CONNECTICUT
SCHOOL FINANCE
PROJECT

FUNDING FORMULA GUIDEBOOK

A FRAMEWORK FOR EQUITABLE SCHOOL FUNDING AND A NEW SCHOOL FINANCE SYSTEM FOR CONNECTICUT'S PUBLIC SCHOOLS

November 2016

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Overview of State Education Funding Policy Approaches

In nearly all states, a formula is used to allocate state education dollars to school districts.[1] Formulas first calculate how much funding is necessary for school districts to educate their students. Then, the state determines how much of that funding the district is able to raise from local sources, subtracts that amount from the total funding, and provides the difference as state aid. The formulas used to compute the amount of necessary funding vary quite a bit from state to state, but generally, state education funding formulas can be placed in one of three categories: student-based, resource-based, or program-based. In some cases, a state will employ a hybrid formula combining two of these approaches.

Student-Based Funding

Student-based formulas assign a dollar figure to the education of a student with no special needs or services, which is usually called a "base" or "foundation" amount. The state identifies certain student categories or special programs associated with higher costs, and the formula apportions extra funding for the education of those certain students accordingly. When a state allocates the additional funding for particular students by applying a weight or multiplier to the base amount (such as a weight of 1.2 for low-income students, generating 120 percent of the base amount for each such student), its system is referred to as weighted student funding.

An example of student-based funding is New York's formula, which uses a base amount and provides additional funding for certain students, including English Learners (ELs), low-income students, and students with disabilities.[2] Connecticut's Education Cost Sharing (ECS) formula, which remains in statute but is not currently being used faithfully to distribute state education aid, is a student-based formula but a limited one.[3] The ECS formula includes a base amount and additional funding for low-income students but not for ELs, students with disabilities, students in gifted programs, or students in especially high-poverty districts.[4]

Resource-Based Funding

Resource-based formulas assess the per-pupil costs of specific necessary resources, such as classroom supplies, computers, and teachers. States then use each district's total student enrollment to determine the total resource costs the district is expected to incur. Usually, resource-based formulas calculate the bulk of district funding in the form of teacher units. These are amounts intended to cover the cost of employing the teachers required by the district's count of enrolled students, in accordance with student-teacher ratios set in the formula.

As an example, Alabama uses a resource-based formula that allocates funding for teacher positions based on student-teacher ratios that vary by grade level (14.2:1 in grades K-3, 21.85:1 in grades 4-6, and so on).[5] The state allocates funding on an individual, per-pupil basis for certain resource costs, such as textbooks.[6] It does not provide increased funding for students in most special need categories.[7]

Program-Based Funding

Program-based formulas calculate the funding deemed necessary to administer particular programs and initiatives, such as bilingual education, career and technical education (CTE), and teacher professional development. They do not use either a base amount or calculations focused on resource needs. Only Wisconsin uses a primarily program-based funding formula.[8]

Hybrid Funding Policies

Some states use hybrid approaches to calculate districts' necessary funding. One state employing both resource-based and student-based methods is Mississippi, which uses resource-based calculations to arrive at its base amount and then provides that base amount to districts on a per-pupil basis.[9] The state uses a weight to increase the funding amount for low-income students and provides additional funds for special education, gifted education, and CTE in a resource-based fashion.[10] Another state using a hybrid approach is South Carolina, which combines student-based and program-based funding.[11] South Carolina has a base amount and uses weights to increase the amount of funding provided for ELs, low-income students, gifted and talented students, and students in certain CTE programs.[12] The state separately provides program-based allocations for a number of school functions, including career services, physical education, and literacy coaching.[13]

Research Review:
Effective Education Funding Policies

Benefits of Increasing Funding for Higher-need Students

Several studies have examined the effects of increased funding for higher-need students and communities on both academic achievement and long-term outcomes. While research regarding the impact on test scores has been mixed, Card and Payne (2002) found school finance reforms that directed more school funding to low-wealth districts narrowed the gap in SAT scores between students with and without highly educated parents.[14] More recent research focusing on long-term outcomes has been more definitive. Candelaria and Shores (2015) found that seven years after court-ordered school finance reforms, districts saw increases in per-pupil revenue ranging from four to 12 percent, and corresponding rises in graduation rates of between five and eight percent.[15] (The larger increases in both spending and graduation rates occurred in districts with higher numbers of low-income students.[16]) In a similar vein, Jackson, Johnson, and Persico (2015) found when low-income students experienced a 20 percent increase in per-pupil spending across all years of grade school, they were 22.9 percent more likely to graduate high school, complete an average of 0.9 additional years of education, experience 25 percent higher earnings at age 30, and were 20 percent less likely to be poor as adults—results representing a two-thirds reduction in the gap between the eventual adult outcomes for low-income and more affluent children.[17] (That study also found no similar gains when spending was increased for children who were not from low-income families, emphasizing additional funding will bear the most fruit when directed for the education of higher-need students.[18])

Equity and Weighted Student Funding

Weighted student funding is the most prevalent form of student-based funding and creates a straightforward framework in which additional resources can be targeted to districts and schools serving higher-need students. Theoretical and conceptual scholarship has outlined the benefits of weighted student funding. Weighted student funding that funds students based on their learning needs, allows for greater resource equity;[19] it streamlines funding systems by associating funding with students;[20] and it can be flexibly and transparently adapted to reflect state priorities and beliefs about the student characteristics that should trigger increased support.[21]

Little research has been done on the impact of weighted student funding at the state level. However, analyses of policies that use weighted student funding to allocate dollars to different schools within a single district suggest the approach may promote resource equity. Miles and Roza (2006) found after weighted student funding was implemented in the city school districts of Houston and Cincinnati, the distribution of resources across schools in both districts became more equitable and responsive to student needs.[22] In a separate examination, Baker (2009) determined, after implementing weighted student funding, Houston and Cincinnati both had higher-levels of intradistrict equity than most comparable districts in their respective states.[23] Similarly, Chambers, Levin, and Shambaugh (2010) found the use of weighted student funding in

California's San Francisco and Oakland school districts led to increased funding for middle and high schools serving higher numbers of students in poverty.[24]

Recent Education Funding Reforms

Rhode Island's Fair Funding Formula

In 2010, Rhode Island enacted a new education funding formula—not to replace an existing formula but to institute one where there had been none previously.[25] The new policy is student-based and includes a base amount that reflects the average instructional costs of other state systems in New England and is indexed to inflation.[26] The formula also allocates additional funding for low-income students equal to 40 percent of the base amount, and uses data regarding student financial need, along with other measures of local wealth and welfare, to determine the share of the formula amount that should be supplied by the local school district.[27] The reform also required districts to begin using a uniform chart of accounts to ensure greater fiscal transparency.[28]

California's Local Control Funding Formula

California passed a reform of its education funding system in 2013.[29] The prior education funding structure provided quite disparate amounts of per-pupil funding to different school districts[30] and made extensive use of grants tied to specific programs or purposes, limiting local flexibility.[31] The new student-based formula includes a base amount and allocates increased funding for students in certain grade levels; students who are low-income, ELs, or both; and districts serving especially large numbers of higher-need students.[32] Most single-use grant programs were eliminated in the reform and their dollars were redirected into the funding formula, providing districts with more control over local spending priorities.[33]

Nevada Plan

Prior to legislation passed in 2015, the Nevada school funding system had not seen significant changes since its creation in 1967.[34] The original Nevada plan set different, individual base amounts for school districts and did not adjust per-pupil distributions to account for student need (though funding for ELs was allocated through a separate grant).[35] Special education was also financed in a resource-based fashion through the funding of teacher units.[36] Reform legislation passed in 2015 created the skeleton of a more comprehensive student-based funding formula, with a statewide base amount and weights to increase funding for low-income students, students with disabilities, ELs, and gifted and talented students.[37] However, the specifics of these amounts were not set in the legislation and were instead left to the Nevada Department of Education to determine.[38] As of this writing, that process is still ongoing.

