional	\$8,013	FG
Burlington	Burlington Twp	\$6,640	FG
Burlington	Cinnaminson Twp	\$7,918	FG
Burlington	Delran Twp	\$7,302	FG
Burlington	Florence Twp	\$7,858	DE
Burlington	Maple Shade Twp	\$8,036	CD
Burlington	Moorestown Twp	\$7,924	I
Burlington	Palmyra Boro	\$6,891	DE
Camden	Audubon Boro	\$7,550	DE
Camden	Cherry Hill Twp	\$8,939	GH
Camden	Collingswood Boro	\$9,111	FG
Camden	Haddon Heights Boro	\$8,610	GH
Camden	Haddon Twp	\$8,613	FG
Camden	Haddonfield Boro	\$8,836	J
Cape May	Ocean City	\$12,388	DE

County	District	Per Pupil Regular Ed. Expend.	DFG
Essex	Caldwell-West Caldwell	\$8,682	I
Essex	Cedar Grove Twp	\$9,362	I
Essex	Glen Ridge Boro	\$9,387	I
Essex	Livingston Twp	\$10,158	I
Essex	Millburn Twp	\$9,850	J
Essex	Montclair Town	\$9,075	I
Essex	Nutley Town	\$7,963	FG
Essex	South Orange-Maplewood	\$9,077	I
Essex	Verona Boro	\$7,898	I
Essex	West Orange Town	\$9,733	GH
Gloucester	Monroe Twp	\$6,437	CD
Gloucester	Pitman Boro	\$8,931	FG
Gloucester	Washington Twp	\$7,980	FG
Gloucester	West Deptford Twp	\$7,020	DE
Hudson	Bayonne City	\$6,918	CD
Hudson	Kearny Town	\$8,474	B
Hudson	North Bergen Twp	\$6,545	B
Hudson	Secaucus Town	\$9,956	DE
Mercer	East Windsor Regional	\$8,099	GH
Mercer	Ewing Twp	\$8,026	DE
Mercer	Hamilton Twp	\$6,976	FG
Mercer	Hopewell Valley Regional	\$10,046	I
Mercer	Lawrence Twp	\$8,507	GH
Mercer	Princeton Regional	\$9,510	I
Mercer	Washington Twp	\$7,702	I
Mercer	W Windsor-Plainsboro Reg	\$9,175	J
Middlesex	Dunellen Boro	\$7,452	FG
Middlesex	East Brunswick Twp	\$8,082	I
Middlesex	Edison Twp	\$8,174	GH
Middlesex	Highland Park Boro	\$8,969	GH
Middlesex	Metuchen Boro	\$9,782	I
Middlesex	Middlesex Boro	\$8,110	FG
Middlesex	Monroe Twp	\$8,800	FG
Middlesex	North Brunswick Twp	\$7,957	FG
Middlesex	Old Bridge Twp	\$7,513	FG
Middlesex	Piscataway Twp	\$8,141	GH
Middlesex	Sayreville Boro	\$6,721	DE
Middlesex	South Brunswick Twp	\$8,491	I
Middlesex	South Plainfield Boro	\$8,262	FG
Middlesex	Spotswood Boro	\$8,286	DE
Middlesex	Woodbridge Twp	\$7,249	DE
Monmouth	Hazlet Twp	\$8,582	DE
Monmouth	Holmdel Twp	\$8,689	I
Monmouth	Manasquan Boro	\$8,302	GH
Monmouth	Matawan-Aberdeen Regional	\$9,360	FG

County	District	Per Pupil Regular Ed. Expend.	DFG
Monmouth	Middletown Twp	\$7,890	GH
Monmouth	Ocean Twp	\$8,590	FG
Monmouth	Upper Freehold Regional	\$8,448	GH
Monmouth	Wall Twp	\$8,468	GH
Morris	Boonton Town	\$8,897	FG
Morris	Butler Boro	\$10,063	DE
Morris	Sch Dist Of The Chathams	\$9,331	J
Morris	Jefferson Twp	\$8,337	GH
Morris	Kinnelon Boro	\$8,684	I
Morris	Madison Boro	\$9,546	I
Morris	Montville Twp	\$9,146	I
Morris	Mount Olive Twp	\$8,569	GH
Morris	Mountain Lakes Boro	\$11,198	J
Morris	Parsippany-Troy Hills Twp	\$10,015	GH
Morris	Pequannock Twp	\$8,459	GH
Morris	Randolph Twp	\$8,403	I
Morris	Roxbury Twp	\$8,539	GH
Ocean	Barneget Twp	\$8,321	CD
Ocean	Brick Twp	\$6,143	DE
Ocean	Jackson Twp	\$6,232	DE
Ocean	Lacey Twp	\$7,535	DE
Ocean	Manchester Twp	\$7,946	B
Ocean	Plumsted Twp	\$6,874	DE
Ocean	Point Pleasant Boro	\$7,044	FG
Ocean	Point Pleasant Beach Boro	\$9,358	FG
Ocean	Toms River Regional	\$7,035	DE
Passaic	Hawthorne Boro	\$8,100	DE
Passaic	Pompton Lakes Boro	\$8,781	FG
Passaic	Wayne Twp	\$8,409	GH
Passaic	West Milford Twp	\$8,218	FG
Salem	Pittsgrove Twp	\$7,673	CD
Salem	Woodstown-Pilesgrove Reg	\$7,982	FG
Somerset	Bernards Twp	\$8,150	J
Somerset	Bridgewater-Raritan Reg	\$8,023	I
Somerset	Hillsborough Twp	\$7,571	I
Somerset	Montgomery Twp	\$7,289	J
Somerset	Somerset Hills Regional	\$10,363	I
Somerset	Somerville Boro	\$9,033	FG
Sussex	Hopatcong	\$7,583	FG
Sussex	Newton Town	\$8,601	CD
Sussex	Sparta Twp	\$7,783	I
Sussex	Vernon Twp	\$7,965	FG
Union	Berkeley Heights Twp	\$9,432	I
Union	Clark Twp	\$8,610	FG
Union	Cranford Twp	\$8,307	I

County	District	Per Pupil Regular Ed. Expend.	DFG
Union	Kenilworth Boro	\$9,304	DE
Union	New Providence Boro	\$8,939	I
Union	Roselle Park Boro	\$7,950	DE
Union	Scotch Plains-Fanwood Reg	\$8,857	I
Union	Springfield Twp	\$10,497	GH
Union	Summit City	\$9,781	I
Union	Westfield Town	\$8,493	I
Warren	Hackettstown	\$8,565	DE

Appendix 2
Expenditure Line Items Included in Regular Education Expenditure Calculation

Line Number	Description
2710	Total Regular Programs - Instruction
4890	Total Basic Skills/Remedial - Instruction
5070	Total Vocational Programs – Local – Instruction
6080	Total School Sponsored Cocurricular & Extracurricular Activities – Instruction
6140	Total School Sponsored Athletics - Instruction
6200	Total Other Instructional Programs – Instruction
6260	Total Community Services Programs/Operations
6420	Total Undistributed Expenditures – Attendance & Social Work
6480	Total Undistributed Expenditures – Health Services
6570	Total Undistributed Expenditures – Support Services - Regular
6840	Total Undistributed Expenditures – Improvement of Instructional Services
6900	Total Undistributed Expenditures – Media Services / School Library
7610	Total Undistributed Expenditures – Instructional Staff Training Services
7000	Total Undistributed Expenditures – Support Services – General Administration
7090	Total Undistributed Expenditures – Support Services – School Administration
7625	Total Undistributed Expenditures – Required Maintenance for School Facilities
7636	Total Undistributed Expenditures – Other Oper. & Maint. Of Plant Services
7500	Total Undistributed Expenditures – Other Support Services
20210	Allocated Benefits: Total Regular Programs – Instruction
20430	Allocated Benefits: Total Vocational Programs – Instruction
20540	Allocated Benefits: Total Other Instructional Programs – Instruction
20710	Allocated Benefits: Total Community Services Programs/Operations
20820	Allocated Benefits: Total Attendance and Social Work Services
20930	Allocated Benefits: Total Health Services
21320	Allocated Benefits: Total Other Support Services – Students - Regular
21540	Allocated Benefits: Total Improvement of Instructional Services
21710	Allocated Benefits: Total Educational Media Services / School Library
21820	Allocated Benefits: Total Instructional Staff Training Services
21930	Allocated Benefits: Total Support Services – General Administration
22040	Allocated Benefits: Total Support Services – School Administration
22210	Allocated Benefits: Total Operations and Maintenance of Plant Services
22430	Allocated Benefits: Total Business and Other Support Services
Unallocated Benefits	
7700	Equipment – Preschool/Kindergarten
7710	Equipment – Grades 1 – 5
7720	Equipment – Grades 6 – 8
7730	Equipment – Grades 9 – 12
7731	Equipment – Home Instruction

