

# **AN EVIDENCE-BASED ADEQUACY FUNDING SOLUTION FOR ILLINOIS EDUCATION**

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Illinois ranks second to last in the nation for state share of public school budget revenue (Baker, Sciarra, & Farrier, 2010); as a result, significant discrepancies across the state's nearly 900 school districts exist in terms of teacher quality, building infrastructure, and educational materials, such as technology. While other states have viewed school funding inequities and inadequacy as detrimental to their social and economic health, Illinois has resisted efforts to update its school funding mechanisms commensurately with the expectations the state has put on its schools.

This article chronicles research utilized in a recent attempt at instituting an evidence-based adequacy model for funding Illinois schools. It is comprised of two related studies that demonstrate the extent to which an evidence-based adequacy model is viable for the state, as well as how allocation practices at a sample of Illinois schools are predisposed toward implementation of such a model.

An evidence-based adequacy framework focuses on the practices and structures in schools that work for ensuring that all students have opportunities to achieve at high levels (Odden, 2003). Then it asks the question: How much do those practices and structures cost? To think about school funding with an adequacy framework is to consider the adequate (or sufficient) fiscal resources that would enable all students to perform at high levels. An adequacy framework first necessitates that current money within the system is possibly used in different

ways. Under an equity framework, the dollar amount that is used as the foundation or baseline is often arbitrarily determined: The money in the system is a result of political compromise, usually with add-on formulas for certain high-needs areas, such as poverty. However, under an adequacy framework, the foundation of the baseline dollar amount is strategic. So, any money above and beyond what the system currently has should be determined--and hopefully used--in ways that are consistent with research and best practice. In particular, the evidence-based model employs findings from experimental studies of effective schooling strategies, as well as Comprehensive School Reform (CSR) models, to build "prototype" schools as a way to model the resources needed so that all schools in Illinois can be as effective as the schools that receive special attention under CSR plans. For instance, evidence from randomized control experiments demonstrates that class sizes of fifteen or fewer students in grades kindergarten through three are effective in increasing achievement (Finn & Achilles, 1990); thus, the evidence-based model accounts for staffing that accommodates this strategy. Additionally, lowering class size does not automatically lead to achievement gains if teachers do not have the support they instructional need (Graue & Rauscher, 2009). Thus, the model also incorporates instructional coaches with specific staffing ratios.

### **Illinois Context**

For many decades, states were concerned primarily with ensuring that all schools were funded equally. States, such as California, were forced, via courts, to equalize funding at the same time that property tax caps were imposed on local communities. Thus, in California, the state controlled a significant share of school funds, and it attempted to distribute those funds as equally as possible.

While California now is in greater financial turmoil than Illinois, Illinois has at the same time resisted any attempt to equalize funding. Fortunately, Illinois does not have to reposition itself from a few decades of a flawed funding model experiment, such as California.

Unfortunately, it has done nothing to address the huge disparities between even neighboring districts. Some of the wealthiest communities are able to fund their schools at over \$20,000 per student per school year; others, sometimes mere miles away, can barely afford \$7,000.

For over two decades, Illinois politicians and school funding advocates have sought tax reform that would increase the state's ability to provide more equitable funding for low property wealth districts. In 1993, a legislative task force was instituted with the goal of producing legislation that would provide property tax relief and restructure state tax rates. In 1996, another business-based taskforce was formed by the governor, Jim Edgar; this taskforce proposed a constitutional amendment that would ease the modifications on tax structures. In 2003-2004, a House joint resolution was passed that would examine property tax and school funding reform. Various bills have been proposed in the legislature that would significantly alter funding levels and policies; none have yet been signed into law. The state's Education Finance Advisory Board has, for nearly a decade, recommends a foundation level with the assistance of formula that provides per-pupil weights (Augenblick & Myers, 2001); the formula was funded until 2005.

There are several optimistic signs, however, that demonstrate reform potential for Illinois school funding. During the middle of the worst recession in sixty years, the Illinois State Senate recently passed a tax increase for investment in education (Senate Amendment 2). Additionally, two major school finance lawsuits are currently on the docket (*Carr & Newell v. Koch*, Illinois State Board of Education, & Quinn, 2010; *Chicago Urban League v. Illinois*, 2008). In addition, a prominent policy advocacy group, Advance Illinois, was recently created to propose reform for

Illinois education. Illinois residents arguably see the impact of school funding disparities on the state's economy; however, understandably, Illinois residents are concerned about pouring more money into a system that may or may not put the new dollars to best use.