Building a Weighted Student Funding Formula that Works

Although weighted student funding formulas provide a structure for funding students based on their learning needs, simply implementing the framework does not guarantee equitable funding. Rather, the effectiveness of a weighted student funding formula depends on the specifics of components selected to construct the formula. Accordingly, there is no "one size fits all" formula that perfectly satisfies the priorities of every stakeholder in every state in which this type of formula is implemented. An education funding formula, therefore, should seek to embody the following elements and characteristics in order to ensure success:

1. ***Foundation:*** A foundation or core instructional amount that is based on an analysis of verifiable data and provides sufficient resources to educate students to a constitutionally adequate standard.

2. ***Weights:*** Weights that allocate sufficient resources to students who require greater resources to learn and achieve at similar levels to their non-need peers.

3. ***State Share Mechanism:*** A state share mechanism that equitably divides the cost of education between local and state resources depending on the wealth and ability for a community to pay.

4. ***Inclusion:*** All students are funded according to their needs through a single funding formula across the state.

5. ***Cost:*** The formula has reasonable state and local cost expectations, combined with a realistic implementation schedule, such that the formula can be fully funded within a reasonable period of time.

The ECS formula is the most recent education equalization formula adopted by the State of Connecticut, although it has not been faithfully used since 2013.[39,40,41] Specifically, the most recent iteration of the formula contains a foundation amount, additional weighting for low-income students, and a state share ratio that uses comparative property and income wealth to assign a percentage responsibility of the cost of education to the State of Connecticut.[42] Structurally, the ECS formula is a weighted student funding formula, but the formula's components and implementation have prevented the state from faithfully using it to distribute education aid.

1. ***Foundation:*** The most recent iteration of the ECS formula specifies a foundation of $11,525,[43] which is set in state statute.[44] Although this amount is supposed to represent the average estimated amount necessary to provide an adequate education to a Connecticut student,[45] the current foundation amount is not the result of any verifiable data analysis.[46] As a result, the current base amount for determining the level of support necessary for the education of Connecticut students is not grounded in research. Additionally,

both funding for students with disabilities and ELs have been "incorporated" into the foundation amount, meaning the current ECS foundation amount is no longer representative of the cost of educating a student without additional learning needs.[47]

2. ***Weights*:** The most recent iteration of the ECS formula includes only one weight—a .3, or 30 percent, weighting for students who are low-income.[48] While this weight for low-income students falls within the normally accepted range (see Appendix A on page 24 for a table of need student ranges), the ECS formula does not provide additional resources for students with other types of learning needs, such as ELs.[49] Currently, students are counted as low-income in the ECS formula if they are eligible for free or reduced-price lunch.[50,i]

3. ***State Share Mechanism*:** The Base Aid Ratio used in the ECS formula includes comparative income and property wealth to rate a community's ability to pay for education.[51] Currently, property wealth is weighted at 90 percent, while income wealth in weighted at 10 percent,[52] which may not accurately measure a community's ability to fund their public schools locally. Additionally, the ECS formula does not contain a required local contribution that is related to the calculated amount produced by the formula. Instead, the current formula relies on a Minimum Budget Requirement that does not scale with the needs of students and the ability of towns to pay for education.[53]

4. ***Inclusion*:** The ECS formula effectively only determines state support for students who are attending local public schools in their resident district. This formula does not calculate state support for students attending magnet schools, state or local charter schools, vocational agriculture programs, the Connecticut Technical High School System, or those attending school in another district through the state's Open Choice program. In total, there are more than 10 different funding formulas for calculating aid to public schools in Connecticut.[54,55] The resident student count used in the calculation of the ECS grant includes only those students enrolled in public schools at the town's expense. Students enrolled in charter schools, the Connecticut Technical High School System, and some magnet schools are excluded from the count.[56] Therefore, the equity component of the ECS formula does not apply to all students regardless of where the students attend school.

[i] However, eligibility for free or reduced-price lunch (FRPL) as a proxy to identify low-income students is rapidly becoming problematic as a result of the increased use of the Community Eligibility Provision of the federal Healthy, Hunger Free Kids Act of 2010, which allows all students to receive no-cost meals if at least 40 percent of their participating school or district's enrollment is identified as eligible for FRPL via direct certification. While CEP is a valuable nutrition program, it makes FRPL functionally unusable as a proxy for counting low-income students and has the effect of artificially inflating FRPL rates in participating schools and districts because all students receive no-cost meals, regardless of family income. For more information, please see our report *Achieving a Better Proxy for Low-income Students in Connecticut* at http://ctschoolfinance.org/reports/student-poverty-proxy.

5. ***Cost:*** The ECS formula, since its initial adoption in 1988, has never been fully funded.[57] The deficit between the amount of ECS funding currently appropriated and the estimated fully-funded formula is approximately $600 million.[58] Additionally, the formula currently includes a "hold harmless" provision, which prevents the formula from reducing state education aid as a result of a decline in the number of students, a reduction in student need, or an increase in the community's ability to pay education costs locally.[59] The result is a formula that has never been fully implemented, leading to arbitrary differences in state education aid between similar towns.[60]

The following pages provide a potential framework for developing a weighted student funding formula that meets the needs of Connecticut and its students, schools, and communities. This document contains information on each component included in a weighted student funding formula, and different methods for arriving at the value of each component.

Foundation Amount

The starting point for all weighted student funding formulas is the foundation amount. In most weighted student funding formulas, this amount is intended to be equal to the amount required to adequately educate a student designated as non-need. Non-need students are those students who are not designated as having learning needs that require additional resources to have equal access to educational opportunities. The foundation amount should be based on an analysis of verifiable and locally appropriate data to ensure the amount resulting from this process fits the context in which the formula will operate. In addition, the construction of a foundation amount should be replicable, such that the foundation amount can be updated on a regular and appropriate basis in response to macro-level changes in costs across the state.

Costing-out studies, sometimes called adequacy studies, are one type of analysis that can produce a foundation amount to be used in a weighted student funding formula. Typically, these studies attempt to answer the question of "What will it cost to provide students in a state with the resources necessary to achieve at desired levels?"[61] However, it should be noted that costing-out studies for the purposes of determining educational adequacy are not exact sciences that yield precise cost estimates.[62]

There are four general types of costing-out studies, detailed below:

1. ***Cost function studies*:** This methodology relates data on educational spending with measures of student need, scale of district operation, measures of efficiency, and educational outcomes based on achievement test results.[63] This method links costs associated with a level of "output" under the conditions defined above.[64] Cost function studies are heavily reliant on rich input data, which includes proper spending data and the appropriateness of the standardized test used in the study.[65] This approach may not be effective in states where there is a significant range of wealth, need, and achievement, as these variances may not be properly handled under this type of study.[66]

2. ***Professional-judgment studies*:** This approach gathers professionals to specify the resources necessary to deliver adequate educational outcomes (predefined) at a minimal cost across settings based on student need and school size.[67] From this selection the costs of providing the outcomes are calculated.[68] While this method too is inherently reliant on the input data, it may be more transparent than the cost function study method due to less complicated calculations.