Line Number	Description
7960	Equipment – Basic Skills/Remedial – Instruction
8070	Equipment – Vocational Programs – Local – Instruction
8080	Equipment – School-Sponsored and Other Instructional Programs
8090	Equipment – Undistributed Expenditures -Instruction
8100	Equipment – Undistributed Expenditures- Support Services – Students – Regular
8110	Equipment – Undistributed Expenditures- Support Services – Students
8130	Equipment – Undistributed Expenditures- Support Services – Instr. Staff
8140	Equipment – Undistributed Expenditures- General Admin.
8150	Equipment – Undistributed Expenditures- School Admin.
8155	Equipment – Undistributed Expenditures- Central Services
8156	Equipment – Undistributed Expenditures- Admin. Information Technology
8160	Equipment – Undistributed Expenditures- Operation of Plant Services
8200	Equipment – Undistributed Expenditures- Other Support Services
8210	Equipment – Undistributed Expenditures- Non-Instructional Services
MINUS	
Multiple Lines	T.P.A.F. Contributions – ERIP
Multiple Lines	Other Retirement Contributions - ERIP
2505	Preschool -Salaries of Teachers
2506	Local Contribution – Transfers to Special Revenue
2511	Local Contribution – Transfers to Special Revenue
6980	Judgments Against the School District
7130	Interest on Current Loans
7135	Interest on Lease Purchase Agreements
7140	Interest in Bond Anticipation Notices
7355	Increase in Sale/Lease-back Reserve
7629	Rental of Land & Building other than Lease Purchase Agreement
7620	Increase in Maintenance Reserve

Appendix 3
School District Demographic Data Submitted to APA

	K – 12 8,000+	K – 12 4,000 – 7,999	K – 12 1,300 – 3,999	K – 12 Less than 1,300	K – 8 350 - 600	K – 8 Less than 350
Number of Districts	31	53	107	27	54	40
Number of Students	419,527	282,511	262,060	28,734	26,071	8,669
Average District Size	13,533	5,330	2,449	1,064	483	217
Average Number of Schools						
Grades K – 5	4.4	2.1	0.9	-	-	-
Grades K – 6	-	-	-	0.4	-	-
Grades K – 8	-	-	-	0.1	0.4	0.7
Grades 6 – 8	1.9	0.8	0.5	-	-	-
Grades 9 – 12	2.0	1.0	0.8	0.5	-	-
Average School Size						
Grades K – 5	372	407	354	-	-	-
Grades K – 6	-	-	-	319	-	-
Grades K – 8	-	-	-	543	341	155
Grades 6 – 8	691	738	525	-	-	-
Grades 9 – 12	1,381	1,225	677	468	-	-
Proportion of Students:						
Free Lunch Eligible	39.7	20.6	13.1	16.6	13.6	12.5
Limited English Proficiency	7.1	4.4	3.2	2.8	1.3	1.2
In County Vocational Dist	1.5	0.9	1.1	1.9	0.6	0.9

	K – 12 8,000+	K – 12 4,000 – 7,999	K – 12 1,300 – 3,999	K – 12 Less than 1,300	K – 8 350 - 600	K – 8 Less than 350
Special Education						
Mild	1.76	2.00	2.37	2.64	3.30	3.97
Moderate	10.99	11.81	11.18	12.53	11.48	12.44
Severe	1.73	1.57	1.67	1.86	1.82	1.51

Appendix 4
Materials Provided to Professional Judgment Panel Participants

**BACKGROUND FOR HYPOTHETICAL SCHOOL AND DISTRICT
PANELS**

The task you are undertaking over the next three days is part of the work Augenblick & Myers, Inc. (A&M) is doing for the New Jersey Department of Education (DOE). DOE is undertaking a variety of studies to support a recommendation for a new state aid formula to be used in 2004-05. The purpose of the studies is to create a rational basis for the parameters that “drive” the allocation of state aid. Two of the studies are designed to estimate the fiscal needs of every school district in the state: (1) one study uses the “professional judgement” approach to estimate a base cost figure, common to all students, and some of the adjustments to that figure that take into consideration the higher costs associated with students with special needs as well as school district grade configuration and enrollment level and (2) another study uses the “successful school district” approach to estimate a base cost figure. For the next few days, you will be participating in activities designed to implement the professional judgement approach.

In order to fulfill the objectives of the professional judgement approach, A&M will be facilitating the work of multiple panels of people whose job is to identify the resources needed by hypothetical schools and school districts so that students will be able to meet a variety of state standards related to elementary and secondary education. You are a member of the first panel, which will be specifying the resource needs of elementary, middle, and high schools of different size in school districts of different size. In February, five different panels (one for each size hypothetical school district) composed of people who work in school districts throughout the state will be reviewing your work. In March, a final panel will review the work of the five panels and provide some advice about the resource prices that should be used in costing out the resources that will have been identified. In the end, DOE will develop, with assistance from A&M, a base cost figure as well as several adjustments in recognition of the higher costs of certain programs, such as special education. These figures will then be used in developing the new state aid system.

The professional judgement approach has been used in other states to estimate the cost of meeting state standards (what is sometimes described as the cost of an adequate education, or adequacy). For example, under court order, Wyoming used the approach to specify the cost of those resources groups of professional educators, like you, thought were necessary to fulfill state education requirements. The approach has also been used in places such as Colorado, Indiana, Kansas, Missouri, Maryland, Montana, Nebraska, New York, Oregon, South Carolina, and Wisconsin to study education costs. In 2002, the Maryland legislature used the recommendations of a state study group that had used the professional judgement approach as the basis for changing the school finance system. While there are many variations of the professional judgement approach, they all are used under the same general assumption: a group

of experienced people can specify the resource needs of hypothetical schools once they know what the schools are expected to accomplish.

It is important to remember that none of the panels that will meet between now and March is charged with designing the best possible schools or school district. The purpose of the exercise is not to build a school that fulfills every fantasy you ever had about what the very best school should look like. Rather, you need to design schools/districts that meets the objectives that the state has identified—and only those objectives. We, and DOE, are relying on your professional judgement about what resources are needed to assure that students, and schools, can meet those objectives, including the kinds of courses that should be offered, the numbers of people that should be employed, the ancillary activities and expenses needed to support those programs and people, and so on.

We will provide you with a lot of additional material about the state's objectives, about the characteristics of hypothetical schools, and about how to report the resources you feel are necessary. You will be given time to discuss the approaches you want to take to organize the hypothetical schools. It is important to remember that this is a collaborative process. We strongly encourage the panel to reach consensus about each of the important decisions you will be asked to make. A team from A&M will be with you over the three days to provide assistance to you – to facilitate the process by answering questions, taking notes, and recording your decisions but not to influence the choices you make.

One thing we need you to think about as you go about your work is how to distinguish the resources needed to educate regular students from those needed to educate students with special needs. Given DOE's objectives, we need to be able to separate the resources you believe are required to serve pupils with special education needs, pupils at risk of failing in school, and students with limited English proficiency (LEP) pupils.

Just so you know A&M is a Denver based consulting firm that works almost exclusively with state level policymakers on issues related to funding education. Today you will be working with John Augenblick, Justin Silverstein, and Jennifer Sharp from A&M.

INSTRUCTIONS TO NEW JERSEY DEPARTMENT OF EDUCATION PROFESSIONAL JUDGEMENT PANEL MEMBERS

Augenblick & Myers, Inc.
Denver, Colorado

January 21-23, 2003
Trenton, New Jersey

1. You are a member of a panel that is being asked to design multiple sets of hypothetical schools –elementary, middle, and high school. This group is also responsible for designing the district level organization that would include several hypothetical schools. The hypothetical schools and school districts are hypothetical –they do not exist and they may never be created. They are a convenient way to identify the resources that schools with a particular set of characteristics should have in order to accomplish a specific set of objectives.
2. This panel will be working today, tomorrow, and Thursday. On the first day we will focus on elementary school districts (K-8) –identifying resources for both schools and the school district in two different size districts. We will also begin identifying school level resources for a small K-12 district. On the second day we will review the work of the first day and then identify the resources for hypothetical schools in a moderately-sized district, a large district, and a very large district. Finally, on Thursday, we will review the work of the previous day and then identify the resources needed at the district level for moderate, large, and very large districts.
3. The characteristics of the hypothetical schools and school districts are shown on a separate page. The characteristics that define the schools include their enrollment, grade span, the proportion of pupils with special education needs, the proportion of pupils with limited English proficiency (LEP), and the proportion of students at risk of failure (as identified by using free lunch eligibility as a proxy).
4. The objectives that need to be accomplished by the hypothetical schools are shown on a separate page. The objectives can be described broadly as either education opportunities/programs/ services or as levels of student performance. These objectives are shown on separate sheet of paper.
5. In designing hypothetical schools or school districts, we need you to provide some very specific information so that a cost of the resources needed to meet the above objectives can be calculated. The fact that we need this information should

not constrain you in anyway in designing the hypotheticals. Your job is to create a set of programs/curriculums designed to serves students with particular needs in such a way that the specified objectives are met. Use your experience and expertise to organize personnel, supplies and materials, and technology in any way you feel confident will produce the desired outcomes.

6. You can make certain assumptions about the hypothetical schools and the environment in which they exist. These assumptions may not characterize the school, or the school district, in which you work and we will devote some time to discussing the assumptions after you have completed your work.

Teachers: You should assume that you can attract and retain qualified personnel and that you can employ people on a part-time basis if needed (based on tenths of a full-time equivalent person).

Facilities: You should assume that the hypothetical school has sufficient space to meet the requirements of the program you design.

Revenues: You should not be concerned about where revenues will come from to pay for the program you design. Don't worry about federal or state requirements that may be associated with some kinds of funding. You should not think about whatever revenues might be available in the school or district in which you work or about any of the revenue constraints that might exist on those revenues.

Timing: You may create new programs or services that do not presently exist that you believe address problems that arise in schools. You should assume that such programs or services are in place and that no additional time is needed for them to produce the results you expect of them.

2. We encourage you to be creative and innovative. There is no single "right" approach to the task. For example:

- You may base your design on a "whole-school approach" (such as Roots and Wings), a charter school approach (such as Edison), or any other philosophical basis (such as Montessori) with which you are familiar.
- You may want to use block scheduling.
- You may want to have a longer or shorter school day or a longer or shorter school year (for some or for all students) than you use currently.