### **Evidence-Based Adequacy Model**

Considering the wide income, as well as student achievement, gaps in the state of Illinois--and considering the persistent focus on reducing property taxes and increasing school funding equity--the state's political scene has been searching for new ways to determine an appropriate general state aid formula. The evidence-based adequacy approach (Odden, 2003) has had wide political and economic interest in other states; additionally, it is an approach that specifically links best practices and evidence-based approaches to funding mechanisms. In particular, this approach utilizes experimental studies--as well as commonly agreed-upon best practices when experimental studies are unavailable--to determine the core features of a school budget. The model (explained in depth in Odden & Picus, 2007), for instance, assumes staffing for grades K-3 would be consistent with the recommendations from the well-known Tennessee class size study (Finn & Achilles, 1999): 15 students to one teacher. Other elements include research and best practice on technology, professional development, specialist teachers, additional teachers to provide for increased teacher collaboration time, school administration, and central office staffing. All elements of the model are predicated on specific school sizes, adjusted up or down by ratio to actual school size. Various costs are also adjusted within the model for ELL and student poverty, for instance, research that demonstrates that English Language Learners and impoverished students require additional instructional resources, such as tutors (Cohen, Kulik, & Kulik, 1982). The model incorporates those costs.

## **Study Overview**

The present study--and the corresponding policy effort, the Illinois School Finance Adequacy Initiative, based at National-Louis University in Chicago--utilizes an evidence-based adequacy approach. Utilizing a state average of teacher and administrator salaries, a model is built that accounts for all the practices determined effective. Additionally, certain practices that are essential for school operations, such as administrative labor, are included. Those costs are determined through a combination of research where available, professional judgment, and local context.

The purpose of this study is two-fold: first, to determine the costs of implementing an evidence-based adequacy funding approach in Illinois, as well as how such an approach would impact specific districts; second, to determine, based on a sample of schools across the state, how current school-based allocation practices prompt the state to successful implementation. In other words, the study not only seeks to understand the actual implications of funding such a model, but to also determine the extent to which, given the widely varied resources across the state, current allocation practices can provide clues to how increased dollars might be spent.

## **Simulation**

The first portion of the study is a simulation to determine the actual costs to the state for implementing an evidence-based adequacy approach utilizing 2008 revenues. This statewide comparison of an evidence-based approach to school finance adequacy to current revenues is replicated after the Wisconsin school finance adequacy study methodology (Odden et al., 2007). The Wisconsin adequacy study was founded on a school-level expenditure structure developed by Odden, Archibald, Fermanich, and Gross (2003). The model builds school-level resources, mostly through staff allocations by programmatic areas, with a limited number of specific dollar amounts. These elements were vetted for their appropriateness to the state-specific context in

Illinois by an advisory group of educators, politicians, business community members, and concerned citizens known as the Illinois School Finance Adequacy Taskforce. They approved the model, with the addition of one assistant principal per prototypical school with the rationale that especially in urban areas, the assistant principal position was needed to handle discipline issues so that the principal and other administrators could be instructional leaders.

The adequacy model was calculated according to the most current data available for schools in Illinois (2008). It was then compared to current district revenues (from local and state sources); federal revenues were not utilized in this study as we attempted instead to study state-specific uses of funds. The Illinois student data includes 2,023,087 Illinois students, 43% of whom qualify for free and reduced-price lunch and 5% of whom are English language learners (ELL). These students attend a total of 4,058 public schools in 873 districts.

Simulation parameters provided the foundational elements for the inputs of the adequacy model for the state of Illinois. Prototypical schools form the foundational cost elements; when compared to actual schools within the state, costs are adjusted in proportion to actual school size and demographics to prototype school. State average salaries were used for teachers, assistant principals, principals, and library media technology positions to calculate a cost for each of the elements. Estimated salaries were used for school secretaries, clerical staff, and instructional aides as there were no reliable statewide data available; these figures may be below actual salaries, and a sampling of salaries in these categories would improve the accuracy of these estimates. Benefits were also estimated at 37.54% and checked against a few districts in the state; this is an area for continued study as benefit rates may vary by location and position throughout the state. See Table 1 for the parameters.

Other expenditure elements in the simulations were straight dollar amounts. These per-pupil resources were replicated from the Wisconsin study (Odden et al., 2007); the Illinois School Finance Adequacy Initiative taskforce reviewed them without further changes. See Table 2 for specific elements. These dollar amounts were populated according to average daily membership (ADM) counts grade-by-grade, rolled up to the school type level for each school. There are also parameters that are dependent on the number students who qualify for free and reduced-price lunch. These elements are specified in Table 3. In addition to the abovementioned parameters, there are also small school adjustments. The model allocates a class size of 1 teacher for every 7 students in schools with less than 75 students total.

