A Survey of Finance Adequacy Studies
By Michael Griffith
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The purpose of school finance adequacy studies is to determine the cost of providing students with an “adequate education”. As this StateNote demonstrates, the definition of an adequate education can vary greatly from one study to the next. The definition of what an adequate education is, and the measures used to define it, can be influenced in each study by:

- State education laws, regulations and standards
- Federal requirements such as those established in the No Child Left Behind Act
- Academic definitions of what an adequate education should entail
- Additional educational standards and measures selected by the organization that funds the study.

Because of these influences, it is possible for two research organizations to conduct adequacy studies in the same state at the same time and use two completely different definitions of what constitutes an adequate education. Some adequacy studies use outcome measures to define an adequate education while others use input measures. Outcome measures consist of indicators such as student test scores, graduation rates or the number of students moving on to postsecondary programs. Typical input measures would be teacher-student ratios, educational programs offered or the ratio of computers per student.

How Adequacy Studies Are Conducted

Several types of school finance adequacy studies have been used across the states. The following are the three most common models.

Evidence Based
The “evidence based” model identifies educational programs that have research-based proof that they produce desired educational results. Once educational programs have been identified, those conducting the study cost them out on a per-student basis and then aggregate the cost to identify the dollar amount required to provide an adequate education on the school, district and state expenditure levels.