- You may expect some students to obtain some courses using education television, the internet, or through experiences in the community or in post-secondary education.
- You may choose to supplement professional staff with community volunteers.

This summary provides information on New Jersey’s Core Curriculum Content Standards and state requirements that potentially impact the cost of providing a thorough and efficient education. Section I outlines the state’s standards in the nine content areas. Section II shows the level of success districts are expected to achieve on the statewide assessment exams linked to these standards. Section III highlights the courses and numbers of credits students are required to take in high school in order to receive a diploma. Section IV summarizes state requirements regarding the length of the school day and year.

I: Core Curriculum Content Standards

The Core Curriculum Content Standards (Standards) define what all students must know and be able to do by the end of their public school education. The Standards specify expectations in nine content areas.

Visual and Performing Arts

- Standard 1.1 (Aesthetics) All students will utilize and synthesize aesthetic knowledge and skills in response to dance, music, theater, and visual art.
- Standard 1.2 (Creation and Performance) All students will utilize those skills, media, methods, and technologies appropriate to each art form in the creation, performance and presentation of dance, music, theater, and visual art.
- Standard 1.3 (Elements and Principles) All students will demonstrate an understanding of the elements and principles of dance, music, theater, and visual art.
- Standard 1.4 (Critique) All students will apply, develop, and reflect knowledge of the process of critique.
- Standard 1.5 (History/Culture) All students will understand and analyze the role, development, and continuing influence of the arts in relation to world cultures, history, and society.

Comprehensive Health and Physical Education

- Standard 2.1 (Health Promotion) All students will achieve optimal wellness by learning and applying health promotion concepts and skills.
- Standard 2.2 (Life Skills) All students will achieve optimal wellness by learning and applying personal, interpersonal, and life skills.
- Standard 2.3 (Drugs and Medicines) All students will achieve optimal wellness by learning and applying substance abuse prevention concepts and skills.

- Standard 2.4 (Human Sexuality and Family Life) All students will achieve optimal wellness by learning and applying concepts and skills that support healthy sexuality and positive personal relationships.
- Standard 2.5 (Movement) All students will achieve optimal wellness by learning and applying movement concepts and skills.
- Standard 2.6 (Fitness) All students will achieve optimal wellness by learning and applying fitness concepts and skills.

Language Arts Literacy

- Standard 3.1 (Reading) All students will understand and apply the knowledge of sounds, letters, and words in written English to become independent and fluent readers, and will read a variety of materials and texts with fluency and comprehension.
- Standard 3.2 (Writing) All students will write in clear, concise, organized language that varies in content and form for different audiences and purposes.
- Standard 3.3 (Speaking) All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.
- Standard 3.4 (Listening) All students will listen actively to information from a variety of sources in a variety of situations.
- Standard 3.5 (Viewing and Media Literacy) All students will access, view, evaluate, and respond to print, nonprint, and electronic texts and resources.

Mathematics

- Standard 4.1 (Number and Numerical Operations) All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.
- Standard 4.2 (Geometry and Measurement) All students will develop spatial sense and the ability to use geometric properties, relationships, and measurement to model, describe and analyze phenomena.
- Standard 4.3 (Patterns and Algebra) All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.

- Standard 4.4 (Data Analysis, Probability, and Discrete Mathematics) All students will develop an understanding of the concepts and techniques of data analysis, probability, and discrete mathematics, and will use them to model situations, solve problems, and analyze and draw appropriate inferences from data.
- Standard 4.5 (Mathematical Processes) All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

Science

- Standard 5.1 (Scientific Processes) All students will develop problem-solving, decision-making and inquiry skills, reflected by formulating usable questions and hypotheses, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results.
- Standard 5.2 (Science and Society) All students will develop an understanding of how people of various cultures have contributed to the advancement of science and technology, and how major discoveries and events have advanced science and technology.
- Standard 5.3 (Mathematical Applications) All students will integrate mathematics as a tool for problem-solving in science, and as a means of expressing and/or modeling scientific theories.
- Standard 5.4 (Nature and Process Of Technology) All students will understand the interrelationships between science and technology and develop a conceptual understanding of the nature and process of technology.
- Standard 5.5 (Characteristics of Life) All students will gain an understanding of the structure, characteristics, and basic needs of organisms and will investigate the diversity of life.
- Standard 5.6 (Chemistry) All students will gain an understanding of the structure and behavior of matter.
- Standard 5.7 (Physics) All students will gain an understanding of natural laws as they apply to motion, forces, and energy transformations.
- Standard 5.8 (Earth Science) All students will gain an understanding of the structure, dynamics, and geophysical systems of the earth.

Standard 5.9 (Astronomy & Space Science) All students will gain an understanding of the origin, evolution, and structure of the universe.

Standard 5.10 (Environmental Studies) All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.

Social Studies

Standard 6.1 (Social Studies Skills) All students will acquire the critical thinking, problem solving and research and social skills and dispositions needed for effective citizenship in a democratic society.

Standard 6.2 (Civics) All students will demonstrate knowledge, understanding, and appreciation of the foundation, values, and principles of American democracy and the rights, responsibilities, and roles of a citizen in a democratic society.

Standard 6.3 (The Humanities) All students will have an enriched and broader understanding of the social studies through the study of the related areas of the humanities (literature, art, philosophy, music and architecture).

Standard 6.4 (World History) All students will demonstrate knowledge and understanding of major events and issues in world history from pre-history to the modern world.

Standard 6.5 (United States History) All students will demonstrate knowledge and understanding of major events, personalities and issues in the history of the United States of America.

Standard 6.6 (New Jersey History) All students will demonstrate knowledge and understanding of major events, personalities and issues in the history of New Jersey.

Standard 6.7 (Economics) All students will acquire an understanding of key economic principles in relation to individuals, institutions, and governments.

Standard 6.8 (Geography) All students will acquire and apply understanding of the spatial contexts of people, places and the environment on earth.

Standard 6.9 (Sociology and Anthropology) All students will demonstrate understanding of societal and cultural structures and functions and how they have contributed and continue to contribute to our everyday experience.

World Languages

- Standard 7.1 (Communication) All students will be able to communicate in at least one world language in addition to English. They will use language to: engage in conversation; understand and interpret spoken and written language; present information, concepts, and ideas while making connections with other disciplines; compare the language/culture studied with their own; and participate in multilingual communities.
- Standard 7.2 (Culture) All students will demonstrate an understanding of the perspectives of a culture(s) through experiences with its products and practices.

Technological Literacy

- Standard 8.1 (Computer Applications) All students will use computer applications to manipulate and communicate information.
- Standard 8.2 (Technology Education) All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world as they relate to the individual, society, and the environment.

Career Education and Life Skills

- Standard 9.1 (Career Awareness) All students will develop career awareness, planning, and employability skills.
- Standard 9.2 (Career/Technical Arts) All students will demonstrate career planning and employability skills, and develop the foundational knowledge and skills necessary for further study in a selected occupational area.
- Standard 9.3 (Critical Thinking) All students will use critical thinking, decision-making and problem solving skills.
- Standard 9.4 (Self-Management) All students will demonstrate interpersonal and self-management skills.

II: Assessment Criteria

The Standards are further delineated by cumulative progress indicators for each benchmark grade level. The statewide assessment system is designed to measure student progress towards achieving the standards. Districts are evaluated based on the percent of students (overall as well as subpopulations) that test at the proficient level or better according to the following schedules.

Grades 3 through 5 Exams

	Language Arts Literacy	Mathematics
2004 – 2005	75	62
2007 – 2008	82	73
2010 – 2011	91	88
2013 – 2014	100	100

Grades 6 through 8 Exams

	Language Arts Literacy	Mathematics
2004 – 2005	66	49
2007 – 2008	76	62
2010 – 2011	87	79
2013 – 2014	100	100

Grades 11 Exam

	Language Arts Literacy	Mathematics
2004 – 2005	79	64
2007 – 2008	85	74
2010 – 2011	92	86
2013 – 2014	100	100

III: Graduation Requirements¹⁹

Completion of at least 110 credits (equivalent of 22 courses)

- At least 20 credits in language arts literacy
- At least 15 credits in mathematics
- At least 15 credits in science
- At least 15 credits in social studies
- At least 3.75 credits per year in health, safety, and physical education (distributed over 150 minutes per week)
- At least 5 credits in visual and performing arts
- At least 5 credits in technological literacy, career education, and life skills
- At least 5 credits in world languages.

IV: Other Requirements

Length of School Year: 180 days
Length of School Day: Minimum of 4 hours of instructional time (2.5 hours for kindergarten)

¹⁹ In the 2004 – 2005 school year, the first year in which the school funding formula would be effective, the junior and senior classes will be required to have 10 credits in visual, performing, and/or practical arts with no requirement for technological literacy, career education and life skills. These same students will also be required to complete 10 credits in world languages.

Appendix 5

Organizations from which Professional Judgment Panel Nominations Were Requested

Education Law Center
Garden State Coalition of Schools
New Jersey Association of Supervision and Curriculum Development
New Jersey Association of School Administrators
New Jersey Association of School Business Officials
New Jersey Education Association
New Jersey Principals and Supervisors Association
New Jersey School Boards Association
Public Education Institute

Appendix 6
Professional Judgment Panel Invitees – Round 1²⁰

Name	Title	Affiliation
Ms. Eunice Couselo	Director	Office of Special Populations
Dr. Bruce Greenfield	County Superintendent	Ocean County
Ms. Vicky Guo	County Business Administrator	Hudson County
Dr. Michael Klavon	Director	Office of Vocational/Technical, Career and Innovative Programs
Dr. Robert Riehs	Educ. Prog. Development Spec.	Office of Academic and Professional Standards
Dr. Judith Weiss	Assistant Commissioner	Northern Regional Services
Ms. Melinda Zangrillo	Planning Associate	Office of Special Education Programs

²⁰ The listings in Appendices 6 through 8 reflect the individuals who were invited to participate in the professional judgment panels. To ensure open discussion, DOE personnel did not attend and the consultants did not record attendance. As a result, the names listed in this appendix would not account for individuals who were unable to attend without providing notice in advance.