Resources for high cost, low incidence special education students are in addition to the total that has been presented for this adequacy model (another approximately \$200 million). The theoretical foundation for the evidence-based approach to adequacy (Odden et al., 2007) supports the preventative notion of placing students in the least restrictive environment, but takes it one step further in providing resources for all struggling students, regardless of whether they qualify for special education services. The fact that Illinois has already begun to implement a Response to Intervention (RTI) model is right in line with this line of thinking. On the flip side, the 1-2% of students who are identified with severe and profound disabilities need to be provided for in a way that allows for districts to be fiscally viable. We follow Odden et al. in recommending that the state cover 100% of the costs associated with students who have severe and profound disabilities.

### **Simulation Results: Comparison of Adequacy Model Costs to Current Revenues**

The adequacy model simulated for Illinois schools and districts costs a statewide total of \$25,434,575,686 or \$12,572 per pupil. Some states include a hold harmless provision wherein no

district would receive less than they did in the previous year; if implemented, this would cost \$1,142,281,186 or \$565 per pupil for 177 districts. 2008 revenues in Illinois, including state and local revenues, total \$21,894,089,547 or \$10,822 per pupil. Therefore, the difference between the adequacy model simulation and current revenues totals \$3,540,486,139 or \$1,750.04 per pupil (without hold harmless). These total amounts can be broken down by element. Table 7 provides these details by personnel category. Table 8 presents the remainder of the resource elements by per-pupil dollar amount. If Tables 7 and 8 are added together, they total \$12,532 per pupil statewide, with the remaining \$40 per pupil allocated for small schools adjustments, for the total \$12,572 per pupil for the Illinois adequacy model.

These elements were calculated without a comparable wage index (CWI). If a district-by-district CWI is applied (Taylor & Fowler, 2007), the model would cost an additional \$79,570,002. The range of the CWI was 0.73 for the lowest regional index to 1.06 for the highest regional index. The average index was 0.92. There are greater numbers of students within the districts located in the regional indices above 1.0 than below statewide.

Further, it may be appropriate to apply an index for district type, since current costs seem to differ depending on if a district is an elementary, high school, or unit (grades K-12) type. The last study of this issue in Illinois (Imazeki, 2001), demonstrates that cost function results, if applied, would use unit district as the baseline (1.0), with elementary districts at 1.16 and high school districts at 1.607. With 386 elementary districts, 101 high school district, and 385 unit districts statewide, the statewide cost would be \$2,770,943,897. The present adequacy model was calculated without district type indices, as there were no figures to apply this model.

In order to put this Illinois adequacy model in perspective for the individual districts that it simulates costs for, three individual districts are highlighted: DeKalb Community Unit School

District 428, Wilmette School District 39, and Vienna High School District 133. DeKalb Community Unit School District 428, a unit district in northern Illinois with 5,720 students enrolled, has 39% of its students qualifying for free or reduced-price lunch and 7% identified as limited English proficiency. The district's 2008 total revenues were \$57,740,379. Our simulated Illinois adequacy model costs a total of \$64,459,630, or \$11,269 per pupil. Therefore, the adequacy model costs a total of \$6,719,251 or \$1,175 per pupil more than current revenues for this district. Assuming local revenues remain the same, percent of local funding would decrease by 7.5%, from 72.2% to 64.7%. If applied, a CWI adjustment would provide this district with an additional \$4,033,664. A district-type index (Imazeki, 2001) would not provide any additional funds.)

Wilmette School District 39 is an elementary district in the affluent northern suburbs of Chicago with 3,642 students enrolled. The student population includes 1% who qualify for free or reduced-price lunch, and 2% who are identified with limited English proficiency. The district's 2008 total district revenues were \$42,767,856. The simulated Illinois adequacy model costs \$40,614,596, or \$11,152 per pupil. The adequacy model costs a total of \$2,153,260 (or \$591 per pupil) less than current revenues for this district. Without a hold harmless provision and assuming local revenues remain the same, percent of local funding would increase by 4.9% from 91.5% to 96.4%. If applied, a CWI adjustment would provide this district with an additional \$15,730,033. Additionally, a district-type index (Imazeki, 2001) could provide an additional \$4,711,293 in funds.

Vienna High School District 133 is a high school district in southern Illinois with 389 students enrolled. The student population includes 50% who qualify for free or reduced-price lunch; no students are identified as limited English proficient. The district's 2008 total district

revenues were \$3,329,772. The simulated Illinois adequacy model costs a corresponding total of \$4,400,570, or \$11,313 per pupil. The adequacy model costs a total of \$1,020,798 (or \$2,624 per pupil) more than current revenues for this district. Assuming local revenues remain the same, percent of local funding would decrease by 10.7% from 46% to 35.3%. If applied, a CWI adjustment would decrease this district's funding by \$956,558. Additionally, a district-type index (Imazeki, 2001) could provide an additional \$2,671,146 in funds.