Professional Judgment (PJ)
The professional judgment model brings together panels of individuals from the educational field, including: teachers, principals, superintendents, business officials and those individuals who work with at-risk, English language learners (ELL) and special education students. These panels are given the job of creating model schools that will meet the definition of an adequate education. The organization conducting the study then costs out these model schools to identify a base cost for providing a general education student an adequate education. The study’s panel also works to determine the added weight that should be given to special needs students and the additional funding that should be given to large or small districts and those in rural or urban areas.
Successful School Districts (SSD)
The successful district approach identifies those districts, or schools, within the state that have successfully taught their students to an "adequate" level. Once the successful districts have been identified the organization undertaking this study determines the average per-pupil cost for these schools. Subtracted from this average cost are expenditures for special education, ELL, at-risk programs, student transportation and food services. The remaining number is the base cost for providing a student without special needs – in an average district – with an adequate education. Those conducting the study then determine the cost of the educational services that were subtracted out and then use those as weights that are added onto the base cost.
<table>
<thead>
<tr>
<th>State</th>
<th>Year Completed</th>
<th>What Drove the Study</th>
<th>Study Undertaken By</th>
<th>Study Undertaken For</th>
<th>Method Used</th>
<th>Recommended Increase In Education Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>2003</td>
<td>Court Case: Lake View v. Huckabee, 2001</td>
<td>Lawrence O. Picus &amp; Associates</td>
<td>Arkansas Legislature’s “Joint Committee on Educational Adequacy”</td>
<td>Evidence Based Study</td>
<td>$847.3 million for the 2002-03 school year</td>
</tr>
<tr>
<td>Connecticut</td>
<td>2005</td>
<td>The CCJEF wanted to understand the cost of an adequate education</td>
<td>Augenblick, Palaich &amp; Associates</td>
<td>The Connecticut Coalition for Justice in Education Funding (CCJEF)</td>
<td>Both Successful School Districts (SSD) &amp; Professional Judgment (PJ)</td>
<td>Between $250 million (SSD) and $2 billion (PJ) for the 2003-04 school year</td>
</tr>
<tr>
<td>Illinois</td>
<td>2001</td>
<td>The legislature wanted to determine the cost of their new educational standards</td>
<td>Augenblick &amp; Myers</td>
<td>The Illinois Education Funding Advisory Board</td>
<td>Successful School Districts</td>
<td>[Incomplete information]</td>
</tr>
<tr>
<td>Kentucky</td>
<td>2003</td>
<td>The CBE wanted to understand the cost of an adequate education</td>
<td>Verstegen &amp; Associates</td>
<td>The Council for Better Education (CBE)</td>
<td>Professional Judgment</td>
<td>Between $1.097 and $1.23 billion for the 2001-02 school year (See state write-up)</td>
</tr>
<tr>
<td>Louisiana</td>
<td>2001</td>
<td>The state wanted to determine the cost of their new educational standards</td>
<td>Augenblick &amp; Myers</td>
<td>State Board of Education</td>
<td>Successful School Districts - School Level</td>
<td>[Incomplete information]</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1993</td>
<td>The state wanted to review its rationale for education spending.</td>
<td>Augenblick, Van de Water &amp; Myers</td>
<td>State Department of Education</td>
<td>Successful School Districts</td>
<td>$89.2 million for the 1991-92 school year</td>
</tr>
<tr>
<td>New York</td>
<td>2004</td>
<td>Court Case: CFE v. State, 2004</td>
<td>American Institute for Research and Management Analysis &amp; Planning</td>
<td>The Campaign for Fiscal Equity</td>
<td>A variation of the Professional Judgment</td>
<td>Between $6.21 and $8.4 billion for the 2001-02 school year (See state write-up)</td>
</tr>
<tr>
<td>Ohio</td>
<td>1997</td>
<td>Court Case: DeRolph v. State, 1997</td>
<td>Augenblick &amp; Myers</td>
<td>The DOE's School Funding Task Force</td>
<td>Successful School Districts</td>
<td>(See state write-up)</td>
</tr>
<tr>
<td>Oregon</td>
<td>1997 (Revised in 2000)</td>
<td>The state wanted to review its rationale for education spending (See state write-up)</td>
<td>Internally by a state-appointed commission.</td>
<td>The Legislative Council on the Oregon Quality Education Model</td>
<td>Professional Judgment</td>
<td>$972 million for the 2001-03 biennium budget</td>
</tr>
<tr>
<td>South Carolina</td>
<td>2000</td>
<td>The SC-SBA wanted to determine the cost of the state's new educational standards</td>
<td>Augenblick &amp; Myers</td>
<td>South Carolina School Boards Association (SC-SBA)</td>
<td>Professional Judgment</td>
<td>$2.9 billion increase in spending between the 1998-99 and 2005-06 school years</td>
</tr>
<tr>
<td>South Dakota</td>
<td>2006</td>
<td>The SDAFE wanted to understand the cost of an adequate education</td>
<td>Augenblick, Palaich &amp; Associates</td>
<td>South Dakota Alliance for Education (SDAFE)</td>
<td>Both Successful School Districts &amp; Professional Judgment</td>
<td>Between $125.6 million (SSD) and $404.3 (PJ) for the 2003-04 school year</td>
</tr>
<tr>
<td>Wyoming</td>
<td>1997</td>
<td>Court Case: Campbell County v. State, 1995</td>
<td>Management Analysis &amp; Planning Associates</td>
<td>Joint Appropriations Committee of the state Legislature</td>
<td>A variation of the Professional Judgment</td>
<td>$76.4 million for the 1996-97 school year</td>
</tr>
</tbody>
</table>
### Individual State Write-ups

**Arkansas**

**Link to the Study:** An Evidence Based Approach to School Finance Adequacy in Arkansas

**Base Cost Figure:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Prior to Study</th>
<th>Recommended by Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>$4,819</td>
<td>$6,230</td>
</tr>
</tbody>
</table>

This amount represents state spending per pupil and does not include local funding.

**Definition of an Adequate Education:**
A successful education was defined as one that meets the standards included in the state’s curriculum frameworks and allows for all but the most severely disabled students to perform at or above proficiency level on the state’s standardized tests. In addition, a successful education should provide for the following: 15-1 teacher student ratio in grades K-3 and 25-1 in all other grades; full-day kindergarten for each student and early learning for low-income students; a 190-day school year; and additional teaching positions for special education, ESL and at-risk students.