Appendix 7
Professional Judgment Panel Invitees – Round 2

Name	Title	Affiliation
Mr. Steven Block	Director	Education Law Center
Mr. Anthony Campisi	WSR Facilitator	Paterson School District
Mr. Samuel Citron	Principal	Voorhees Middle School (Voorhees Twp Public Schools)
Ms. Gail Cohen	Assistant to the Superintendent	Cherry Hill Public Schools
Mr. Angelo DeSimone	Business Administrator	Hawthorne Public Schools
Ms. Mary Ellen Eck	Superintendent	Riverton Public School
Ms. Annette Edmonds	School Business Administrator	Greenwich Township School District
Mr. Richard Flamini	Supervisor	South Plainfield Board of Education
Ms. Edithe Fulton	President	New Jersey Education Association
Ms. Elizabeth George	School Business Administrator	Mount Arlington Public School
Dr. Bertha Henson	Supervisor of Instruction	Vineland City Board of Education
Ms. Carmen Holster	Principal	Washington Elementary School (Little Ferry Public Schools)
Mr. Richard Horowitz	Principal	J. Fithian Tatem Elementary School (Haddonfield Public Schools)
Ms. Kelly Ippolito	School Business Administrator	Cresskill Public Schools
Mr. Paul Kadri	Superintendent	Moorestown Public Schools
Dr. Carole Kernan	Director of Special Services	Summit Public Schools
Mr. John Knorr	School Board Member	Galloway Township Public Schools
Dr. Richard Konet	Principal	Parsippany High School
Dr. Ted Kozlik	Director of Special Services	Westfield Public Schools
Ms. Suzane Krewson	Teacher	Holland Township School
Dr. Walter Mahler	Superintendent	Springfield Public Schools
Dr. Thomas McMahon	Superintendent	Barnegat Township School District
Mr. Robert Murphy	Principal	East Brunswick High School (East Brunswick Public Schools)
Dr. Charles Murray	Superintendent	Mercer Co. Special Services School District
Mr. Joseph Pompeo	Principal	Wallington High School (Wallington Public Schools)
Mr. Robert Reid	Principal	Wildwood Elementary School (Mountain Lakes School District)
Dr. Lester Richens	Superintendent	Belmar Public Schools
Dr. Andrew Rinko	Superintendent	Bedminster Schools
Mr. Lou Ripatrazone	Superintendent	Roxbury Public Schools
Ms. Magda Savino	Principal	Joseph H. Brensinger Elementary School (Jersey City Public Schools)
Mr. Jeff Scott	Asst. Sup. for Business	South Brunswick Public Schools
Mr. David Shaftner	Business Administrator	East Windsor Regional School District
Mr. Richard Sullivan	Assistant Director	New Jersey School Boards Association
Ms. Regina Swiere	Superintendent	Warren Co. Special Services School District
Mr. Jerry Tarnoff	Superintendent	West Orange Public Schools
Mr. Dennis Ventrello	Principal	Brookside Elementary School (Monroe Twp School District)
Dr. Carmina Villa	WSR Facilitator	Long Branch School District
Ms. Barbara Williams	Director	Irvington Board of Education
Mr. Fred Wright	Business Administrator	Eastern Camden County Regional School District
Dr. Debra Zamparelli	Director	Tinton Falls Board of Education

Appendix 8
Professional Judgment Panel Invitees – Round 3

Name	Title	Affiliation
Dr. Pablo Clausell	Superintendent	Perth Amboy Public Schools
Dr. Jacqueline Cusack	Superintendent	Pequannock Township Public Schools
Dr. Len Elovitz	Professor	Kean University, College of Education
Mr. Peter Genovese	School Business Administrator	Long Branch Public Schools
Dr. Patricia Hoey	Superintendent	Harrison Township School District
Mr. Brian O’Leary	School Board Member	South Orange-Maplewood Public Schools
Mr. Bruce Quinn	Superintendent	Matawan-Aberdeen Regional School District
Dr. Morton Sherman	Superintendent	Cherry Hill Public Schools

Appendix 9
Final Professional Judgment Panel Resources

Appendix 9: Table 1.A
Very Small K – 8 School District
Elementary School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	225	3	9	28	3
Instructional Staff					
Classroom Teachers	13.0	0.4			1.0
Other Teachers	2.5				
Instructional Aides				2.0	3.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				3.0	
Self-Contained Teacher				2.0	
Support Staff					
Librarians / Media Specialists	1.0				
Technology Specialists	1.0				
Counselors	1.0				
Nurses	1.0				
Psychologists			0.1	0.2	0.1
Social Workers			0.1	0.2	0.1
LDTC			0.1	0.2	0.1
Speech Therapist			0.2	0.2	0.2
Occupational Therapist				0.1	0.2
Physical Therapist				0.1	0.2
Administrative Staff					
Principal	0.0				
Assistant Principal	0.5				
Clerical / Data Entry	2.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$300 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$50 / pupil				
Technology	\$150 / pupil				
Assessment	\$5,000	\$50 / pupil		\$1,350	\$3,000
State Assessment	\$35 / tested pupil				
Student Activities	\$100 / pupil				
Safety & Security	\$7,500				

Appendix 9: Table 1.B
Very Small K – 8 School District
Elementary School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration
Enrollment	23	46
Instructional Staff		
Instructional Aides		2.0
Reading Specialists / Basic Skills	1.0	2.0
Substitute Teachers		10 days @ \$100
Support Staff		
Social Workers		
Parent Liaison		
Other Costs		
Professional Development	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil

Appendix 9: Table 1.C
Very Small K – 8 School District
Elementary School Model
Other Education Programs

	Gifted & Talented	Special Education – Preschool	Extended School Year	After School Programs	Summer School Programs
Enrollment	15	5	12	½ At-Risk, LEP & Special Ed	½ At-Risk, LEP 18 Special Ed
Instructional Staff					
Classroom Teachers	0.1	1.0	2.0		
Other Teachers					
Instructional Aides		1.0	4.0		
Substitute Teachers	10 days @ \$100	10 days @ \$100	10 days @ \$100		
Support Staff					
Nurses					
Psychologists		0.1			
Social Workers		0.1			
LDTC		0.1			
Speech Therapist		0.1	0.6		
Occupational Therapist		0.05	0.2		
Physical Therapist		0.05	0.2		
Other Costs					
Professional Development		\$1,250 / personnel			
Supplies & Materials	\$50 / pupil	\$200 / pupil	\$50 / pupil		
Equipment		\$50 / pupil			
Assessment		\$25 / pupil			
Other				\$480 / pupil	\$400 / pupil

Appendix 9: Table 2.A
Small K – 8 School District
Elementary School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	495	6	17	57	9
Instructional Staff					
Classroom Teachers	27.0	0.4			2.0
Other Teachers	5.5				
Instructional Aides				3.0	5.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				5.0	
Self-Contained Teacher				3.5	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides	1.0				
Technology Specialists	1.0				
Counselors	1.0				
Nurses	1.0				
Psychologists			0.1	0.4	0.3
Social Workers			0.1	0.4	0.3
LDTC			0.1	0.4	0.3
Speech Therapist			0.3	0.5	0.6
Occupational Therapist				0.2	0.3
Physical Therapist				0.2	0.3
Administrative Staff					
Principal	0.0				
Assistant Principal	0.5				
Clerical / Data Entry	2.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$300 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$50 / pupil				
Technology	\$150 / pupil			\$2,700	\$9,000
Assessment	\$11,000	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities K – 5	\$50 / pupil				
Student Activities 6 – 8	\$150 / pupil				
Safety & Security	\$7,500				

**Appendix 9: Table 2.B
Small K – 8 School District
Elementary School Model
At-Risk Education**

	Low At-Risk Concentration	Moderate At-Risk Concentration
Enrollment	50	99
Instructional Staff		
Instructional Aides	2.0	4.0
Reading Specialists / Basic Skills	2.0	4.0
Substitute Teachers	10 days @ \$100	10 days @ \$100
Support Staff		
Social Workers		
Parent Liaison		
Other Costs		
Professional Development	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil

Appendix 9: Table 2.C
Small K – 8 School District
Elementary School Model
Other Education Programs

	Gifted & Talented	Special Education – Preschool	Extended School Year	After School Programs	Summer School Programs
Enrollment	33	11	20	½ At-Risk, LEP & Special Ed	½ At-Risk, LEP & 37 Special Ed
Instructional Staff					
Classroom Teachers	0.2	2.0	3.0		
Other Teachers					
Instructional Aides		2.0	6.0		
Substitute Teachers	10 days @ \$100	10 days @ \$100	10 days @ \$100		
Support Staff					
Nurses					
Psychologists		0.2			
Social Workers		0.2			
LDTC		0.2			
Speech Therapist		0.2	1.0		
Occupational Therapist		0.2	0.4		
Physical Therapist		0.2	0.4		
Other Costs					
Professional Development		\$1,250 / personnel			
Supplies & Materials	\$50 / pupil	\$200 / pupil	\$50 / pupil		
Equipment		\$50 / pupil			
Assessment		\$25 / pupil			
Other				\$480 / pupil	\$400 / pupil