### **School-Based Allocation Practices**

The second portion of the study examined current allocation practices at a sample of Illinois schools. In order to determine how current revenues are utilized in Illinois schools, a stratified random sample was generated. Thirty schools, out of a total 3,582 statewide, were divided into nine categories, combining all combinations of high, medium, and low student poverty with high, medium, and low student performance (See Table 4). Percentages of students identified as eligible for free or reduced-price lunch were stratified as follows: high (66.6-100%), medium (33.3-66.5%), and low (0-33.2%) are the top, middle, and bottom thirds of school-level poverty. Student performance categories were determined by a 3-year average of percent of students who met and exceeded proficiency at the school-level with high (66.6-100%), medium (33.3-66.5%), and low (0-33.2%) as the top, middle, and bottom thirds of school-level scores. The schools were also distributed among elementary, middle, and high school levels.

To put the sample in the context of the state of Illinois, Table 5 identifies the number of these types of public schools across the state. As is evident in this table, the distribution of poverty and performance is neither random nor equally present across the state. Since this was a stratified, random sample, the student demographics within the sample will not be representative

of the state as a whole. Table 6 identifies the sample characteristics with the statewide characteristics of public school students.

The principals of all schools in the sample were visited during the 2008-09 school year by researchers who collected data on all resources at the school level, including staffing, professional development, technology, and so forth. Additionally, researchers validated the data by collecting narrative accounts of the school improvement process at each school. The data from the narrative accounts also contributed to an in-depth understanding of how various resources were actually used at each school. All the quantitative data were then aggregated into a larger database and compared to the evidence-based adequacy model; qualitative data were analyzed into corresponding school-level case studies.

Overall, as anticipated, significant discrepancies exist across the state of Illinois (see Appendix). Clearly, many schools in the sample had the resources to implement the adequacy model, but their resources were instead used in very different ways. For instance, some schools relied on larger class sizes to increase numbers of instructional aides and/or pupil support staff. Others sacrificed specialist teachers for class size or pupil support to the detriment of significant reading achievement problems that clearly needed additional resources. Though resources varied considerably, school leadership was a significant factor in both the impacts of available resources, as well as the ability to gain various resources from school districts.

In particular, high performing, high poverty elementary schools within the sample incorporate additional strategies for struggling students (e.g. academic extended day program) compared to high performing, medium poverty elementary schools. The high poverty schools also provide more supports for teachers: common research-based curriculum aligned to state standards, with professional development to support teaching it. All high performing schools

analyze data, but that analysis is often done by the principal in medium poverty schools, whereas teachers usually were involved in the high poverty schools. Most high performing schools in the sample provided full-day kindergarten & offered pre-K programs, as well. One of the elementary schools in this category, with approximately 450 students, 21 core teachers and 3 specialist teachers, nearly met the recommendations of the adequacy model: 22.08 core teachers and 4.42 specialist teachers. Six instructional aides were employed, while the adequacy model does not recommend such positions. The school employed approximately three fewer pupil support staff than the model recommendation.

As another example, one high school in this category, with approximately 450 students, employed one less core teacher than the model recommends but made up for that with nearly 1.5 additional specialist teachers. One certified tutor was employed by the school, with a model recommendation of 3.70. The rest of the staffing at this school is consistent with the model, except that it had nearly three fewer pupil support staff than the model recommends.

Two schools in the low performance, high poverty stratum demonstrate resource use that is inconsistent with the adequacy model. Indeed, both utilize more assistant principals and specialist teachers than the model recommends. One high school, with approximately 900 students, has only 22.2 core teachers, while the model recommends 36; one certified tutor, while the model recommends 8.73; 8.8 pupil support staff, while the model recommends 12.33. Yet 0.5 additional assistant principal is employed at the school over the recommendation of the model.

The other school, with approximately 1,340 students, employs 43 core teachers, while the model recommends 53.8; 10 pupil support staff, while the model recommends 15.04; no certified tutors, while the model recommends 9.66; and one librarian, while the model recommends 2.24.

The resources at this school are directed elsewhere: the model recommends 2.23 assistant principals, but the school employs six; 17.75 specialist teachers, but the school employs 20.4

High performing, low poverty schools used their resources in a way that most closely reflected the adequacy model. Indeed, they had the resources to implement many of the strategies that are recognized, though not all of the elements.

### **Conclusions**

Based on the sample schools, it is likely that Illinois will have to contribute more money in order to provide an evidence-based adequacy approach to funding for many schools; it is unclear, though, how many schools will adopt the model, even with increased funding. Indeed, much more money would be needed to implement the system at a state-wide level. The proposed adequacy model would be a 16% increase in total state expenditures for elementary and secondary education. Implementation would be no small feat in a state with a multi-billion dollar deficit. Thus, the primary purpose of this study is to provide detailed fiscal information regarding what an adequate education in Illinois costs so that policymakers can make informed decisions in both the current fiscally constrained environment as well as future times of financial surpluses.