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**Connecticut**

**Link to the Study:** Estimating the Cost of an Adequate Education In Connecticut
http://www.schoolfunding.info/states/ct/CT-adequacystudy.pdf

**Base Cost Figure:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Prior to Study</th>
<th>Recommended by the PJ Study</th>
<th>Recommended by the SSD Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>$9,807</td>
<td>$10,241</td>
<td>$13,270</td>
</tr>
</tbody>
</table>

The recommended base cost does not include at-risk, ESL or special education funding.

The study recommends each special needs student receive an additional weight in the funding formula.

**Definition of an Adequate Education:**
The SSD study used test results from the Connecticut Mastery Test (CMT) and academic performance test (CAPT) to determine an adequate education. If at least 79% of a district’s students scored proficient or above in reading and math for three consecutive years, that district was considered to provide an adequate education.

The PJ study used a combination of input and outcome measures to define an adequate education. The adequate outcome of an education should have 94% (CMT) or 96% (CAPT) of the students scoring proficient in reading and 96% (CMT) or 95% (CAPT) scoring proficient in math by the 2011-12 school year. The input measures defined an adequate education as one that provided curriculum that met state standards and had sufficient funding to maintain a 180-day school year.

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**Illinois**

**Base Cost Figure:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Prior to Study</th>
<th>Recommended by Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>$4,425</td>
<td>$4,600</td>
</tr>
</tbody>
</table>

The recommended base cost figure does not include “at-risk” funding which was determined to be between $1,697 and $2,329 per identified student, depending on the percentage of at-risk students in a district.
Definition of an Adequate Education:
A successful school was defined as one that will have 83% of its students meet standards for the Illinois Standards Achievement Test (ISAT) by 2004 (which was five years beyond 1999, the first year the test was given). The ISAT test is given in reading, writing and math to 3rd, 5th and 8th graders in the state.

Kentucky
Link to Study: Calculation of the Cost of an Adequate Education in Kentucky: A Professional Judgment Approach http://epaa.asu.edu/epaa/v12n8/

Base Cost Figure: 2001-02
Prior to Study: $7,271
Recommended by Study: $9,582 (Small districts) $9,112 (Moderate districts) $8,438 (Large districts)

These numbers are actual per-pupil expenditure amounts and include all cost for educating a student.

Notes on Total Education Spending:
The study recommended a total increase of $1.097 billion in the 2001-02 school year. In addition, the PJ panels recommended the school year be extended, teacher’s salaries be increased and the state create a voluntary half-day preschool program. If these changes were made to the education system it would bring the total increase in education spending to $1.23 billion.

Definition of an Adequate Education:
The study used both input and outcome measures to define an adequate education. The input measures used were: class sizes of no bigger than 24 (grades K-3), 28 (grade 4), 29 (grades 5-6) and 31 (grades 7-12); a school year of at least 185 days; four days of professional development; the establishment of a library/media center in each school; and a program that address the student drop-out problem. Outcome measures included the goal of 100% of the students scoring proficient or above on the state’s subject exams by 2014 (exam subjects include: reading, writing, math, science, social studies, arts and humanities, and practical living/vocational arts). In addition, districts must receive a score of 100 on the state’s “Non-Academic Index” – measures on this index include: attendance rate, drop-out rate, retention rate and the rate of students who make a successful transition to adult life (measured for high school only).

Notes:
Two other adequacy studies were completed in Kentucky in 2003 both by Picus & Associates – one used the professional judgment approach, the other the evidence-based approach.

Louisiana

Base Cost Figure: Prior to Study: $3,103 $3,103
Recommended by Study: $4,174 $4,234

These base cost numbers are for the 2000-01 school year. The recommended base cost figure includes at-risk funding, but not special education funding, capital outlay and vocational education. The base prior to the study does not include funding for at-risk programs.

Definition of an Adequate Education:
Schools scoring a grade of over 100 on the State Performance Score and any school that improves its grade by at least 75% over a two-year period would be seen as successful.