Appendix 9: Table 3.A
Small K – 12 School District
Elementary School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	720	20	19	90	14
Instructional Staff					
Classroom Teachers	40.0	1.0			2.0
Other Teachers	9.0				
Instructional Aides				3.0	6.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				8.0	
Self-Contained Teacher				3.0	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides	1.0				
Technology Specialists	2.0				
Counselors	2.0				
Nurses	1.0				
Psychologists					
Speech Therapist			0.3	0.7	1.0
Occupational Therapist				0.2	0.6
Physical Therapist				0.2	0.4
Administrative Staff					
Principal	1.0				
Assistant Principal	1.0				
Clerical / Data Entry	2.5				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$300 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$50 / pupil			\$50 / pupil	\$100 / pupil
Technology	\$150 / pupil			\$3,000	\$10,000
Assessment	\$16,000	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities K - 5	\$50 / pupil				
Student Activities 6 - 8	\$150 / pupil				
Safety & Security	\$7,500				

**Appendix 9: Table 3.B
Small K – 12 School District
Elementary School Model
At-Risk Education**

	Low At-Risk Concentration	Moderate At-Risk Concentration
Enrollment	72	144
Instructional Staff		
Instructional Aides	3.0	6.0
Reading Specialists / Basic Skills	3.0	6.0
Substitute Teachers	10 days @ \$100	10 days @ \$100
Support Staff		
Social Workers		
Parent Liaison		
Other Costs		
Professional Development	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil

Appendix 9: Table 3.C
Small K – 12 School District
Elementary School Model
Other Education Programs

	Gifted & Talented	Special Education – Preschool	Extended School Year	After School Programs	Summer School Programs
Enrollment	50	16	24	½ At-Risk, LEP & Special Ed	½ At-Risk, LEP & 40 Special Ed
Instructional Staff					
Classroom Teachers	0.3	2.0	3.0		
Other Teachers					
Instructional Aides		4.0	6.0		
Substitute Teachers	10 days @ \$100	10 days @ \$100	10 days @ \$100		
Support Staff					
Nurses			1.0		
Psychologists					
Social Workers					
LDTC					
Speech Therapist			1.0		
Occupational Therapist			0.5		
Physical Therapist			0.5		
Other Costs					
Professional Development		\$1,250 / personnel			
Supplies & Materials	\$50 / pupil	\$250 / pupil	\$20 / pupil		
Equipment		\$50 / pupil			
Assessment		\$25 / pupil			
Other				\$480 / pupil	\$400 / pupil

Appendix 9: Table 3.D
Small K – 12 School District
High School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	320	9	8	40	6
Instructional Staff					
Classroom Teachers	28.0	0.5			1.0
Other Teachers					
Instructional Aides					2.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				4.0	
Self-Contained Teacher				2.0	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides					
Technology Specialists	1.0				
Counselors	2.0				
Nurses	1.0				
Lunchroom Aides					
Speech Therapist			0.1	0.2	0.2
Occupational Therapist					0.1
Physical Therapist					0.1
Administrative Staff					
Principal	1.0				
Assistant Principal	1.0				
Department Chairs					
Clerical / Data Entry	4.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$400 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$75 / pupil				
Technology	\$150 / pupil			\$2,300	\$850
Assessment	\$10,000	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities	\$600 / pupil				
Security Guard	1.0				
Safety & Security	\$10,000				

Appendix 9: Table 3.E
Small K – 12 School District
High School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration
Enrollment	32	64
Instructional Staff		
Classroom Teacher	1.0	1.0
Substitute Teachers	10 days @ \$100	10 days @ \$100
Other Costs		
Professional Development	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil

Appendix 9: Table 3.F
Small K – 12 School District
High School Model
Other Education Programs

	Extended School Year	After School Programs		Summer School Programs
Enrollment	11	At-Risk Students – Low Concentration	At-Risk Students – Moderate Concentration	½ At-Risk, LEP & 20 Special Ed
Instructional Staff				
Classroom Teachers	2.0			
Instructional Aides	2.0			
Substitute Teachers	10 days @ \$100			
Support Staff				
Nurses				
Speech Therapist	18 hours @ \$75/hour			
Occupational Therapist	18 hours @ \$150/hour			
Physical Therapist	18 hours @ \$150/hour			
Other Costs				
Other		\$9,000	\$18,000	\$360 / pupil

Appendix 9: Table 4.A
Moderate, Large and Very Large K – 12 School District
Elementary School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	400	28	8	45	7
Instructional Staff					
Classroom Teachers	22.0	1.1			2.0
Other Teachers	5.0				
Instructional Aides				2.0	2.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				4.0	
Self-Contained Teacher				2.0	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides	1.0				
Technology Specialists	1.0				
Counselors	1.0				
Nurses	1.0				
Psychologists					
Social Workers					
Parent Liaison					
Lunchroom Aides	0.6				
Speech Therapist			0.1	0.4	0.5
Occupational Therapist				0.1	0.3
Physical Therapist				0.1	0.3
Administrative Staff					
Principal	1.0				
Assistant Principal					
Clerical / Data Entry	2.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$300 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$50 / pupil				
Technology	\$150 / pupil			\$1,350	\$9,000
Assessment	\$8,888	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities	\$50 / pupil				
Safety & Security	\$7,500				

Appendix 9: Table 4.B
Moderate, Large and Very Large K – 12 School District
Elementary School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration	Very High At-Risk Concentration
Enrollment	40	80	160	240
Instructional Staff				
Instructional Aides	2.0	2.0	2.0	2.0
Reading Specialists / Basic Skills	2.0	4.0	8.0	8.0
Substitute Teachers	10 days @ \$100	10 days @ \$100	10 days @ \$100	10 days @ \$100
Support Staff				
Social Workers			1.0	1.0
Parent Liaison			1.0	1.0
Other Costs				
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil	\$50 / pupil	\$50 / pupil

Appendix 9: Table 4.C
Moderate, Large and Very Large K – 12 School District
Elementary School Model
Other Education Programs

	Gifted & Talented	Special Education – Preschool	Extended School Year	After School Programs	Summer School Programs
Enrollment	28	13	12	½ At-Risk, LEP & Special Ed	½ At-Risk, LEP & 23 Special Ed
Instructional Staff					
Classroom Teachers		2.0	1.5		
Other Teachers	0.2				
Instructional Aides		2.0	3.0		
Substitute Teachers	10 days @ \$100	10 days @ \$100	10 days @ \$100		
Support Staff					
Nurses			1.0		
Psychologists		0.2			
Social Workers		0.2			
LDTC		0.2			
Speech Therapist		0.3	0.3		
Occupational Therapist		0.3	0.3		
Physical Therapist		0.3	0.3		
Other Costs					
Professional Development		\$1,250 / personnel			
Supplies & Materials	\$50 / pupil	\$200 / pupil			
Equipment		\$50 / pupil		\$480 / pupil	\$400 / pupil
Assessment		\$25 / pupil			

Appendix 9: Table 4.D
Moderate, Large and Very Large K – 12 School District
Middle School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	600	43	13	68	10
Instructional Staff					
Classroom Teachers	43.0	2.0			2.0
Other Teachers					
Instructional Aides				2.0	2.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				6.0	
Self-Contained Teacher				3.0	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides	1.0				
Technology Specialists	1.0				
Counselors	2.5				
Nurses	1.0				
Lunchroom Aides	0.5				
Speech Therapist			0.2	0.3	0.3
Occupational Therapist				0.2	0.3
Physical Therapist				0.2	0.3
Administrative Staff					
Principal	1.0				
Assistant Principal	1.0				
Clerical / Data Entry	3.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$320 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$50 / pupil				
Technology	\$150 / pupil			\$1,350	\$9,000
Assessment	\$13,332	\$50 / pupil			
State Assessment	\$35 / tested student				
Student Activities	\$150 / pupil				
Security Guard	1.0				
Safety & Security	\$7,500				

Appendix 9: Table 4.E
Moderate, Large and Very Large K – 12 School District
Middle School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration	Very High At-Risk Concentration
Enrollment	60	120	240	360
Instructional Staff				
Instructional Aides				
Reading Specialists / Basic Skills	1.0	3.0	6.0	6.0
Support Staff				
Social Workers			1.0	1.0
Parent Liaison				
Other Costs				
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil	\$50 / pupil	\$50 / pupil

Appendix 9: Table 4.F
Moderate, Large and Very Large K – 12 School District
Middle School Model
Other Education Programs

	Extended School Year	After School Programs	Summer School Programs
Enrollment	22	½ At-Risk, LEP & Special Education	½ At-Risk, LEP & 23 Special Education
Instructional Staff			
Classroom Teachers	3.0		
Other Teachers			
Instructional Aides	3.0		
Substitute Teachers	10 days @ \$100		
Support Staff			
Nurses	1.0		
Psychologists	0.5		
Social Workers	0.5		
LDTC	0.5		
Speech Therapist	0.4		
Occupational Therapist	0.3		
Physical Therapist	0.3		
Other Costs			
Supplies & Materials			
Other		\$480 / pupil	\$400 / pupil