3. ***Successful-schools/districts method:*** This approach uses statistical analysis to identify districts judged to be successful and then analyzes the spending of those districts to arrive at a foundation amount.[69] More recent iterations of this approach use techniques to identify districts that are "beating the odds" given the needs of their populations.[70] This method relies on extensive gathering of longitudinal data to ensure the identification of successful schools is appropriate. However, analysis has shown relatively few schools

truly consistently qualify as "beating the odds" in the long run, which impacts the analysis of the spending within these districts used to calculate a foundation amount.[71]

4. ***Evidence-based approach*:** This method uses a review of the published literature on educational effectiveness to specify the resources needed for successful schools.[72] The published research may be contradictory, however, and therefore the inclusion and exclusion of studies is key to the results of the analysis. In addition, this approach may not fit the local context of the funding formula, as it may not exactly fit the ranges of wealth, need, size, or other characteristics of the districts within the state.

Although it is desirable to assign a dollar amount to the cost of an adequate education using a scientific approach, there are multiple research design flaws associated with attempting to make this determination.

One of the primary challenges researchers face in designing an adequacy study is the ambiguity of the term "adequacy" itself. The meaning of an adequate education has multiple definitions, which are usually related primarily to student performance benchmarks that conform to educational standards set by state legislatures, but sometimes the definition of adequacy can vary within a single state.[73] Thus, different performance standards can result in large discrepancies in the per-pupil estimates of the cost of an adequate education.[74] In addition, there is currently no method by which one can determine the differences in district efficiency—that may translate to different per-pupil spending even among school districts with similar demographics and student outcomes—to determine a minimum efficient cost of an adequate education.[75]

Straightforward evidence on the combinations of resources that "work" would undoubtedly simplify the process of performing costing-out studies, but the research on resource types and levels that lead to adequate outcomes is simply not advanced to the point of an unambiguous answer to this question.[76] This lack of clarity in costing-out studies, coupled with possible political influence on the selection of research design,[77] are generally causes costing-out studies to fall short of providing reliable, replicable results.[78] As there are no standard accepted methods or requirements for consistency, different methodologies can produce different numbers with none of the numbers produced qualifying as accurate or scientific.[79]

One alternative approach to developing a foundation amount is the Core Instructional Cost (CIC) methodology, which is supported by data from the National Center for Education Statistics (NCES).[80] Under the CIC methodology, education expenditure data is analyzed to determine which expenditures are central to the instructional process, and therefore, should be included in the general education formula aid from the state to localities.[81] Under this analysis, policymakers determine which education expenditures fall inside and outside the responsibility of the main education formula aid to towns, and therefore, the funding formula. The CIC is the aggregate expenditure for the expenditure types selected by policymakers to be included in the main funding formula. Please see Appendix B for additional information on this methodology as well

as an example of the composition of the CIC used in the creation of Rhode Island's funding formula.

There are several advantages and disadvantages to this approach. The validity of any calculation is the result of the data used and the decisions made. In this calculation, the NCES data is nationally published and verifiable with data standardized across the country. Revenues and expenditures are audited after the close of the fiscal year and are then submitted to NCES by each state education agency.[82] Beginning with fiscal year 1989, detailed fiscal data on all public revenues and expenditures within states, for regular pre-kindergarten to grade 12 education, has been collected.[83] This data is updated each year, allowing for a core instructional amount that reflects changes in spending patterns. In addition, the state-level aggregation of this data provides an actionable data set appropriate for a statewide funding formula. In sum, the data source used in this calculation is well-suited toward providing insight into education finance at the state level.

Key to this method is the process by which policymakers understand the selection of expenditure types to be considered core instructional costs. This methodology is heavily reliant on this selection process, which can result in an inadequate formula if the amount is not properly inclusive, or a formula that cannot be implemented if the process results in an overly inclusive core instructional amount. Therefore, stakeholders must carefully consider the impact of their consensus decision(s) on the formula as a whole. While a diverse group of stakeholders may be essential in selecting expenditure types that represent a wide array of interests, such a group may also struggle to identify which expenditure categories should be considered "core" for the purposes of a funding formula. In addition, this methodology does not consider the relationship between educational outcomes and expenditures. If this is an important principle to stakeholders, this method may not be suitable.

As there is no single, accepted scientific methodology for determining how much it costs to educate a student, there may be other reasonable methodologies for determining an appropriate foundation amount. Regardless of the methodology chosen, foundation amount calculations should be transparent and use data that is verifiable and updated on a regular basis. Following this guiding principle will produce a core instructional amount that is data-driven, policy focused, transparent, and adjustable to changes in spending patterns over time.

Need Student Weighting

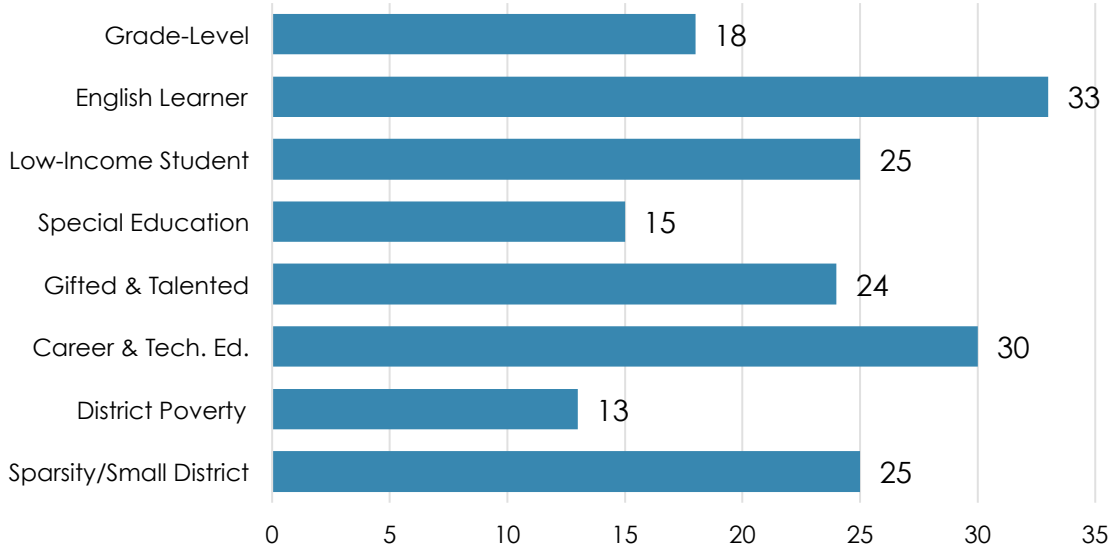
One of the primary benefits of a weighted school funding formula is the ability to use weights or multipliers to drive resources toward districts and schools that serve higher-need students. Certain groups of students are more likely to need additional resources to have equal access to educational opportunities. Weights can also be used to assist schools and districts that face particular challenges based on their demographics or geography. Some states also use different weights to account for the variable costs of different types of schools or programs.

An effective weighted student funding formula will contain weights that allocate sufficient resources to students who require greater resources to learn and achieve at a similar level to their non-need peers. While there is no consensus on the exact combination of categories and values to be included in an "ideal" formula, the selection of such categories should come as the result of a formalized process of engaging with stakeholders and analyzing data to determine the particular learning needs of students in the state.

Thirty-seven states currently use a student-based school funding formula to distribute state education funding, which employs weights or multipliers to a core instructional amount.[84] In these states, the types of weights used vary greatly but include the following categories: low-income students, ELs, special education students, gifted and talented students, large concentrations of higher-need students, grade-level, and sparsity or small district weights.[85] In addition, states may assign higher multipliers for districts serving high concentrations of low-income, EL, or special education students.