Given the deficit in the state budget--and the evidence of uneven allocation practices across schools in Illinois--it would make greater sense to implement a short-term plan, as follows:

1. Propose \$12,572 as the foundation amount without any funds allocated for the current general State Aid poverty grant. This recommendation would include a stipulation that this amount includes dollars per pupil be part of a categorical grant for free and reduced-price lunch recipients, as well as English Language Learners. Lastly, this amount does

not include funds for students with severe and profound disabilities, which should be fully covered by state aid.

2. Propose \$10,856 as the foundation level with \$1,716pp allocated through the Poverty grant. \$10,856 per pupil would be considered the “base” amount for all districts, with the \$1,716pp distributed proportionally according to student demographics (poverty, ELL). Again, these amounts do not include funds for students with severe and profound disabilities, which should be fully covered by state aid.
3. Propose a 5 year phase-in approach, which would be predicated on adjustments to the class-size recommendations in the model. It would also shift the proportion of the disbursements to more heavily weigh on the foundation level side. Again, these amounts do not include funds for students with severe and profound disabilities, which should be fully covered by state aid.
  - a. **Baseline:** total 2008 state and local revenues = **\$10,822pp**
  - b. **2011-2012** school year proposal: \$6,469pp foundation level + \$4,703pp Poverty & ELL grant aid = **\$11,172pp** total state and local revenues
  - c. **2012-2013:** \$7,566pp foundation level + \$3,956pp Poverty & ELL grant aid = **\$11,522pp** total state and local revenues
  - d. **2013-2014:** \$8,663pp foundation level + \$3,209pp Poverty & ELL grant aid = **\$11,872pp** total state and local revenues
  - e. **2014-2015:** \$9,760pp foundation level + \$2,462pp Poverty & ELL grant aid = **\$12,222pp** total state and local revenues
  - f. **2015-2016:** \$10,856pp foundation level + \$1,716pp poverty & ELL grant aid = **\$12,572pp** total state and local revenues

With such a short-term plan in mind, the state can move slowly toward adopting a stance toward evidence-based allocation practices, as well as the educational practices that are derived from the allocations. This would have a significant impact in ensuring that, when fully funded, districts would utilize the additional funds for strategic purposes. Ultimately, this study demonstrates that an evidence-based adequacy approach to funding schools is in reach; it will simply take greater courage for state legislators to fight for these bold plans.

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Table 1. Simulation Parameters Allocated by School Size

| <b>Expenditure Element</b>                | <b>School Type</b>                        | <b>Parameter</b>   |
|---|---|--|
| Prototypical School Size                  | Elementary School                         | 432 Students   |
|   | Middle School                             | 450 Students   |
|   | High School                               | 600 Students   |
| Specialist Teachers                       | Elementary & Middle Schools               | 20% over Core Teachers   |
|   | High School                               | 33% over Core Teachers   |
| Instructional Facilitators                | All School Types                          | 1 per 200 students   |
| Summer School and Extended Day Class Size | All School Types                          | 15:1 for half of the students who qualify for free and reduced-price lunch |
| Regular School Day Class Sizes            | Kindergarten to 3 <sup>rd</sup> Grade     | 15   |
|   | 4 <sup>th</sup> to 12 <sup>th</sup> Grade | 25   |
|   | Alternative and Small Schools             | 7  |
| Special Education Teachers                | All School Types                          | 1 per 150 students   |
| Special Education Teacher Aides           | All School Types                          | 0.5 per 150 students   |
| Principals                                | All School Types                          | 1 per prototypical school  |
| Assistant Principals*                     | All School Types                          | 1 per prototypical school  |
| Secretaries                               | All School Types                          | 1 per prototypical school  |
| Clerical Staff                            | Elementary & Middle Schools               | 1 per prototypical school  |
|   | High Schools                              | 3 per prototypical school  |
| Non-Instructional Aides                   | Elementary & Middle Schools               | 2 per prototypical school  |
|   | High Schools                              | 3 per prototypical school  |
| Guidance Counselor                        | Middle & High Schools                     | 1 per 250 students   |

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|            |                  |                                     |
|------------|------------------|-------------------------------------|
| Library    | All School Types | 1 per prototypical school           |
| Media Tech | High Schools     | 1 for every 600 students above 1000 |

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Table 2. Simulation Parameters Allocated by Per-Pupil Dollar Amount

| <b>Expenditure Element</b> | <b>School Type</b>            | <b>Per-Pupil Dollar Amount</b> |
|----------------------------|-------------------------------|--------------------------------|
| Supplies                   | Elementary and Middle Schools | \$140.00                       |
|                            | High Schools                  | \$175.00                       |
| Technology                 | All School Types              | \$250.00                       |
| Student Activities         | Elementary and Middle Schools | \$200.00                       |
|                            | High Schools                  | \$250.00                       |
| GATE                       | All School Types              | \$25.00                        |
| PD                         | All School Types              | \$100.00                       |
| Assessment                 | All School Types              | \$25.00                        |
| Central Office             | N/A                           | \$658                          |

