



Study of Pupil Weights in Vermont's Education Funding Formula

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Submitted to: Secretary, Dan French, Ed.D.
Vermont Agency of Education
Montpelier, VT 05641

Submitted by: Tammy Kolbe, Ed.D.
University of Vermont

Bruce Baker, Ed.D.
Rutgers University
New Brunswick, NJ

Drew Atchison, Ed.D.
Jesse Levin, Ph.D.
American Institutes for Research®

Executive Summary

Background to the Report

The Vermont Agency of Education (AOE) was directed, under Section 11 of No. 173 of the 2018 Acts and Resolves of the Vermont General Assembly (Act 173) to undertake a study that examines and evaluates whether:

- 1) the current weights for economically-disadvantaged students, English language learners (ELL), and secondary-level students should be modified;
- 2) new cost factors and weights should be incorporated into the equalized pupil calculation; and
- 3) the special education census grant should be adjusted for differences in the incidence of and costs associated with SWD across school districts.

In part, the Assembly's direction stems from concerns about the extent to which the existing funding formula is effective in equalizing educational costs, and by extension, opportunities to learn for students across the state. The manner in which the State currently calculates the number of equalized pupils in a school district has been criticized for being out of step with contemporary educational conditions. For the most part, the student need cost factors and weights used in the calculation have not been modified in more than 20 years, despite the significant changes in statewide demographics and student need that have transpired during that time.

All of these concerns and critiques occur against a shifting policy landscape. Vermont's "Act 46," which encourages, and in some instances, requires school districts to consolidate into larger units, has created both opportunities and challenges for the State's existing school funding mechanisms. In particular, stakeholders have raised concerns about the potential misalignment between the State's existing Small Schools Grant program and the governance reforms articulated by Act 46.

Districts and schools are also grappling with implementing other systemic education reforms that may have implications for both the cost of and equity in educational opportunities. Policies such as the Flexible Pathways Initiative, including the Early College Program, created by Vermont Act 77 and requirements to implement multi-tiered systems of support (MTSS) for struggling students have implications for how resources are allocated to ensure equal access to quality educational programs and services.

The purpose of this study is to undertake a comprehensive analysis of Vermont's approach to providing supplemental funding to districts and schools according to differences in student need or geographic location through the use of pupil weights and categorical funding programs.

Key objectives for the study were to:

1. Develop a comprehensive national profile of state policies that adjust for differences in educational costs across school districts.
2. Summarize perspectives in the field about how Vermont's existing education funding policies, particularly the cost factors and weights used in the equalized pupil calculation and the State's categorical funding programs for special education, transportation, and small schools
3. Evaluate the cost factors and weights to be used in Vermont's equalized pupil calculation and recommend changes, where appropriate.

4. Consider whether the approach that will be used to calculate supervisory unions' special education census grant should be revised to reflect differences in student need across supervisory unions.
5. Provide concrete examples for how incorporating different cost factors and weights into the funding formula might impact school districts' equalized pupil counts and, by extension, local education-related property tax rates.
6. Model how potential changes to the special education census grant calculation would affect the amount of state aid supervisory unions receive for special education programs.

Major Findings & Recommendations

State Funding Formulae

- Students come to school with dissimilar learning needs and socioeconomic backgrounds that may require different types and levels of educational supports for them to achieve common standards or outcomes. Similarly, schools in different contexts may also require different levels of resources due to scale of operations or the price they must pay for key resources.
- Dissimilar resource requirements translate to differences in the cost of education among school districts. Without additional funding from states, some communities may be either unable or unwilling to pay for the additional resources necessary to ensure an adequate education for its students.
- All states operate school funding formula and supplemental grants-in-aid programs that attempt to address differences in educational costs across school districts, while simultaneously account differences in the ability of local communities to pay for these costs. However, there is considerable variation across states in the policies and level of funding available.
- Cost factors that are commonly-recognized in state funding formula include adjustments for: *student need*, including economically-disadvantaged and at-risk students; ELL; SWD; and gifted and talented; *economies of scale* and *geographic necessity*, including district and school size and population density; *grade range*; and *resource prices*.
- State funding formula use different mechanisms to adjust for cost differences, including: weights, resource-based allocations, cost reimbursement, and categorical funding.
- Vermont's existing school funding formula accounts for differences in educational costs across school districts by recognizing three cost factors – student poverty, limited English proficiency, and secondary-level education – and assigning weights to these factors in its equalized pupil calculations. In addition, the State operates categorical funding programs for special education, small schools, and transportation.