When contemplating the relative value of student weights, it is important to remember base student funding differs greatly across states, so a higher weight does not necessarily correlate to a higher dollar amount. An estimate of effective funding per weighted student will include the state's base foundation amount multiplied by the weight. It is also important to note that weights are only one way states allocate additional resources to school districts based on student needs. The following graph displays the nationwide distribution of weights used in state weighed student funding formulas.[86]

Number of States Using Each Weight Type



1. ***Grade-level*** weights are generally applied to different grade bands depending on the costs determined to be associated with operating schools and programs for different ages of students. Of the 37 states that use a student-based funding formula, 18 provide differentiated funding based on grade levels.[87] Of these, 12 states apply weights in order to direct funds to certain grades.[88] The majority of states use grade-level weights to allocate additional funding to the early grades (up to grade 3) and/or to high school grades (9-12).[89]

2. ***English Learner*** weights are applied to the base student funding for students who are identified as needing to acquire additional English-language skills. Of the states that use a student-based funding formula, 33 provide additional funds for students who are ELs.[90] Some states add a flat dollar amount to the base amount, while others provide program-based funding for ELs.[91] Twenty-three states allocate additional funds for ELs through multipliers.[92]

3. ***Low-income student*** weights are applied to students living below a certain family income threshold, because research suggests these students tend to need additional resources to perform at the same levels as their more affluent peers.[93] Of the states that have student-based funding formulas, 25 have systems that direct additional resources to schools and districts serving low-income students and 20 use weights for this purpose.[94]

4. ***Special education*** weights are included in some student-based school finance systems as the method by which state dollars are allocated to support special education. Of the states that have a student-based funding system, 15 use student weights to fund special education services.[95] Five states assign a single weight to all special education students and 10 states assign a range of weights depending on the need-level or diagnosis of the special education student.[96]

5. ***Gifted and talented*** weights are applied to certain students in order to assign funds for enrichment programs for students with advanced academic skills. Of the states with student-based school finance systems, 24 provide additional funds for gifted students.[97] Seven of these states allocate additional resources for gifted students through multipliers.[98]

6. ***Career and technical education*** weights are applied to students who attend schools where the equipment and staffing associated with the program of study are specialized. Of the 37 states that use a student-based funding formula, 30 provide additional funds for CTE.[99] Of these states, nine allocate dollars through student multipliers.[100]

7. ***District poverty*** weights, also known as concentrated poverty weights, are designed to direct funds to school districts that serve high concentrations of low-income students. This funding is provided because research shows low-income students who attend school in income-integrated classrooms tend to achieve higher levels of academic success than their low-income peers who attend schools with other low-income students.[101] Of the states using a student-based funding formula, 13 provide funding to school districts that have high concentrations of low-income students.[102] Of these states, three allocate resources to districts through multipliers.[103] These appear as a range of weights associated with low-income students, depending on the concentration of low-income students in a district.

8. ***Sparsity/small district*** weights are used to assist school districts that are geographically remote or that serve small numbers of students. Of the states with student-based school funding formulas, 25 provide additional funding to small or sparse school districts.[104] Ten of these states allocate resources to small or sparse districts through multipliers in their school funding formulas.[105] Most states that use sparsity weights assign multiplier values on a scale, depending on the district enrollment.

There is neither a perfect combination of weight categories nor a formalized calculation for determining the weights in a funding formula. Appendix A provides value ranges for the weights specified above to provide nationwide context. Generally, these weights should direct more resources toward students requiring greater resources to achieve at a level similar to their non-need peers, and toward districts facing particular challenges and costs in educating students. Funding formula weights should be determined by a formal process that includes both the analysis of data particular to the state of note and engagement with stakeholders familiar with the needs present within a state.

State Share Mechanism

The purpose of the state share mechanism is to divide the responsibility for funding education between the state and local government. In 2014, 57 percent of Connecticut education funding came from local sources, with 39 percent coming from state sources.[106] Federal funding provided just four percent of education funding in Connecticut.[107] Only eight states have a smaller percentage of education revenue from state sources than Connecticut, and Connecticut's 39 percent contribution is below the national average of 47 percent of total public school revenue from state sources.[108]

An effective state share mechanism will divide the cost of education between state and local resources depending on a community's wealth and its ability to pay its education costs locally. This is the main formula component that attempts to achieve equity in education funding between towns, as towns with less wealth and higher needs require more aid from the state than towns with more wealth and less need. Typically, the state share mechanism is applied to a town's total funding amount as specified by the weighted student funding formula to determine the dollar amount a town will receive from the state as education aid, and conversely the amount a town must raise from local sources to educate resident students. The sum of these two components typically equals this total amount.

Traditional state share mechanisms typically measure some combination of the following characteristics of a town when calculating the amount of state aid required or the local contribution available:

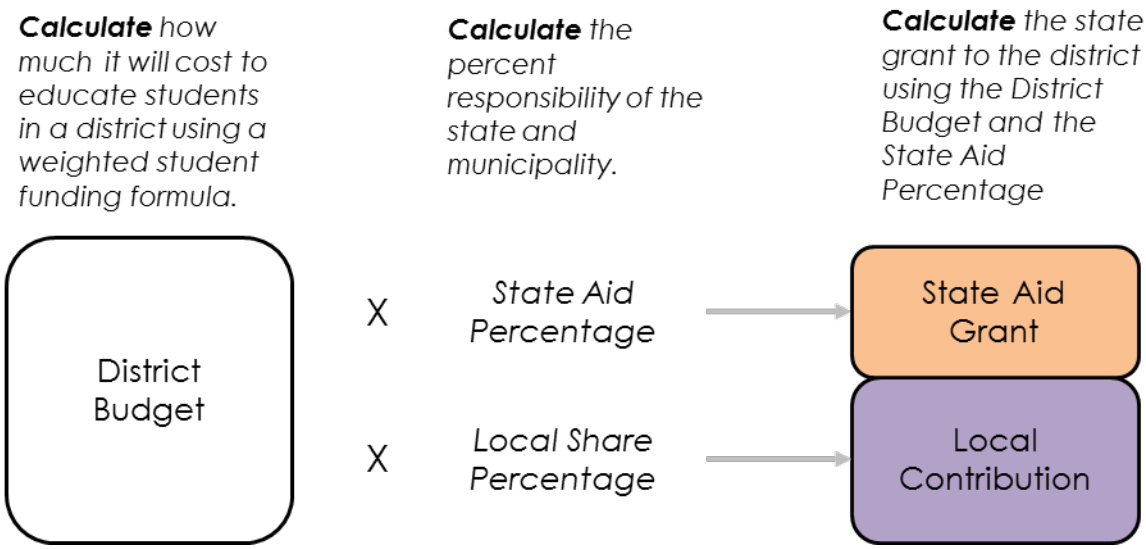
1. Property wealth
2. Income wealth
3. Unemployment rate
4. Current local taxing effort
5. Need present in town's students
6. Benefits from state aid programs[ii]

Within each of these characteristics, there exist many specific measures that provide variable values in the state share calculations. For example, property wealth can be measured by interpreting the value of taxable property within a town in the form of a grand list, while income wealth can be measured at the per capita or median household level. Typically, these measures are chosen based on state suitability and data availability. State suitability is the ability for a specific measure to capture the true range of wealth or need existing in the state's municipalities. The wide range of wealth and need in Connecticut makes this consideration key in determining a state share mechanism. Of course, not all measures are both available in every state and up-to-date, so measure selection relies on the currently existing measures as well as the ability for a state to implement new measure collection going forward.

[ii] A state share mechanism may include a measure designed to capture the amount of state aid from other related programs as a proxy for community wealth or need. One example of this could be the number or percentage of town students receiving aid through the Temporary Family Assistance program in Connecticut.