Table 3. Simulation Parameters Allocated by Student Demographics

| <b>Expenditure Element</b>                | <b>School Type</b>      | <b>Parameter</b>   |
|---|-------------------------|--|
| Summer School and Extended Day Class Size | All School Types        | 15:1 for half of the students who qualify for free or reduced-price lunch (FRL)  |
| Tutors                                    | All School Types        | Minimum of 1 per prototypical school or 1 for every 100 students who qualify for FRL, whichever is greater             |
| Pupil Support Staff                       | Elementary              | 1 for every 100 students who qualify for free or reduced-price lunch   |
|   | Middle and High Schools | 1 for every 100 students who qualify for free or reduced-price lunch, plus 1 guidance counselor for every 250 students |
| English Language Learner (ELL) Teachers   | All School Types        | An additional 1.0 FTE teacher positions for every 100 ELL students   |

Table 4. Number and Type of Sampled Schools

|                    | High Poverty  | Medium Poverty | Low Poverty         |
|--------------------|---------------|----------------|---------------------|
| High Performance   | 2 Elementary  | 2 Elementary   | 2 Elementary        |
|                    | 2 Middle      | 2 Middle       | 1 Jr. High School   |
|                    | 2 High School | 2 High School  | 2 Jr/Sr High School |
|                    |               |                | 1 High School       |
| Medium Performance | 1 Middle      | 1 Middle       | 1 High School       |
| Low Performance    | 2 Elementary  | 2 High School  | 1 High School       |
|                    | 1 Middle      |                |                     |
|                    | 3 High School |                |                     |

Table 5. Number of Public Schools in Illinois

|                    | High Poverty | Medium Poverty | Low Poverty |
|--------------------|--------------|----------------|-------------|
| High Performance   | 188          | 763            | 1420        |
| Medium Performance | 585          | 202            | 326         |
| Low Performance    | 82           | 15             | 1           |

Table 6. Sample and Statewide Student Demographics

| Demographics                         | Statewide (2007) |       | Sample     |    |
|--------------------------------------|------------------|-------|------------|----|
| Number of Students in Average School | 534              |       | 740        |    |
| Number of Schools                    | Elementary       | 2,581 | Elementary | 8  |
|                                      | Middle           | 613   | Middle     | 8  |
|                                      | High             | 660   | High       | 14 |
|                                      | Charter          | 34    | Charter    | 0  |
| Percent Free and Reduced-Price Lunch | 42%              |       | 42%        |    |
| Percent ELL                          | 6%               |       | 3%         |    |

Table 7. State-level Adequacy Simulation Resource Elements by Personnel Category

| <b>Resource Element</b>    | <b>Statewide FTE</b> | <b>Statewide Cost</b>   | <b>Per Pupil</b> |
|----------------------------|----------------------|-------------------------|------------------|
| Core Teachers              | 97,175               | \$8,155,085,046         | \$4,031          |
| Specialist Teachers        | 22,726               | \$1,907,189,870         | \$943            |
| Instructional Facilitators | 10,115               | \$848,901,532           | \$420            |
| Teacher Tutors             | 9,411                | \$789,756,327           | \$390            |
| ELL Teachers               | 995                  | \$83,490,050            | \$41             |
| Extended Day               | 7,156                | \$600,556,270           | \$297            |
| Summer School              | 7,156                | \$600,556,270           | \$297            |
| Special Education Teachers | 13,487               | \$1,131,868,709         | \$559            |
| Special Education Aides    | 6,744                | \$185,503,591           | \$92             |
| Pupil Support              | 9,411                | \$789,756,327           | \$390            |
| Guidance Counselors        | 4,432                | \$371,977,606           | \$184            |
| Library                    | 4,229                | \$404,606,536           | \$200            |
| Media Tech                 | 385                  | \$36,819,042            | \$18             |
| Substitute Teacher Days    | N/A                  | \$289,796,616           | \$143            |
| Principal                  | 4,229                | \$601,328,964           | \$297            |
| Assistant Principal        | 4,229                | \$555,361,921           | \$275            |
| Secretary                  | 4,229                | \$174,492,131           | \$86             |
| Clerical                   | 6,338                | \$217,945,954           | \$108            |
| Non-Instructional Aides    | 9,513                | \$261,670,512           | \$129            |
| <b>TOTAL</b>               | <b>221,960 FTE</b>   | <b>\$18,006,663,274</b> | <b>\$8,900</b>   |