Appendix 9: Table 5.A
Moderate K – 12 School District
High School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	760	24	18	85	13
Instructional Staff					
Classroom Teachers	60.0	1.0			3.0
Other Teachers					
Instructional Aides				2.0	6.5
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				6.0	
Self-Contained Teacher				2.0	
Support Staff					
Librarians / Media Specialists	1.0				
Media Aides	1.0				
Technology Specialists	1.0				
Counselors	5.0				
Nurses	1.0				
Lunchroom Aides					
Speech Therapist			0.1	0.1	0.4
Occupational Therapist					0.1
Physical Therapist				0.5	0.6
Administrative Staff					
Principal	1.0				
Assistant Principal	1.5				
Department Chairs	2.0				
Clerical / Data Entry	4.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$400 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$75 / pupil				\$300 / pupil
Technology	\$150 / pupil			\$4,600	\$1,000
Assessment	\$16,887	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities	\$575 / pupil				
Security Guard	1.0				
Safety & Security	\$7,500				

Appendix 9: Table 5.B
Moderate K – 12 School District
High School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration
Enrollment	76	152
Instructional Staff		
Instructional Aides		
Reading Specialists / Basic Skills	1.0	2.0
Support Staff		
Social Workers		
Parent Liaison		
Other Costs		
Professional Development	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil

Appendix 9: Table 5.C
Moderate K – 12 School District
High School Model
Other Education Programs

	Extended School Year	After School Programs	Summer School Programs
Enrollment	27	At-Risk Students	½ At-Risk, LEP & 20 Special Education
Instructional Staff			
Classroom Teachers	5.0		
Other Teachers			
Instructional Aides	7.5		
Substitute Teachers	10 days @ \$100 / day		
Support Staff			
Nurses			
Psychologists	0.6		
Social Workers	0.6		
LDTC	0.6		
Speech Therapist	0.5		
Occupational Therapist	0.3		
Physical Therapist	0.3		
Other Costs			
Supplies & Materials			
Other		\$36,000	\$400 / pupil

Appendix 9: Table 6.A
Large K – 12 School District
High School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	1,640	72	33	194	26
Instructional Staff					
Classroom Teachers	128.0	3.0			5.0
Other Teachers					
Instructional Aides				3.0	8.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				8.0	
Self-Contained Teacher				4.0	
Support Staff					
Librarians / Media Specialists	2.0				
Media Aides	1.0				
Technology Specialists	2.0				
Counselors	9.0				
Nurses	2.0				
Lunchroom Aides					
Speech Therapist			0.3	0.3	0.6
Occupational Therapist				0.5	0.4
Physical Therapist				0.5	0.4
In-School Suspension	1.0				
Administrative Staff					
Principal	1.0				
Assistant Principal	3.0				
Department Chairs	4.0				
Athletic Director	1.0				
Clerical / Data Entry	9.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$400 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$75 / pupil				
Technology	\$150 / pupil			\$2,700	\$2,000
Assessment	\$36,441	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities	\$400 / pupil				
Security Guard	3.0				
Safety & Security	\$15,000				

Appendix 9: Table 6.B
Large K – 12 School District
High School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration
Enrollment	164	328	656
Instructional Staff			
Instructional Aides			
Reading Specialists / Basic Skills	2.0	4.0	8.0
Substitute Teachers			
Support Staff			
Social Workers			1.0
Parent Liaison			
Other Costs			
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil	\$50 / pupil
Security Guard		1.0	4.0

Appendix 9: Table 6.C
Large K – 12 School District
High School Model
Other Education Programs

	Extended School Year	After School Programs	Summer School Programs
Enrollment	47	At-Risk Students	½ At-Risk, LEP & 87 Special Education
Instructional Staff			
Classroom Teachers	6.0		
Other Teachers			
Instructional Aides	8.0		
Substitute Teachers	10 days @ \$100		
Support Staff			
Nurses			
Psychologists	0.6		
Social Workers	0.6		
LDTC	0.6		
Speech Therapist	0.5		
Occupational Therapist	0.3		
Physical Therapist	0.3		
Other Costs			
Supplies & Materials			
Other		\$24,000	\$400 / pupil

Appendix 9: Table 7.A
Very Large K – 12 School District
High School Model
General, LEP and Special Education

	Regular Education	LEP	Spec. Education – Mild	Spec. Education – Moderate	Spec. Education – Severe
Enrollment	1,387	99	25	153	24
Instructional Staff					
Classroom Teachers	109.0	4.0			5.0
Other Teachers					
Instructional Aides				3.0	7.0
Substitute Teachers	10 days @ \$100	10 days @ \$100		10 days @ \$100	10 days @ \$100
Resource Teacher				7.0	
Self-Contained Teacher				3.0	
Support Staff					
Librarians / Media Specialists	2.0				
Media Aides	1.0				
Technology Specialists	2.0				
Counselors	8.5				
Nurses	2.0				
Lunchroom Aides					
Speech Therapist			0.2	0.2	0.6
Occupational Therapist				0.2	0.4
Physical Therapist				0.2	0.4
Administrative Staff					
Principal	1.0				
Assistant Principal	2.0				
Department Chairs	4.0				
Athletic Director	1.0				
Clerical / Data Entry	8.0				
Other Costs					
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$400 / pupil	\$50 / pupil	\$25 / pupil	\$50 / pupil	\$150 / pupil
Equipment	\$75 / pupil				
Technology	\$150 / pupil			\$4,000	\$2,000
Assessment	\$30,819	\$50 / pupil			
State Assessment	\$35 / tested pupil				
Student Activities	\$400 / pupil				
Security Guard	3.0				
Safety & Security	\$7,500				

Appendix 9: Table 7.B
Very Large K – 12 School District
High School Model
At-Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration	Very High At-Risk Concentration
Enrollment	139	277	555	832
Instructional Staff				
Instructional Aides				
Reading Specialists / Basic Skills	2.0	3.5	7.0	7.0
Support Staff				
Counselor			1.0	1.0
Social Workers			1.0	1.0
Parent Liaison				
Other Costs				
Professional Development	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel	\$1,250 / personnel
Supplies & Materials	\$50 / pupil	\$50 / pupil	\$50 / pupil	\$50 / pupil
Security Guards			2.0	5.0
School-Based Youth Services / Health Clinic			\$500,000	\$500,000

Appendix 9: Table 7.C
Very Large K – 12 School District
High School Model
Other Education Programs

	Extended School Year	After School Programs	Summer School Programs
Enrollment	41	At-Risk Students	½ At-Risk, LEP & 78 Special Education
Instructional Staff			
Classroom Teachers	6.0		
Other Teachers			
Instructional Aides	7.0		
Substitute Teachers	10 days @ \$100 / day		
Support Staff			
Nurses			
Psychologists	0.6		
Social Workers	0.6		
LDTC	0.6		
Speech Therapist	0.5		
Occupational Therapist	0.2		
Physical Therapist	0.2		
Other Costs			
Supplies & Materials			
Other		\$24,000	\$600 / pupil

Appendix 9: Table 8.A
Very Small K – 8 School District
Districtwide Resources - Personnel

	General Education
Superintendent	1.0
Directors	0.5
Business Administrator	1.0
Clerical / Data Entry	2.0
Custodians	2.0
Maintenance Workers	1.0

Appendix 9: Table 8.B
Very Small K – 8 School District
Districtwide Resources – Other Resources

	General	Special Education
Home Instruction	\$2,700	
Out-of-District Placement		\$50,000
Technology	\$20,000	
Telecommunications	\$40 / pupil	
Textbooks	\$100 / pupil	
Treasurer of School Moneys	\$2,500	
Professional Development		
- Custodial Staff	\$200 / personnel	
- Clerical Staff	\$750 / personnel	
- Professional Staff	\$1,500 / personnel	
Insurance	\$25,000	
Legal	\$12,500	
Activities	\$2,500	
Supplies	\$8 / pupil	
Maintenance Supplies	\$58 / pupil	
Utilities	\$1.34 / sq ft	
Elections	\$4,000	
Association Fees	\$12,500	

Appendix 9: Table 9.A
Small K – 8 School District
Districtwide Resources - Personnel

	General Education
Superintendent	1.0
Supervisors	0.5
Coordinators	1.0
Business Administrator	1.0
Clerical / Data Entry	2.0
Custodians	3.0
Maintenance Workers	3.5

**Appendix 9: Table 9.B
Small K – 8 School District
Districtwide Resources – Other Resources**

	General	Special Education
Home Instruction	\$5,490	
Out-of-District Placement		\$120,000
Technology	\$20,000	
Telecommunications	\$40 / pupil	
Textbooks	\$100 / pupil	
Treasurer of School Moneys	\$2,500	
Professional Development		
- Custodial Staff	\$200 / personnel	
- Clerical Staff	\$750 / personnel	
- Professional Staff	\$1,500 / personnel	
Insurance	\$35,000	
Legal	\$15,000	
Activities	\$5,000	
School Board	\$10,000	
Supplies	\$8 / pupil	
Maintenance Supplies	\$58 / pupil	
Utilities	\$1.34 / sq ft	
Elections	\$8,000	
Association Fees	\$3,500	

Appendix 9: Table 10.A
Small K – 12 School District
Districtwide Resources - Personnel

	General Education	Special Education
Superintendent	1.0	
Assistant Superintendent	1.0	
Directors		1.0
Supervisor	1.0	
Business Administrator	1.0	
Clerical / Data Entry	5.0	1.0
Psychologist		1.0
Social Worker		1.0
LDTC		1.0
Buildings & Grounds Super.	1.0	
Custodians	8.0	
Maintenance Workers	2.0	

Appendix 9: Table 10.B
Small K – 12 School District
Districtwide Resources – Other Resources