While the aforementioned characteristics can be combined in many different ways to divide the cost of educating students between the state and local governments, the end result can take two different forms. The first form is the Percentage State Share Responsibility methodology, which results in the percentage of the total school district budget that the state is responsible for funding. Local government is responsible for paying the difference between the state's share and the total district budget. In this state share mechanism, the above town characteristics are combined into a formula that measures each town's relative wealth and need and determines what percentage of the school district's budget the town can afford to pay and what percentage of the school district's budget the state should be responsible for funding. The state's percentage share is then multiplied by the district's total budget, and the resulting amount is the district's state education aid grant. This state share mechanism allows clear comparisons between districts of similar ability to pay as measured by the formula, as each town—regardless of size—has a state aid percentage. This percentage results in a state share that is explicitly responsive to changes in enrollment, as the total calculated funding amount is a result of the pupil count. This mechanism is outlined below.

Figure 1: Percentage State Share Responsibility Diagram

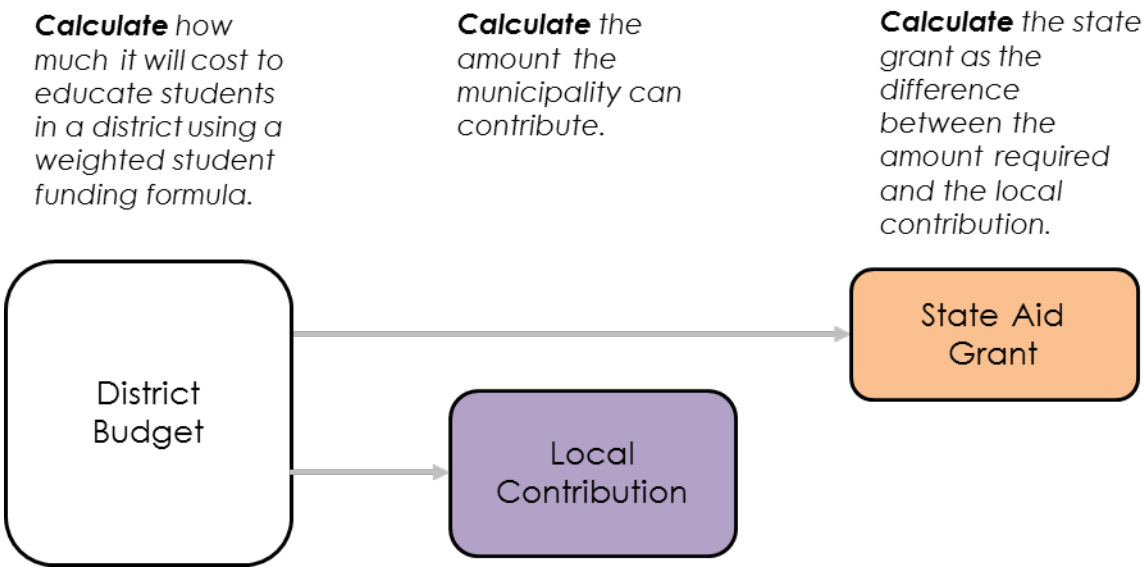


Appendix C contains an example implementation of the percentage state share mechanism on page 25.

The second type of state share mechanism, the Absolute Local Share Responsibility methodology, results in the absolute dollar amount a local government must contribute to its school district budget. In this method, the state share amount is the difference between the total calculated formula funding amount and the absolute dollar amount ability of the town. In other words, state funding fills in the "gap" between the local funding amount and the total district budget. This method allows for clear comparisons between towns of similar total wealth and need but not size. Because the amount is not

a percentage but a dollar amount, this technique is not explicitly responsive to changes in enrollment unless enrollment is specifically used in the calculation. Most importantly, this method assigns a clear dollar amount responsibility to the town, which may not be the result of the percentage responsibility mechanism. This state share mechanism is outlined below.

Figure 2: Absolute Local Share Responsibility Diagram



Appendix C contains a sample implementation of the absolute local share mechanism on page 26.

Funding Formula Inclusivity

An effective funding formula will provide need-based state aid to all students attending public school within a state, regardless of the public school the students attend. The implementation of one single funding formula will not only treat all of the state's students in the same manner according to their learning needs, it will also reduce the complexity and irrationality of current school funding systems that allocate state resources in many different ways, such that students are treated very differently depending on the school they attend.

There are two main avenues for calculating and providing general education funding for school choice programs: 1) the state may choose to fully fund choice programs, with no local contribution to choice schools, or 2) choice programs may receive a portion of their funding from local contributions, with the state paying the difference between the local contributions and the full cost of operating the choice program.

If the state chooses to have choice programs receive a portion of their funding from local contributions, there are three main ways to determine the amount of funding associated with each student.

1. The amount can be related to what the implemented funding formula specifies as the local responsibility per pupil.
2. The amount can be related to what the town contributes to the local school district, if this amount is not specified by a state funding formula.
3. The amount can be a flat dollar amount per student.

Within these three methods for calculating a local contribution, there exist a variety of methods for adjusting this amount based on state preference. Appendix D presents a selection of these methods on page 27. The specific method used, however, is less important than the coherence provided in funding all students in a single funding formula based on their learning needs, and regardless of the type of school they attend. If a formula includes a local contribution to choice education, it should be a function of the needs of the student attending the choice program and the ability of the town to pay for the student's education. Straying from this principle will result in a disjointed and illogical system. While additional methods may be used to determine a town's contribution to choice programs, methods outside the bounds of the three ways mentioned above would not make sense in the context of a weighted student funding formula. Complexity and irrationality can be managed by eliminating the arbitrary nature of choice program funding systems external to a state's main formula aid grant, which will ensure students receive resources based on their learning needs.

Conclusion

Although weighted student funding formulas provide a structure for funding students based on their learning needs, simply implementing the framework does not guarantee equitable funding. Rather, the effectiveness of a weighted student funding formula depends on the specifics of components selected to construct the formula. While weighted student funding formulas provide the conceptual framework to deliver equity in state funding, there is no "one size fits all" formula that perfectly satisfies the priorities of every stakeholder in every state. An education funding formula, therefore, should seek to embody the following elements and characteristics in order to ensure success:

1. ***Foundation:*** A foundation or core instructional amount that is based on an analysis of verifiable data and provides sufficient resources to educate students to a constitutionally adequate standard.

2. ***Weights:*** Weights that allocate sufficient resources to students who require greater resources to learn and achieve at similar levels to their non-need peers.

3. ***State Share Mechanism:*** A state share mechanism that equitably divides the cost of education between local and state resources depending on the wealth and ability for a community to pay.

4. ***Inclusion:*** All students are funded according to their needs through a single funding formula across the state.

5. ***Cost:*** The formula has reasonable state and local cost expectations, combined with a realistic implementation schedule, such that the formula can be fully funded within a reasonable period of time.

Ultimately, there is no single "right" funding formula. Instead, it is up to each state's legislative body to adopt a funding formula that meets the needs of their state's students, schools, and communities.