Notes:
This study looked at elementary and middle school programs but did not include information about high school spending. The report was presented to the state in June 2001 and it has not yet had an impact on the state’s education funding formula.
## Mississippi

**Base Cost Figure:**
- **1991-92**
  - Prior to Study: $2,005
  - Recommended by Study: $2,614

Under the proposed system, local school districts would be expected to pay a share of the base cost program. The state’s share of the base cost would range from $1,683 to $2,500, depending on a local school district’s property tax wealth.

**Definition of an Adequate Education:**
The study identified schools by using socioeconomic information including: percent of students receiving free/reduced price lunch, the local operating tax levy, the assessed valuation per pupil and school size. Once districts were identified to be within a "normal" range for each of those categories, the study looked at their institutional cost. The information that was reviewed to determine instructional cost included: accreditation level, number of Carnegie units offered at the high school level and the average teacher experience in the district.

**Notes:**
The state incorporated the information from this study into its school finance system, which is still in place in Mississippi.

## New York

**Link to Study:** Determining the Cost of Providing All Children in New York An Adequate Education
[http://www.cfequity.org/FINALCOSTINGOUT3-30-04.pdf](http://www.cfequity.org/FINALCOSTINGOUT3-30-04.pdf)

**Base Cost Figure:**
- **2001-02**
  - Prior to Study: $11,056
  - Recommended by Study: $12,975

These numbers are actual per pupil expenditure amounts and include all costs for educating a student.

**Definition of an Adequate Education:**
The following was the definition of an adequate education provided to members of the professional judgment panels in this study: “As of 2005, all high school students (except for certain special education students) will be required to achieve a passing score of 65 on the Regents examinations in English, social studies, mathematics, and science to receive a high school diploma. As of the 2005-06 school year, students in grades 3-8 will be tested in English, and mathematics (and shortly thereafter in science) to determine whether they are making satisfactory progress toward meeting the Learning Standards.”

## Ohio

**Link to Study:** Recommendations for a Base Figure and Pupil-Weighted Adjustments to the Base Figure for Use in a New School Finance System in Ohio
[http://www.apaconsulting.net/Flash/papers/ohio97.pdf](http://www.apaconsulting.net/Flash/papers/ohio97.pdf)

**Base Cost Figure:**
- **1995-96**
  - Prior to Study: (Incomplete information)
  - Recommended by Study: $3,930

**Spending on Education:**
In FY 1996-97, the year this study was undertaken, the state funding for the “basic aid” program was $1.28 billion, with the base cost figure being $3,500. In the FY 2001-02 budget, which incorporated most of the changes recommended by this study, the funding for the “basic aid” program was $2.93 billion with the base cost figure being $4,814. The state of Ohio was able to pay for this increase in school funding by reprioritizing the items in its state budget.
Definition of an Adequate Education:
Six criteria were used to select successful school districts:

1. A passing rate of 75% on the 4th-grade proficiency tests in reading, mathematics, writing and citizenship
2. A passing rate of 75% on the 9th-grade proficiency test in reading, mathematics, writing and citizenship administered in the 9th grade
3. A passing rate of 85% on the 9th-grade proficiency test in reading, mathematics, writing and citizenship administered in the 10th grade
4. A passing rate of 60% on the 12th-grade proficiency tests in reading, mathematics, writing and citizenship
5. A dropout rate of 3% or less
6. An attendance rate of at least 93%.

Oregon
Link to Study: The Oregon Quality Education Model: Relating Funding and Performance
http://www.ode.state.or.us/sfda/qualityed/docs/origgemreport1999.pdf

Base Cost Figure:

<table>
<thead>
<tr>
<th></th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Study</td>
<td>$5,216</td>
<td>$5,444</td>
</tr>
<tr>
<td>Recommended</td>
<td>$5,762</td>
<td>$5,880</td>
</tr>
</tbody>
</table>

Definition of an Adequate Education:
The model assumes that all schools will be able to reach the performance goal of 90% of the students being at benchmark standards for 3rd grade and each grade there after. In addition, the remaining 10% of students should be making progress toward the standards.