	General	Special Education
Home Instruction	\$12,480	
Out-of-District Placement		\$240,000
Technology	\$25,000	
Telecommunications	\$40 / pupil	
Textbooks	\$100 / pupil	
Professional Development		
- Custodial Staff	\$200 / personnel	
- Clerical Staff	\$750 / personnel	\$750 / personnel
- Professional Staff	\$1,500 / personnel	\$1,500 / personnel
Insurance	\$50,000	
Legal	\$40,000	
Activities	\$10,000	
School Board	\$10,000	
Supplies	\$8 / pupil	
Maintenance Supplies	\$58 / pupil	
Utilities	\$1.34 / sq ft	
Elections	\$15,000	
School Physician	\$5,000	
Association Fees	\$8,000	\$15,000

**Appendix 9: Table 11.A
Moderate K – 12 School District
Districtwide Resources - Personnel**

	General Education	LEP	Special Education
Superintendent	1.0		
Assistant Superintendent	1.0		
Directors			1.0
Supervisors	1.0	0.5	0.5
Coordinators	2.0		
Business Administrator	1.0		
Facilities Manager	1.0		
Clerical / Data Entry	7.0	0.5	1.5
Psychologist			3.0
Social Worker			3.0
LDTC			3.0
Custodians	18.0		
Maintenance Workers	3.0		
Groundskeepers	3.0		

Appendix 9: Table 11.B
Moderate K – 12 School District
Districtwide Resources – Other Resources

	General	LEP	Special Education
Home Instruction	\$15,000		\$15,000
Out-of-District Placement			\$1,000,000
Security	\$1,000		
Technology	\$50,000		
Telecommunications	\$40 / pupil		
Textbooks	\$100 / pupil		
Professional Development			
- Custodial Staff	\$200 / personnel		
- Clerical Staff	\$750 / personnel	\$750 / personnel	\$750 / personnel
- Professional Staff	\$1,500 / personnel	\$1,500 / personnel	\$1,500 / personnel
Insurance	\$250,000		
Legal	\$50,000		\$10,000
Activities	\$10,000		
School Board	\$15,000		
Supplies	\$8 / pupil		
Maintenance Supplies	\$58 / pupil		
Utilities	\$1.34 / sq ft		
Elections	\$25,000		
School Physician	\$5,000		
Association Fees	\$15,000		
Miscellaneous			\$30,000

Appendix 9: Table 11.C
Moderate K – 12 School District
Districtwide Resources – At Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration
Contingency	\$10,000	\$20,000

Appendix 9: Table 12.A
Large K – 12 School District
Districtwide Resources - Personnel

	General Education	LEP	Special Education
Superintendent	1.0		
Assistant Superintendent	2.0		
Directors	4.0		1.0
Supervisor	1.0	0.5	1.0
Coordinators	4.0		
Business Administrator	1.0		
Asst. Bus. Admin.	1.0		
Facilities Manager	1.0		
Business Clerks	4.0		
Clerical / Data Entry	10.0	0.5	2.0
Technician	1.0		
Teachers		2.0	
Counselor			
Psychologist			5.0
Social Worker			5.0
LDTC			5.0
Interpreter / Liaison		0.5	
Custodians	40.0		
Maintenance Workers	4.0		

Appendix 9: Table 12.B
Large K – 12 School District
Districtwide Resources – Other Resources

	General	LEP	Special Education
Home Instruction	\$63,960		
Out-of-District Placement			\$2,075,000
Security	\$15,000		
Technology	\$80,000		
Consultant / Technical Services			\$50,000
Telecommunications	\$40 / pupil		
Textbooks	\$100 / pupil		
Professional Development			
- Custodial Staff	\$200 / personnel		
- Clerical Staff	\$750 / personnel	\$750 / personnel	\$750 / personnel
- Professional Staff	\$1500 / personnel	\$1500 / personnel	\$1500 / personnel
Insurance	\$800,000		
Legal	\$125,000		
Activities	\$20,000		
Supplies	\$8 / pupil		\$20 / pupil
Maintenance Supplies	\$58 / pupil		
Utilities	\$1.34 / sq ft		
Elections	\$35,000		
School Physician	\$25,000		
Association Fees	\$25,000		

Appendix 9: Table 12.C
Large K – 12 School District
Districtwide Resources – At Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration
In-School Suspension	2.0	4.0	8.0
Guidance Counselor		1.0	1.0
Professional Development	\$1,500 / personnel	\$1,500 / personnel	\$1,500 / personnel

**Appendix 9: Table 13.A
Very Large K – 12 School District
Districtwide Resources - Personnel**

	General Education	LEP	Special Education
Superintendent	1.0		
Assistant Superintendent	3.0		
Assistants to Superintendent	2.0		
Directors	5.0		1.0
Supervisor	3.0	1.0	5.0
Coordinators	7.0	1.0	
Business Administrator	1.0		
Asst. Bus. Admin.	1.0		
Purchasing Agent	1.0		
Purchasing Clerk	2.0		
Accountant	1.0		
Facilities Manager	2.0		
Business Clerks	7.0		
Clerical / Data Entry	14.0	1.0	6.0
Technician	3.0		
Programmer	1.0		
Teachers		5.0	
Interpreter		1.0	
In-School Suspension			
Psychologist			14.0
Social Worker			14.0
LDTC			14.0
Head Custodians	8.0		
Custodians	75.0		
Maintenance Workers	9.0		
Groundskeepers	15.0		
Security Guard			

Appendix 9: Table 13.B
Very Large K – 12 School District
Districtwide Resources – Other Resources

	General	LEP	Special Education
Home Instruction	\$162,000		
Out-of-District Placement			\$4,700,000
Security	\$25,000		
Technology	\$125,000		\$50,000
Consultant Services			\$150,000
Computer IEP			\$6,000
Telecommunications	\$40 / pupil		
Textbooks	\$100 / pupil		
Professional Development			
- Custodial Staff	\$200 / personnel		
- Clerical Staff	\$750 / personnel	\$750 / personnel	\$750 / personnel
- Professional Staff	\$1,500 / personnel	\$1,500 / personnel	\$1,500 / personnel
Insurance	\$1,750,000		
Legal	\$275,000		
Activities	\$25,000		
School Board	\$15,000		
Supplies	\$8 / pupil	\$5 / pupil	\$20 / pupil
Maintenance Supplies	\$58 / pupil		
Utilities	\$1.34 / sq ft		
Elections	\$50,000		
Audit	\$60,000		
School Physician	\$30,000		
Association Fees	\$50,000		

Appendix 9: Table 13.C
Very Large K – 12 School District
Districtwide Resources – At Risk Education

	Low At-Risk Concentration	Moderate At-Risk Concentration	High At-Risk Concentration	Very High At-Risk Concentration
Director	1.0	1.0	2.0	2.0
Clerical / Data Entry	1.0	1.0	1.0	1.0
Teachers	7.0	7.0	7.0	7.0
In-School Suspension	4.5	4.5	4.5	4.5
Professional Development				
- Clerical Staff	\$750 / personnel	\$750 / personnel	\$750 / personnel	\$750 / personnel
- Professional Staff	\$1,500 / personnel	\$1,500 / personnel	\$1,500 / personnel	\$1,500 / personnel

Appendix 10
Personnel Costs Used in PJP Analysis

	Salary	Benefits	Total Cost	Data Source ^{21,22,23}
School-Level Staff				
<i>Instruction</i>				
Classroom Teacher	\$51,066	\$10,213	\$61,279	Median Salary: Certificated Staff Data 2004 - 2005
Other Teacher	\$51,066	\$10,213	\$61,279	Median Salary: Certificated Staff Data 2004 - 2005
Instructional Aides	\$18,173	\$3,635	\$21,808	Median Salary: NJEA Salary Data 2002 – 2003 (Inflated by 4.8057 percent)
Reading Specialist	\$70,411	\$14,082	\$84,493	Median Salary: Certificated Staff Data 2004 - 2005
Resource Teacher/In-Class	\$51,066	\$10,213	\$61,279	Median Salary: Certificated Staff Data 2004 - 2005
Self-Contained/Pull Out Teacher	\$51,066	\$10,213	\$61,279	Median Salary: Certificated Staff Data 2004 - 2005
Substitute Teacher	\$100 / day	N/A	\$100 / day	PJP Panelists Recommendation
<i>Student Support</i>				
Librarian	\$70,705	\$14,141	\$84,846	Median Salary: Certificated Staff Data 2004 - 2005
Media Aide	\$16,685	\$3,337	\$20,022	Median Salary: NJEA Salary Data 2002 – 2003 (Inflated by 4.8057 percent)
Technology Specialist	\$44,120	\$8,824	\$52,944	Median Salary: Bureau of Labor Statistics (Occupational Code 15-1041: Computer Support Specialist) – Nov. 2004
Guidance Counselor	\$72,902	\$14,580	\$87,482	Median Salary: Certificated Staff Data 2004 - 2005
Nurse	\$53,440	\$10,688	\$64,128	Median Salary: Certificated Staff Data 2004 - 2005
Psychologist	\$66,410	\$13,282	\$79,692	Median Salary: Certificated Staff Data 2004 - 2005
Social Worker	\$56,975	\$11,395	\$68,370	Median Salary: Certificated Staff Data 2004 - 2005
Occupational Therapist	\$56,277	\$11,255	\$67,532	Median Salary: Certificated Staff Data 2004 - 2005
Physical Therapist	\$64,139	\$12,828	\$76,967	Median Salary: Certificated Staff Data 2004 - 2005
Learning Disabled Teacher Consultant	\$75,689	\$15,138	\$90,827	Median Salary: Certificated Staff Data 2004 - 2005

²¹ All salaries taken from the Certificated Staff Data include a 1.5 percent increase recommended by Dr. Augenblick.