Appendix

Appendix A

Need Student Weight Ranges

	Low		High	
Type	**State**	**Weight**	**State**	**Weight**
Grade-Level	**Georgia**	Grades 6-8, 1.0281[109]	**Georgia**	Kindergarten, 1.6532[110]
English Learner	**North Dakota**	1.07[111]	**Georgia**	2.5096[112]
Low-Income Student	**Virginia**	1.01[113]	**New Jersey**	1.46[114]
Special Education – Single Weight	**Maryland**	1.74[115]	**Louisiana**	2.5[116]
Special Education – Multiple Weights	**Arizona** – 1.003 to 8.47 depending on severity of need.[117]			
Gifted & Talented	**Texas**	1.12[118]	**New Mexico**	3.0[119]
Career & Tech. Ed.	**Florida**	1.005[120]	**Iowa**	1.7[121]
District Poverty	**Virginia** – 1.01 to 1.13 based on the poverty concentration of the district.[122]			
Sparsity/Small District	**Colorado** – 1.0297 to 2.3858 depending on level of sparsity.[123]			

Appendix B

Core Instructional Cost Methodology Detail

Once policymakers have selected the expenditure categories that should be included, the NCES' Public Education Finance Survey is analyzed to determine the aggregate statewide level of spending per student for the expenditure types selected.[124] The purpose of this survey is to make available to the public an annual state-level collection of revenues and expenditures for public education of grades pre-kindergarten through 12.[125] The core instructional amount is the aggregated state-level spending on the selected expenditure categories, with possible adjustments for comparisons to other states on the basis of cost-of-living.[126]

Rhode Island Formula Core Instructional Cost Composition[127]

Service Category	Cost Details	Percent funded in cost of core instruction
Instructional staff	Salaries for teachers (regular, part-time, substitute, hospital-based, sabbatical, home-bound) and teacher aides.	100%
Other instructional service	Salaries and contracts for technical and professional services, as well as supplies, textbooks, and professional dues and fees.	100%
Student support	Salaries for social workers; guidance counselors; staff in health, psychology, speech pathology, and audiology; nurses; coaches; bus supervisors; summer school teachers; and supervisors in extra-curricular activities.	100%
Other student support	Salaries for supervisors of instruction, library, and media staff; computer lab staff; curriculum coordinators; and in-service teacher training staff; as well as salaries and contracts for professional services, supplies, textbooks, and professional dues and fees.	100%
General district administration	Salaries for school board members, school board staff, superintendent, central office staff, and purchased services and contracts.	100%
School-level administration	Salaries for principals, department chairs, and administrative staff; as well as purchased services; supplies; and professional dues and fees.	100%
Staff benefits	Fringe benefits for instructional, administrative, and support staff.	60%

Appendix C

Example Implementation: Percentage State Share Responsibility

The Rhode Island State Share Ratio attempts to address two questions: How do we account for differences in the revenue-generation capacity of communities? And how do we allocate funding to communities based on the supports students need?[128] This state share mechanism uses the percentage of students in grades pre-kindergarten through 6 enrolled in the free and reduced price lunch program and the State Share Ratio for the Community, a calculation of a district's revenue generating capacity based on assessed real estate values and median family incomes compared to statewide averages.[129] The detailed calculation is below:[130]

$$State\ Share\ Ratio = \sqrt{\frac{SSRC^2 + FRPL^2}{}}$$

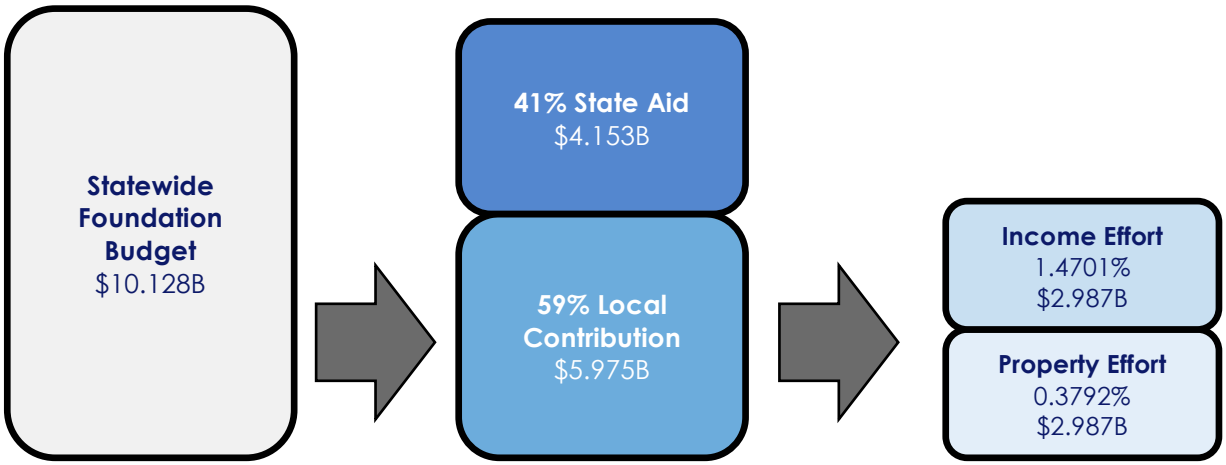
$$SSRC = 1 - (.475 * \frac{District\ EWAV / District\ RADM}{State\ EWAV / State\ RADM})$$

- **SSRC** (State Share Ratio for the Community) is a calculation of a district's revenue generating capacity. It is a number between zero percent and 100 percent based on district assessed real estate values and median family incomes.
- **FRPL** is the percentage of students in grades pre-kindergarten through 6 enrolled in the free and reduced lunch program.
- **EWAV** is the Equalized Weighted Assessed Valuation, which includes assessed property values adjusted for median family income.
- **RADM** is the Resident Average Daily Membership (pupil count).

Example Implementation: Absolute Local Responsibility

The Chapter 70 foundation budget of Massachusetts determines a target local share for each community based on property values and resident income.[131] The statewide foundation budget, or the total funding amount for all students in the state, is calculated before determining the aggregate state and local portions of this statewide foundation.[132] The state and local shares of the foundation budget are set at 41 percent and 59 percent respectively.[133] From this calculation, the total local aggregate contribution in dollars is determined. Massachusetts has determined half of the local aggregate contribution will come from calculated income effort, and half from calculated property effort.[134] Statewide percentages of the total property and income value needed to raise the required funding are then calculated, and then applied to each individual community property and income value to determine the combined local effort yield. This amount is subtracted from a town's foundation budget, with the difference equaling the amount of state funding a town receives.[135] The model is displayed graphically at the aggregate level below.

Figure 3: Required Local Contribution Calculation[136]



This model has the advantage of determining state and local aggregate percent contributions as an input to the formula, rather than an output. This allows state stakeholders to set the level of state contribution (as a percentage) to general education funding as a policy rather than creating a formula with this information as an aggregate-level output. In addition, this model is flexible in handling different approaches to determining foundation budgets at the state and town levels, and can handle a weighted student funding formula approach in addition to resource allocation among other methodologies.

Appendix D

Example: Local Contribution to Choice Education Alternatives

A local contribution to choice education can take the following forms:

1. The amount can be related to what the implemented funding formula specifies as the local responsibility per pupil.
2. The amount can be related to what the town contributes to the local school district.
3. The amount can be a flat dollar amount per student.

Within the first two options, there are several methods for adjusting this amount. The state can specify a percentage of the local contribution per student. The state can implement a dollar amount per student for this local contribution, up to a certain percentage of the formula specified or actual local contribution. Or the state can implement a percentage of this local contribution per student, up to a certain dollar amount. These measures will allow the formula to use a local contribution to choice education based on the needs of the students utilizing the choice programs and the ability of the town to contribute, while still allowing flexibility around the policy goals of the funding formula itself.