Table 8. State-level Adequacy Simulation Resource Elements by Per-Pupil Dollar Amount

| <b>Resource Element</b>                | <b>Statewide Cost</b>  | <b>Per Pupil</b> |
|--|------------------------|------------------|
| Supplies                               | \$305,382,140          | \$151            |
| Technology                             | \$505,771,750          | \$250            |
| Activities                             | \$436,260,200          | \$216            |
| GATE                                   | \$50,577,175           | \$25             |
| Formative Assessments                  | \$50,577,175           | \$25             |
| Professional Development               | \$202,308,700          | \$100            |
| Central Office Administrative/Staffing | \$1,331,191,246        | \$658            |
| Central Office Carry Forwards          | \$4,465,896,989        | \$2,207          |
| Small Schools Adjustment               | \$ 79,947,036          | N/A              |
| <b>TOTAL</b>                           | <b>\$7,427,912,411</b> | <b>\$3,632</b>   |



## Appendix A: School-Level Staffing Resources Compared to the Adequacy Model

### **Resources in a High Poverty, High Performance Elementary School** (~450 Students, 85% Low-income, 10% IEPs, 30% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.04                  | 1             |
| Assistant Principals | 1.04                  | 1             |
| Core Teachers        | 22.08                 | 21            |
| Specialist Teachers  | 4.42                  | 3             |
| Instructional Aides  | 0                     | 6             |
| Certified Tutors     | 1.29                  | 0             |
| Librarians           | 0.97                  | 1             |
| Pupil Support Staff  | 4.74                  | 1.6           |
| Secretaries          | 1.95                  | 2             |

### **Resources in a High Poverty, High Performance High School** (~450 Students, 82% Low-income, 16% IEPs, 18% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 1             |
| Core Teachers        | 18.04                 | 17            |
| Specialist Teachers  | 3.61                  | 5             |
| Instructional Aides  | 0                     | 0             |
| Certified Tutors     | 3.70                  | 1             |
| Librarians           | 1                     | 1             |
| Pupil Support Staff  | 5.5                   | 2.2           |
| Secretaries          | 2                     | 2             |

## **Resources in a High Poverty, Medium Performance Middle School**

(~510 Students, 94% Low-income, 12% IEPs, 3% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.14                  | 3             |
| Assistant Principals | 1.14                  | 0             |
| Core Teachers        | 20.52                 | 20            |
| Specialist Teachers  | 4.24                  | 5             |
| Instructional Aides  | 0                     | 3             |
| Certified Tutors     | 4.82                  | 3             |
| Librarians           | 1.14                  | 1             |
| Pupil Support Staff  | 6.87                  | 5             |
| Secretaries          | 2.28                  | 2             |

## **Resources in a High Poverty, Low Performance High School**

(~900 Students, 98% Low-income, 28% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.5                   | 1             |
| Assistant Principals | 1.5                   | 2             |
| Core Teachers        | 36                    | 22.2          |
| Specialist Teachers  | 10.94                 | 11.4          |
| Instructional Aides  | 0                     | 0             |
| Certified Tutors     | 8.73                  | 1             |
| Librarians           | 1.6                   | 1             |
| Pupil Support Staff  | 12.33                 | 8.8           |
| Secretaries          | 5.6                   | 2             |

**Resources in a High Poverty,  
Low Performance High School**  
(~1,340 Students, 72% Low-income, 15% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 2.23                  | 6             |
| Core Teachers        | 53.8                  | 43            |
| Specialist Teachers  | 17.75                 | 20.4          |
| Instructional Aides  | 0                     | 1             |
| Certified Tutors     | 9.66                  | 0             |
| Librarians           | 2.24                  | 1             |
| Pupil Support Staff  | 15.04                 | 10            |
| Secretaries          | 8.97                  | 7             |

**Resources in a Medium Poverty,  
High Performance Elementary School**

(~280 Students, 43% Low-income, 14% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 0             |
| Core Teachers        | 8.19                  | 12            |
| Specialist Teachers  | 1.64                  | 0.06          |
| Instructional Aides  | 0                     | 5.06          |
| Certified Tutors     | 1.2                   | 0             |
| Librarians           | 0.33                  | 0.06          |
| Pupil Support Staff  | 1.2                   | 0.95          |
| Secretaries          | 0.66                  | 1             |

## **Resources in a Medium Poverty, High Performance Elementary School**

(~563 Students, 42% Low-income, 15% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.3                   | 1             |
| Assistant Principals | 1.3                   | 0             |
| Core Teachers        | 29.19                 | 26            |
| Specialist Teachers  | 6.81                  | 3             |
| Instructional Aides  | 0                     | 3.5           |
| Certified Tutors     | 2.35                  | 0             |
| Librarians           | 1.29                  | 0             |
| Pupil Support Staff  | 3.10                  | 8             |
| Secretaries          | 2.57                  | 2             |