²² The 4.8057 percent inflation adjustment is based on the CPI for the interim years (2.11 percent and 2.64 percent).

²³ Bureau of Labor Statistics salary data are taken from the State Occupational Employment and Wage Estimates available at <http://www.bls.gov/oes/current/oesrest.htm>.

	Salary	Benefits	Total Cost	Data Source ^{21,22,23}
Speech Therapist	\$65,200	\$13,040	\$78,240	Median Salary: Certificated Staff Data 2004 - 2005
Parent Liaison	\$23,216	\$4,643	\$27,859	Median Salary: NJEA Salary Data 2002 – 2003 (Inflated by 4.8057 percent)
Lunchroom Aide	\$10,444	\$2,089	\$12,533	Median Salary: NJEA Salary Data 2002 – 2003 (Inflated by 4.8057 percent)
Security Guard	\$21,610	\$4,322	\$25,932	Median Salary: Bureau of Labor Statistics (Occupational Code 33-9032: Security Guards) – Nov. 2004
Administration				
Principal – Elem.	\$109,217	\$21,843	\$131,060	Median Salary: Certificated Staff Data 2004 - 2005
Asst. Principal – Elem.	\$92,520	\$18,504	\$111,024	Median Salary: Certificated Staff Data 2004 - 2005
Principal – Middle	\$111,619	\$22,324	\$133,943	Median Salary: Certificated Staff Data 2004 - 2005
Asst. Principal – Middle	\$91,991	\$18,398	\$110,389	Median Salary: Certificated Staff Data 2004 - 2005
Principal – High	\$120,906	\$24,181	\$145,087	Median Salary: Certificated Staff Data 2004 - 2005
Asst. Principal – High	\$100,897	\$20,179	\$121,076	Median Salary: Certificated Staff Data 2004 - 2005
Director	\$96,425	\$19,285	\$115,710	Median Salary: Certificated Staff Data 2004 - 2005
Clerical / Data Entry	\$33,680	\$6,736	\$40,416	Median Salary: Bureau of Labor Statistics (Occupational Code 43-6014: Secretaries) – Nov. 2004
District-Level Staff				
Superintendent (Has no Asst. Superintendent)	\$130,200	\$26,040	\$156,240	Median Salary: Certificated Staff Data 2004 - 2005
Superintendent (Has Asst. Superintendent)	\$159,282	\$31,856	\$191,138	Median Salary: Certificated Staff Data 2004 - 2005
Asst. Superintendent	\$133,473	\$26,695	\$160,168	Median Salary: Certificated Staff Data 2004 - 2005
Asst. to the Superintendent	\$44,370	\$8,874	\$53,244	Median Salary: Bureau of Labor Statistics (Occupational Code 43-6011: Executive Secretaries) – Nov. 2004
Director	\$109,772	\$21,954	\$131,726	Median Salary: Certificated Staff Data 2004 - 2005
Supervisor	\$99,220	\$19,844	\$119,064	Median Salary: Certificated Staff Data 2004 - 2005
Coordinator	\$85,656	\$17,131	\$102,787	Median Salary: Certificated Staff Data 2004 - 2005
Business Administrator	\$99,470	\$19,894	\$119,364	Median Salary: Certificated Staff Data 2004 - 2005
Asst. Business Administrator	\$59,682	\$11,936	\$71,618	60% of Business Administrator
Purchasing Agent	\$54,580	\$10,916	\$65,496	Median Salary: Bureau of Labor Statistics (Occupational Code 13-1023: Purchasing Agents) – Nov. 2004

	Salary	Benefits	Total Cost	Data Source ^{21,22,23}
Purchasing Clerk	\$34,100	\$6,820	\$40,920	Median Salary: Bureau of Labor Statistics (Occupational Code 43-3061: Procurement Clerk) – Nov. 2004
Accountant	\$58,940	\$11,788	\$70,728	Median Salary: Bureau of Labor Statistics (Occupational Code 13-2011: Accountants & Auditors) – Nov. 2004
Facilities Manager	\$99,220	\$19,844	\$119,064	
Business Clerk	\$33,830	\$6,766	\$40,416	Median Salary: Bureau of Labor Statistics (Occupational Code 43-3031: Bookkeeping, Accounting and Auditor Clerks) – Nov. 2004
Technician	\$44,120	\$8,824	\$52,944	Median Salary: Bureau of Labor Statistics (Occupational Code 15-1041: Computer Support Specialist) – Nov. 2004
Programmer	\$72,010	\$14,402	\$86,412	Median Salary: Bureau of Labor Statistics (Occupational Code 15-1021: Computer Programmers) – Nov. 2004
Other District-wide Costs				
Head Custodian	\$36,450	\$7,290	\$43,740	Median Salary: Bureau of Labor Statistics (Occupational Code 37-1011: Supervisors, Janitorial Workers) – Nov. 2004
Custodian	\$20,690	\$4,138	\$24,828	Median Salary: Bureau of Labor Statistics (Occupational Code 37-2011: Janitors & Cleaners) – Nov. 2004
Maintenance Worker	\$35,530	\$7,106	\$42,636	Median Salary: Bureau of Labor Statistics (Occupational Code 49-9042: Maintenance & Repair, general) – Nov. 2004
Groundskeeper	\$22,560	\$4,512	\$27,072	Median Salary: Bureau of Labor Statistics (Occupational Code 37-3011: Landscaping and Groundskeeping) – Nov. 2004

Appendix 11
Expenditure Line Items Included in Program Cost Comparison Analysis

Line Number	Description
2710	Total Regular Programs – Instruction
4800	Total Special Education – Instruction
4890	Total Basic Skills/Remedial – Instruction
4980	Total Bilingual Education – Instruction
5070	Total Vocational Programs – Local – Instruction
5350	Total Regular Vocational Programs – Instruction
5630	Total Special Vocational Programs – Instruction
6080	Total School Sponsored Co-curricular Activities – Instruction
6140	Total School Sponsored Athletics – Instruction
6200	Total Other Instructional Programs – Instruction
6260	Total Community Services Programs/Operations
6360	Total Undistributed Expenditures – Instruction (Tuition)
6420	Total Undistributed Expenditures – Attendance & Social Work
6480	Total Undistributed Expenditures – Health Services
6485	Total Undistributed Expenditures – Oth. Support Services – Related Services
6705	Total Undistributed Expenditures – Oth. Support Services – Extraordinary Services
6570	Total Undistributed Expenditures – Support Services – Regular
6680	Total Undistributed Expenditures – Support Services – Special
6840	Total Undistributed Expenditures – Improvement of Instruction Services
6900	Total Undistributed Expenditures – Educ. Media Services/School Library
7610	Total Undistributed Expenditures – Instructional Staff Training Services
7000	Total Undistributed Expenditures – General Administration
7090	Total Undistributed Expenditures – School Administration
7625	Required Maintenance for School Facilities
7636	Other Operations and Maintenance of Plant Services
7500	Business and Other Support Services
7150	Central Services
7185	Admin. Information Technology
20210	Allocated Benefits: Total Regular Programs - Instruction
20320	Allocated Benefits: Total Special Programs - Instruction
20430	Allocated Benefits: Total Vocational Programs - Instruction
20540	Allocated Benefits: Total Other Instructional Programs - Instruction
20710	Allocated Benefits: Total Community Services Programs/Operations
20820	Allocated Benefits: Total Attendance and Social Work Services
20930	Allocated Benefits: Total Health Services
21320	Allocated Benefits: Total Other Support Services – Students –Regular
21430	Allocated Benefits: Total Other Support Services – Students – Special
21540	Allocated Benefits: Total Improvement of Instruction Services
21710	Allocated Benefits: Total Educational Media Services/School Library
21820	Allocated Benefits: Total Instructional Staff Training Services
21930	Allocated Benefits: General Administration
22040	Allocated Benefits: School Administration

Line Number	Description
22210	Allocated Benefits: Operations and Maintenance of Plant
22430	Allocated Benefits: Business and Other Support Services
22710	Unallocated Benefits
22850	Allocated Benefits: Central Services
22950	Allocated Benefits: Admin. Information Technology
8230	Total Equipment
13480	Demonstrably Effective Program Aid – Total Instruction
13640	Demonstrably Effective Program Aid – Total Support Services
13850	Distance Learning Network Aid – Total Support Services
14080	Instructional Supplement Aid – Total Instruction
14240	Instructional Aid – Total Support Services
MINUS	
Multiple Lines	T.P.A.F. Contributions – ERIP
Multiple Lines	Other Retirement Contributions - ERIP
2505	Preschool – Salaries of Teachers
2506	Local Contribution – Transfer to Special Revenue
2511	Local Contribution – Transfer to Special Revenue
2705	Abbott Parity – Set Aside
6980	Judgments Against the School District
7620	Increase in Maintenance Reserve
7629	Rental of Land & Buildings other than Lease-Purchase Agreement
7355	Increase in Sale/Lease-back Reserve
7120	Sale/Lease-back Payment
7130	Interest on Current Loans
7135	Interest on Lease Purchase Agreements
7140	Interest on Bond Anticipation Notes
8180	Equipment: School Buses – Regular
8190	Equipment: School Buses – Special
8220	Equipment: Special Schools (All Programs)
13580	Demonstrably Effective Program Aid: Rentals
13590	Demonstrably Effective Program Aid: Transportation
13800	Distance Learning Network Aid: Rentals
14180	Instructional Supplement Aid: Rentals
14190	Instructional Supplement Aid: Transportation
195	Tuition from Individuals
196	Tuition from Other LEAs Within the State
197	Tuition from Other LEAs Outside the State
198	Tuition from Other Sources