Endnotes

[1] EdBuild. (2016). *Funded: State Policy Analysis*. Available from http://funded.edbuild.org.
[2] EdBuild. (2016). *Funded: State Policy Analysis – New York*. Retrieved from http://funded.edbuild.org/state/NY.
[3] EdBuild. (2016). *Funded: State Policy Analysis – Connecticut*. Retrieved from http://funded.edbuild.org/state/CT.
[4] Ibid.
[5] EdBuild. (2016). *Funded: State Policy Analysis – Alabama*. Retrieved from http://funded.edbuild.org/state/AL.
[6] Ibid.
[7] Ibid.
[8] EdBuild. (2016). *Funded: State Policy Analysis – Wisconsin*. Retrieved from http://funded.edbuild.org/state/WI.
[9] EdBuild. (2016). *Funded: State Policy Analysis – Mississippi*. Retrieved from http://funded.edbuild.org/state/MS.
[10] Ibid.
[11] EdBuild. (2016). *Funded: State Policy Analysis – South Carolina*. Retrieved from http://funded.edbuild.org/state/SC.
[12] Ibid.
[13] Ibid.
[14] Card, D., & Payne, A. A. (2002). School finance reform, the distribution of school spending, and the distribution of student test scores. *Journal of Public Economics*, *83(1)*, 49–82. Retrieved from http://davidcard.berkeley.edu/papers/school-finance-reform.pdf.
[15] Candelaria, C. A., & Shores, K. A. (2015). *The Sensitivity of Causal Estimates from Court-Ordered Finance Reform on Spending and Graduation Rates* (Center for Education Policy Analysis Working Paper No. 16-05). Stanford University, Stanford, CA. Retrieved from https://cepa.stanford.edu/sites/default/files/wp16-05-v201602.pdf.
[16] Ibid.
[17] Jackson, C. K., Johnson, R., & Persico, C. (2015). *The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms* (NBER Working Paper No. 20847). Cambridge, MA: National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w20847.
[18] Ibid.
[19] Curtis, K., Sinclair, K., & Malen, B. (2014, March). *Student-Based Budgeting (SBB) as an Education Reform Strategy: Theory and Evidence*. Paper presented at the 39th Annual Conference of the Association for Education Finance and Policy, San Antonio, TX. Retrieved from http://web3.apiu.edu/researchfile/Research%20Materials/School%20Finance-April,%202014/Student%20based%20budgeting%20as%20an%20education%20reform%20strategy.pdf.
[20] Ibid.
[21] Ladd, H. F. (2008). Reflections on Equity, Adequacy, and Weighted Student Funding. *Education Finance and Policy, 3(4),* 402–423. Available from http://www.mitpressjournals.org/doi/abs/10.1162/edfp.2008.3.4.402?journalCode=edfp#.WAUVwZMrLMI.
[22] Miles, K. H., & Roza, M. (2006). Understanding Student-Weighted Allocation as a Means to Greater School Resource Equity. *Peabody Journal of Education, 81(3)*, 39–62. Available from http://www.tandfonline.com/doi/abs/10.1207/s15327930pje8103_2.
[23] Baker, B. D. (2009). Within-district resource allocation and the marginal costs of providing equal educational opportunity: Evidence from Texas and Ohio. *Education Policy Analysis Archives, 17*, 3. Available from http://epaa.asu.edu/ojs/article/view/5.
[24] Chambers, J. G., Levin, J. D., & Shambaugh, L. (2010). Exploring weighted student formulas as a policy for improving equity for distributing resources to schools: A case study of two California school districts. *Economics of Education Review, 29(2),* 283–300. Available from http://doi.org/10.1016/j.econedurev.2009.09.005.
[25] Wong, K. K. (2011). *The Design of the Rhode Island School Funding Formula*. Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/issues/2011/08/pdf/rhode_island_reform.pdf.
[26] Ibid.

[27] EdBuild. (2016). *Funded: State Policy Analysis – Rhode Island*. Retrieved from http://funded.edbuild.org/state/RI.
[28] Wong, K. K. (2011). *The Design of the Rhode Island School Funding Formula*. Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/issues/2011/08/pdf/rhode_island_reform.pdf.
[29] California School Boards Association (n.d.). Local Control Funding Formula. Retrieved from https://www.csba.org/GovernanceAndPolicyResources/FairFunding/LCFF.aspx.
[30] Weston, M. (2010). *Funding California Schools: The Revenue Limit System*. San Francisco, CA: Public Policy Institute of California. Retrieved from http://www.ppic.org/content/pubs/report/R_310MWR.pdf.
[31] Weston, M. (2011). *California's New School Funding Flexibility*. San Francisco, CA: Public Policy Institute of California. Retrieved from http://www.ppic.org/content/pubs/report/R_511MWR.pdf.
[32] EdBuild. (2016). *Funded: State Policy Analysis – California*. Retrieved from http://funded.edbuild.org/state/CA.
[33] California Department of Education. (2015, December 4). Categorical Programs. Retrieved from http://www.cde.ca.gov/fg/aa/lc/lcfffaq.asp#CAT.
[34] Guinn Center for Policy Priorities (2015, February). *Nevada K-12 Education Finance*. Retrieved from https://guinncenter.org/wp-content/uploads/2015/02/Guinn-Center-K-12-Education-Finance-Fact-Sheet.pdf.
[35] Ibid.
[36] Ibid.
[37] 2015 Nev. Stat. 3701-3735
[38] Ibid.
[39] Conn. Acts 14-47.
[40] Conn. Acts 16-2 (May Special Session).
[41] Conn. Acts 16-3 (May Special Session).
[42] Conn. Gen. Statutes ch. 172, § 10-262f.
[43] Ibid.
[44] Ibid.
[45] Moran, J. (2012). *Education Cost Sharing Formula* (2012-R-0101). Hartford, CT: Connecticut General Assembly, Office of Legislative Research. Retrieved from https://www.cga.ct.gov/2012/rpt/2012-R-0101.htm.
[46] *Connecticut Coalition for Justice in Education Funding, Inc. v. Rell*, Superior Court, judicial district of Hartford, Docket No. XO7-HHD-CV-145037565-S. Pls.' Trial Ex. 1142, at 98; see also id. at 67-68, 71-72, 96-99, 248 (Chambers Corporate Representative Testimony).
[47] Connecticut General Assembly, Office of Legislative Research. (2013). *Task Force to Study State Education Funding Final Repor*t. Retrieved from http://www.cga.ct.gov/2013/rpt/2013-R-0064.htm.
[48] Conn. Gen. Statutes ch. 172, § 10-262f.
[49] Ibid.
[50] Ibid.
[51] Ibid.
[52] Ibid.
[53] Conn. Gen. Statutes ch. 172, § 10-262i.
[54] Connecticut General Assembly, Office of Legislative Research. (2013). *Task Force to Study State Education Funding Final Repor*t. Retrieved from http://www.cga.ct.gov/2013/rpt/2013-R-0064.htm.
[55] Moran, J. (2014). *Comparison of Charter, Magnet, Agricultural Science Centers, and Technical High Schools* (2014-R-0257). Hartford, CT: Connecticut General Assembly, Office of Legislative Research. Retrieved from http://www.cga.ct.gov/2014/rpt/2014-R-0257.htm.
[56] Conn. Gen. Statutes ch. 172, § 10-262f.
[57] Connecticut School Finance Project. (2016). *History of School Finance in Connecticut*. Available from http://ctschoolfinance.org/reports/history-of-school-finance-in-connecticut.
[58] Conn. Acts 16-2 (May Special Session).
The full funding total was simulated by Kathleen S. Guay based on data provided by the Connecticut State Department of Education.
[59] Conn. Gen. Statutes ch. 172, § 10-262h.
[60] Ibid.
[61] Chambers, J. G, & Levin, J. D. (2009). *Determining the Cost of Providing an Adequate Education for All Students.* Washington, DC: National Education Association.