South Carolina
Link to the Study: Determining an Adequate Per Pupil Funding Level for Public K-12 Education in South Carolina in Relationship to Pupil Performance Objectives
http://www.apaconsulting.net/Flash/papers/sc00.pdf

Base Cost Figure:

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Study</td>
<td>(See note below)</td>
</tr>
<tr>
<td>Recommended</td>
<td>$6,189</td>
</tr>
</tbody>
</table>

The base cost amount prior to the study for FY 1998-99 was $4,990.

The recommended cost does not include at-risk and special education funding. When at-risk and special education funding are included, the recommended per-student funding for FY 2005-06 increases to $9,182.

Definition of an Adequate Education:
The state uses the Palmetto Achievement Challenge Test (PACT) to measure students' abilities in English and math. The performance expectations were 85% of elementary students score at the level of “basic” or above by 2005-06, and 75% of all elementary students score at the level of “proficient” or above by 2010-11. For middle school students, it was expected 75% score at “basic” or above by 2005-06, and 65% score at “proficient” or above by 2010-11. High school students are expected to make progress in meeting all the high school education criteria (graduation exam, attendance rate, dropout rate and participation in Advanced Placement courses) by 2005-06, and by 2010-11, 100% of high school students should pass the 10th grade graduation exam by the end of the 12th grade.

South Dakota
Link to Study: Estimating the Cost of an Adequate Education in South Dakota

Base Cost Figure:

<table>
<thead>
<tr>
<th></th>
<th>2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to Study (2002-03)</td>
<td>$5,475</td>
</tr>
<tr>
<td>Recommended by PJ Study:</td>
<td>$8,761</td>
</tr>
<tr>
<td>Recommended by SSD Study:</td>
<td>$6,496</td>
</tr>
</tbody>
</table>
The recommended base cost does not include at-risk, ESL or special education funding. The study recommends each special needs student receive an additional weight in the funding formula. The recommended weights vary by district size – they are: at-risk (0.24 – 0.72), ESL (0.39 – 1.18), mild special ed. (.66 – 1.31), moderate special ed. (1.25 – 2.26) and severe special ed. (3.57 – 4.33).

Definition of an Adequate Education:
The SSD study used test results for students in grades 3-8 and 11 on the two different standardized tests that were given to students (The SAT -10 and the Dakota STEP examination). If a district’s students met one of three standards, the district was defined as providing an adequate education. These standards included: (1) meeting state exam standards, (2) showing a 5% improvement over the previous year’s exam results or (3) having test scores that were significantly above the state’s average scores.

The PJ study used a combination of input and outcome measures to define an adequate education. The adequate outcome of an education should be students testing at grade level on the Dakota STEP exams, and a graduation rate of at least 90% or a student attendance rate of 94%. The input measures defined an adequate education as one that provided: curriculum that met state standards; planning time and professional development; courses of instruction required to graduate from high school; class sizes of 15 or less for grades K-3; and proper special education class and services.

Notes:
State exam standards for both the SSD and PJ study were for the 2002-03 school year. The standards for grades K-8 were a 65% passage rate in reading and a 45% passage rate in math – for grades 9-12 they were 50% for reading and 60% for math.

Wyoming
Link to Study: A Proposed Cost Based Block Grant Model for Wyoming School Finance http://legisweb.state.wy.us/schoolx/cost/final/final.htm

Base Cost Figure: 1995-96
Grades: K-5 6-8 9-12
Prior to Study: $5,964 $5,964 $5,964
Recommended by Study: $6,165 $6,403 $6,781

Definition of an Adequate Education:
Once this program is implemented it will provide “Assured Opportunity (to all students) to Acquire Postsecondary Prerequisites.”

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