Perspectives on Cost Factors & Weights Incorporated in Existing Funding System

- The cost factors incorporated in the calculation do not reflect current educational circumstances. Stakeholders viewed the existing approach as “*outdated*.” Neither the factors considered by the formula nor the value of the weights reflect contemporary educational circumstances and costs.
- The values for the existing weights have weak ties, if any, with evidence describing differences in the costs for educating students with disparate needs or operating schools in different contexts.
- Stakeholders were uniformly frustrated with the State’s Small Schools grant program, both in its design and operations. Stakeholders recommended abolishing the program, and instead, integrating weights in the equalized pupil calculation for geographically-necessary small schools.
- The transportation aid grant program is operating effectively and does not require modifications.
- Stakeholder perspectives were mixed as to whether the special education census grant calculation should be revised to include adjustments for differences in student need across school districts. If adjustments are made, stakeholders preferred changes to how the number of pupils in a supervisory union are counted, as opposed to adjusting the unified base amount (i.e., per capita grant) for a district’s poverty rate.
- Stakeholders recommended new categorical funding programs, that would provide specific and targeted state aid for student mental health services and trauma-informed instruction.
- Stakeholders raised concerns about how ECP students are deducted from the count of students in a school district. The general consensus was that ECP students should be counted in a district’s weighted long-term membership as a fraction of a full FTE student, as opposed to the existing practice of not including them at all.
- Stakeholders were concerned that efforts to update the equalized pupil calculation to better reflect differences in educational costs may not translate to increased levels of spending in districts with higher need. Instead, the additional tax capacity generated by a higher equalized pupil count may be seen as an opportunity to reduce taxes rather than increase spending.

Evaluating Cost Factors & Weights Included in Vermont’s School Funding Formula

Assessing Risk

- The percentages of students who are economically disadvantaged, SWDs (mild and severe), and ELLs are relevant measures of student need.
- The negative relationship between the share of students who are economically disadvantaged in a school and average levels of student achievement is more pronounced at the middle and

secondary levels than at the elementary level. This relationship also varies according to whether a district is located in a urban or rural area.

- The negative relationship between the share of students who are economically disadvantaged in a school and average levels of student achievement is weaker in smaller schools than it is in larger schools.

Recommended Cost Factors & Weights

- The empirical analyses undertaken for this study identify a comprehensive set of factors that are related to differences in educational costs across school districts. Specifically:
 - 1) Percentage of students who are economically disadvantaged
 - 2) Percentage of students who are ELL
 - 3) Percentage of students who are enrolled in the middle- and secondary-grades
 - 4) Indicators for geographically-necessary small schools
 - 5) Population density of the community in which a district is located
- Table E.1 lists two sets of recommended weights for each cost factor.

The first set of weights assume that policymakers implicitly adjust for differences in the demand for special education when calculating the number of equalized pupils in a district. The second set of weights assumes that policymakers explicitly adjust for differences by modifying how the special education census grant is calculated.

Table E.1. Recommended Weights for Vermont’s School Funding Formula

| Cost Factor | Measure | Weight Value | | |
|--------------------|-------------------------------|-----------------|--|---|
| | | Existing Weight | New Weight Derived from Models Without Controls for SWDs | New Weight Derived from Models With Controls for SWDs |
| Student Needs | Poverty Rate (AOE) | 0.25 | 3.14 | 2.97 |
| | % of ELLs | 0.20 | 0.57 | 1.58 |
| Context | | | | |
| Enrollment | <100 Students | | 0.24 | 0.26 |
| | 101–250 | | 0.12 | 0.12 |
| Population Density | <36 Persons per Square Mile | | 0.23 | 0.23 |
| | 36 to <55 | | 0.17 | 0.17 |
| | 55 to <100 | | 0.11 | 0.11 |
| Grade Range | % Middle Grades Enrollment | | 1.23 | 1.23 |
| | % Secondary Grades Enrollment | 1.13 | 1.13 | 1.20 |
| | Pre-kindergarten | 0.46 | | |

Note. Grade range weights were set to a base value of 1.00. Grade range weights and poverty weights are multiplicative, meaning that the poverty weight is applied to the grade range weighted enrollment. Therefore, the poverty weight has a large effect in grade ranges with a larger weight. The remaining weights are additive, meaning the effect of the weights does not vary with the strength of other weights. Enrollment weights apply to school size. Evaluating the existing weight used for PK students was not included in the scope of this study.

Census-Based Special Education Block Grant

- Whether a census-based funding mechanism is an appropriate and fair approach to providing localities with supplemental funding for special education is contingent on (1) the proportion of SWDs being roughly the same across supervisory unions, and (2) the nature and extent of student need and the cost of providing special education services are similar across jurisdictions.
- The share of enrolled SWDs varied considerably across districts, with some districts having less than 2% of their student population identified for special education and others with more than 30%.
- Variability in the share of SWDs across districts, is related to a district's poverty rate. Districts with proportionately larger shares of students who are economically disadvantaged also, on average, have larger shares of students with IEPs.
- Assuming that the existing formula for calculating the census grant amount (starting in FY2021), we found that state aid for special education will comprise a proportionately smaller share of total special education spending in supervisory unions with larger percentages of SWDs than in supervisory unions with fewer SWDs.
- An alternative approach to calculating the census grant amount for differences in student need is to inflate the number of pupils to which the per-capita amount is applied. That is, rather than calculating a supervisory union's census grant based on the long-term PK–12 ADM, the grant is calculated on a weighted pupil count that implicitly accounts for differences in student need across jurisdictions.
- Possible adjustments to the census grant should be considered in light of other policy objectives, particularly the intent to provide districts with new flexibility in using funding to strengthen early intervening services for students who are struggling and incentives to revamp special education service delivery models. Across time, such changes to local policies and practices may result in fewer students identified for special education and, as a result, less concern about sufficiency and fairness in state special education funding.