[62] Ibid.
[63] Chambers, J. G, & Levin, J. D. (2009). *Determining the Cost of Providing an Adequate Education for All Students.* Washington, DC: National Education Association.
[64] Ibid.
[65] Ibid.
[66] Ibid.
[67] Hanushek, E. A. (2005, October). *The Alchemy of "Costing Out" an Adequate Education*. Paper prepared for the conference on Adequacy Lawsuits: Their Growing Impact on American Education, Cambridge, MA. Retrieved from https://www.hks.harvard.edu/pepg/PDF/events/Adequacy/PEPG-05-28hanushek.pdf.
[68] Chambers, J. G, & Levin, J. D. (2009). *Determining the Cost of Providing an Adequate Education for All Students.* Washington, DC: National Education Association.
[69] Hanushek, E. A. (2005, October). *The Alchemy of "Costing Out" an Adequate Education*. Paper prepared for the conference on Adequacy Lawsuits: Their Growing Impact on American Education, Cambridge, MA. Retrieved from https://www.hks.harvard.edu/pepg/PDF/events/Adequacy/PEPG-05-28hanushek.pdf.
[70] Chambers, J. G, & Levin, J. D. (2009). *Determining the Cost of Providing an Adequate Education for All Students.* Washington, DC: National Education Association.
[71] Ibid.
[72] Ibid.
[73] Hanushek, E. A. (2005, October). *The Alchemy of "Costing Out" an Adequate Education*. Paper prepared for the conference on Adequacy Lawsuits: Their Growing Impact on American Education, Cambridge, MA. Retrieved from https://www.hks.harvard.edu/pepg/PDF/events/Adequacy/PEPG-05-28hanushek.pdf.
[74] Duncombe, W., Lukemeyer, A. ,& Yinger, J. (2004). *Education Finance Reform in New York: Calculating the Cost of a "Sound Basic Education" in New York City* (Paper 15). Syracuse University, Maxwell School of Citizenship and Public Affairs, Center for Policy Research. Retrieved from http://surface.syr.edu/cgi/viewcontent.cgi?article=1014&context=cpr.
[75] Ibid.
[76] Chambers, J. G, & Levin, J. D. (2009). *Determining the Cost of Providing an Adequate Education for All Students.* Washington, DC: National Education Association.
[77] Hanushek, E. A. (2005, October). *The Alchemy of "Costing Out" an Adequate Education*. Paper prepared for the conference on Adequacy Lawsuits: Their Growing Impact on American Education, Cambridge, MA. Retrieved from https://www.hks.harvard.edu/pepg/PDF/events/Adequacy/PEPG-05-28hanushek.pdf.
[78] Ibid.
[79] Ibid.
[80] Wong, K. K. (2011). *The Design of the Rhode Island School Funding Formula*. Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/issues/2011/08/pdf/rhode_island_reform.pdf.
[81] Ibid.
[82] U.S. Department of Education, National Center for Education Statistics. (2015). *National Public Education Financial Survey Data.* Available from https://nces.ed.gov/ccd/stfis.asp.
[83] Ibid.
[84] EdBuild. (2016). *Funded: State Policy Analysis*. Available from http://funded.edbuild.org.
[85] Ibid.
[86] Ibid.
[87] Ibid.
[88] Ibid.
[89] Ibid.
[90] Ibid.
[91] Ibid.
[92] Ibid.
[93] Duncombe, W. D., & Yinger, J. (2004). *How Much More Does a Disadvantaged Student Cost?* (Working Paper 103). Syracuse University, Maxwell School of Citizenship and Public Affairs, Center for Policy Research. Available from http://surface.syr.edu/cpr/103.
[94] EdBuild. (2016). *Funded: State Policy Analysis*. Available from http://funded.edbuild.org.
[95] Ibid.
[96] Ibid.
[97] Ibid.
[98] Ibid.

[99] Ibid.
[100] Ibid.
[101] Duncombe, W. D., & Yinger, J. (2004). *How Much More Does a Disadvantaged Student Cost?* (Working Paper 103). Syracuse University, Maxwell School of Citizenship and Public Affairs, Center for Policy Research. Available from http://surface.syr.edu/cpr/103.
[102] EdBuild. (2016). *Funded: State Policy Analysis*. Available from http://funded.edbuild.org.
[103] Ibid.
[104] Ibid.
[105] Ibid.
[106] U.S. Census Bureau. (2016). *Public Education Finances: 2014*. Available from http://www.census.gov/content/dam/Census/library/publications/2016/econ/g14-aspef.pdf
[107] Ibid.
[108] Ibid.
[109] EdBuild. (2016). *Funded: State Policy Analysis – Georgia*. Retrieved from http://funded.edbuild.org/state/GA.
[110] Ibid.
[111] EdBuild. (2016). *Funded: State Policy Analysis – North Dakota*. Retrieved from http://funded.edbuild.org/state/ND.
North Dakota has a range of EL weights, based on the English proficiency level of the student, ranging from 1.07-1.33.
[112] EdBuild. (2016). *Funded: State Policy Analysis – Georgia*. Retrieved from http://funded.edbuild.org/state/GA.
[113] EdBuild. (2016). *Funded: State Policy Analysis – Virginia*. Retrieved from http://funded.edbuild.org/state/VA.
Virginia's low-income student weight begins at 1.01 and this weight is increased depending on the concentration of poverty in the district.
[114] EdBuild. (2016). *Funded: State Policy Analysis – New Jersey*. Retrieved from http://funded.edbuild.org/state/NJ.
[115] EdBuild. (2016). *Funded: State Policy Analysis – Maryland*. Retrieved from http://funded.edbuild.org/state/MD.
[116] EdBuild. (2016). *Funded: State Policy Analysis – Louisiana*. Retrieved from http://funded.edbuild.org/state/LA.
[117] EdBuild. (2016). *Funded: State Policy Analysis – Arizona*. Retrieved from http://funded.edbuild.org/state/AZ.
[118] EdBuild. (2016). *Funded: State Policy Analysis – Texas*. Retrieved from http://funded.edbuild.org/state/TX.
[119] EdBuild. (2016). *Funded: State Policy Analysis – New Mexico*. Retrieved from http://funded.edbuild.org/state/NM.
New Mexico assigns weights to gifted and talented students depending on the degree of modification to the general education program that a student requires. These weights range from 1.7–3.0.
[120] EdBuild. (2016). *Funded: State Policy Analysis – Florida*. Retrieved from http://funded.edbuild.org/state/FL.
[121] EdBuild. (2016). *Funded: State Policy Analysis – Iowa*. Retrieved from http://funded.edbuild.org/state/IA.
[122] EdBuild. (2016). *Funded: State Policy Analysis – Virginia*. Retrieved from http://funded.edbuild.org/state/VA.
[123] EdBuild. (2016). *Funded: State Policy Analysis – Colorado*. Retrieved from http://funded.edbuild.org/state/CO.
[124] U.S. Department of Education, National Center for Education Statistics. (2015). *National Public Education Financial Survey Data.* Available from https://nces.ed.gov/ccd/stfis.asp.
[125] Ibid.
[126] Ibid.
[127] Wong, K. K. (2011). *The Design of the Rhode Island School Funding Formula*. Washington, DC: Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/issues/2011/08/pdf/rhode_island_reform.pdf.
[128] Rhode Island Department of Education. (2015). *A Funding Formula for Rhode Island*. Retrieved from http://www.ride.ri.gov/Portals/0/Uploads/Documents/Funding-and-Finance-Wise-Investments/Funding-Sources/State-Education-Aid-Funding-Formula/Formula-Presentation.pdf.
[129] Ibid.

[130] Ibid.
[131] Massachusetts Department of Elementary and Secondary Education. (2016). *FY17 Chapter 70 Aid: Preliminary House 2 Proposal* [PowerPoint slides]. Available from http://www.doe.mass.edu/finance/chapter70/chapter-17p.pptx.
[132] Ibid.
[133] Massachusetts Department of Elementary and Secondary Education. (2016, July 11). *School Finance: Chapter 70 Program, FY17 Chapter 70 Aid and Required Contribution Calculations*. Retrieved from http://www.doe.mass.edu/finance/chapter70/chapter-17-explain.html.
[134] Massachusetts Department of Elementary and Secondary Education. (2016). *FY17 Chapter 70 Aid: Preliminary House 2 Proposal* [PowerPoint slides]. Available from http://www.doe.mass.edu/finance/chapter70/chapter-17p.pptx.
[135] Ibid.
[136] Ibid.