## **Resources in a Medium Poverty, High Performance Middle School**

(~560 Students, 43% Low-income, 12% IEPs, 8% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.24                  | 1             |
| Assistant Principals | 1.24                  | 2             |
| Core Teachers        | 22.48                 | 28            |
| Specialist Teachers  | 7.42                  | 17            |
| Instructional Aides  | 0                     | 2             |
| Certified Tutors     | 2.41                  | 4             |
| Librarians           | 1.25                  | 1             |
| Pupil Support Staff  | 4.66                  | 6             |
| Secretaries          | 2.5                   | 3             |

## **Resources in a Medium Poverty, Medium Performance Middle School**

(~780 Students, 58% Low-income, 11% IEPs, 5% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.73                  | 1             |
| Assistant Principals | 1.73                  | 1             |
| Core Teachers        | 31.36                 | 32            |
| Specialist Teachers  | 10.35                 | 12            |
| Instructional Aides  | 0                     | 1             |
| Certified Tutors     | 4.55                  | 0             |
| Librarians           | 1.74                  | 0.4           |
| Pupil Support Staff  | 7.69                  | 6.58          |
| Secretaries          | 3.48                  | 4             |

## **Resources in a Low Poverty, High Performance Elementary School**

(~150 Students, 15% Low-income, 11% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 0             |
| Core Teachers        | 8.16                  | 7             |
| Specialist Teachers  | 1.63                  | 3.13          |
| Instructional Aides  | 0.51                  | 1             |
| Certified Tutors     | 0.34                  | 0             |
| Librarians           | 0.34                  | 0             |
| Pupil Support Staff  | 0.43                  | 0.4           |
| Secretaries          | 0.68                  | 1             |

## **Resources in a Low Poverty, High Performance Elementary School**

(~270 Students, 14% Low-income, 6% IEPs, 7% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 0             |
| Core Teachers        | 17.08                 | 11            |
| Specialist Teachers  | 3.64                  | 1.8           |
| Instructional Aides  | 0                     | 5             |
| Certified Tutors     | 0.71                  | 0             |
| Librarians           | 0.71                  | 0.4           |
| Pupil Support Staff  | 0.89                  | 2.8           |
| Secretaries          | 1.42                  | 1.5           |

## **Resources in a Low Poverty, High Performance Jr/Sr High School**

(~230 Students, 15% Low-income, 10% IEPs, 0% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 0             |
| Core Teachers        | 9.2                   | 13            |
| Specialist Teachers  | 2.63                  | 3             |
| Instructional Aides  | 0                     | 2             |
| Certified Tutors     | 0.43                  | 0             |
| Librarians           | 0.43                  | 0.5           |
| Pupil Support Staff  | 1.35                  | 4.7           |
| Secretaries          | 1.36                  | 2             |

## **Resources in a Low Poverty, High Performance Jr/Sr High School**

(~290 Students, 26% Low-income, 11% IEPs, 1% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1                     | 1             |
| Assistant Principals | 1                     | 0             |
| Core Teachers        | 11.72                 | 11.5          |
| Specialist Teachers  | 3.34                  | 12            |
| Instructional Aides  | 0.76                  | 2             |
| Certified Tutors     | 0.76                  | 0             |
| Librarians           | 1                     | 0.54          |
| Pupil Support Staff  | 1.93                  | 2.5           |
| Secretaries          | 1.73                  | 4             |

## **Resources in a Low Poverty, High Performance High School**

(~2700 Students, 3% Low-income, 8% IEPs, 2% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 4.5                   | 1             |
| Assistant Principals | 4.5                   | 3             |
| Core Teachers        | 108                   | 118.6         |
| Specialist Teachers  | 35.64                 | 29.6          |
| Instructional Aides  | 0                     | 31            |
| Certified Tutors     | 4.5                   | 0             |
| Librarians           | 4.5                   | 3.8           |
| Pupil Support Staff  | 15.3                  | 23            |
| Secretaries          | 18                    | 21            |

## **Resources in a Low Poverty, Medium Performance High School**

(~1,150 Students, 8% Low-income, 12% IEPs, 2% LEP)

| <b>Staffing</b>      | <b>Adequacy Model</b> | <b>Actual</b> |
|----------------------|-----------------------|---------------|
| Principals           | 1.92                  | 1             |
| Assistant Principals | 1.92                  | 3             |
| Core Teachers        | 62.12                 | 52            |
| Specialist Teachers  | 20.5                  | 26.1          |
| Instructional Aides  | 0                     | 0             |
| Certified Tutors     | 2.59                  | 2.2           |
| Librarians           | 2.59                  | 1             |
| Pupil Support Staff  | 8.8                   | 8             |
| Secretaries          | 10.35                 | 11            |