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REPORT ON THE ADDITIONAL COST
OF EDUCATING VERMONT'S
ENGLISH LEARNER STUDENTS

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Executive Summary

The Vermont Legislative Joint Fiscal Office (JFO) was directed under Section 11 of the 2022 Acts and Resolves of the Vermont General Assembly (Act 127) to undertake a study that examines:

- (1) The advantages and disadvantages of changing the pupil weight for English learner (EL) students that was revised by Act 127 of 2022 to reflect the cost of providing *different levels of educational services* for students with *different levels of English proficiency*; and
- (2) Changing the amount of or eligibility for categorical aid provided by the state to school districts with 25 or fewer EL students.

The General Assembly's direction stems from questions about whether the EL pupil weight in Vermont's education funding formula appropriately adjusts for the additional cost of educating EL students.

The current pupil weight used in Vermont's education funding formula adjusts for the average additional cost of educating a Vermont EL student to meet Vermont's academic standards but does not account for possible differences in educational costs among EL students with varying needs. EL students have different levels of English proficiency and as a result may need different types and amounts of instructional supports. Vermont is also home to EL students who are New Americans (Newcomer) and students with limited or interrupted formal education (SLIFE). EL students who are Newcomer/SLIFE may require additional services, above-and-beyond what is provided to a typical EL student to successfully access and participate in public education.

The existing weight also does not account for the fact that Vermont school districts operate EL programs of different sizes. EL students comprise a very small share of Vermont's K-12 student population and are unequally distributed among school districts statewide. Together, Burlington, Winooski, South Burlington, Essex Westford, Colchester, and Champlain Valley school districts educated nearly 70% of the state's EL students during the 2023 school year. The other 30% of Vermont's EL students are distributed among the state's remaining SU/SDs, with most of the state's SU/SD's enrolling very small numbers of EL students who are distributed among schools and grade levels within districts.

Act 127 put in place a new categorical aid program intended to offset a portion of the additional cost districts encounter when operating EL programs for very small numbers of students. Starting with FY2025, districts enrolling 1-5 EL students will receive an additional \$25,000 in state aid and districts with 6-25 EL students an additional \$50,000. It is unknown

whether these payments are sufficient to offset the cost of operating very small EL programs, particularly in rural districts.

The purpose of this study was to determine the:

- a) Cost of educating EL students with different levels of English language proficiency and for students who are Newcomer/SLIFE, and
- b) Resources districts need to operate EL programs that reflect best practices in the field, regardless of the number of EL students enrolled in the program.

The study draws on statewide data about Vermont's EL student population that were provided by the Vermont Agency of Education (AOE); a review of existing literature on best practices and standards for educating EL students and operating EL programs; and a series of meetings with a panel of experts who provided information on the resources required to educate EL students to meet Vermont's academic standards.

Key Findings

- **The cost of providing EL services to Vermont students *varies according to students' English proficiency levels.***

EL students with the lowest level of English proficiency require the most resources and as a result are the costliest to serve, whereas students with the highest levels of English proficiency need fewer supports and services and are the least costly. Estimates based on the Vermont ***student-level cost*** model suggest that the average additional annual cost for an EL student ***ranges between \$30,579*** (Level 1 proficiency) ***and \$1,754*** (Levels 5 or 6 English language proficiency). (Exhibit E.1)

The ***average additional student-level cost*** for EL students in Vermont for the 2023 school year is ***\$19,845***. This amount represents the cost of the resources the expert panel identified as needed to provide the instructional services to EL students need to attain language proficiency and meet Vermont's academic standards but does not include other costs that districts and schools incur to operate their EL programs and comply with federal and state requirements.

- **The additional cost of serving an EL student is *higher for districts that serve fewer EL students than those with larger numbers of EL students.***

The cost to Vermont school districts to ensure EL students have equitable access to comparable EL services varies according to the size of a district's EL program. The average additional annual cost per EL student for a district operating a ***very small program with 10 EL students is \$23,283***, whereas the cost per EL student is ***\$16,950 for a district operating a large EL program*** with 375 students. (Exhibit E.2)

Exhibit E.1. Student-level Cost Estimate, by EL Student Language Proficiency & Newcomer/SLIFE Status and Grade Level

Student Grade Level	Language Proficiency				Newcomer/ SLIFE
	Level 1	Levels 2/3	Level 4	Levels 5/6	
Elementary Grade Student (K-5)	\$29,664	\$19,622	\$17,593	\$1,724	\$6,075
Middle Grade Student (6-8)	\$30,762	\$20,720	\$19,776	\$1,724	\$6,075
Secondary Grade Student (9-12)	\$31,310	\$21,077	\$15,003	\$1,755	\$6,190
Average Cost by Proficiency Level	\$30,579	\$20,473	\$17,457	\$1,734	\$6,113
Weighted Average Student-level Cost for SY2023	\$19,845				

Note: See Exhibit 12 for the final set of assumptions that were used to estimate the costs reported in this table. The weighted average cost was calculated using the count of Vermont students statewide with different levels of English proficiency (Exhibit 4) and the average cost per EL student for each proficiency level (Exhibit 13).

Exhibit E.2. Average Annual Additional Cost per EL Student for EL Programs of Different Size

	Very Small Program (10 EL Students)	Small Program (25 EL Students)	Midsize Program (125 EL Students)	Large Program (375 Students)
Student-level cost	\$19,845	\$19,845	\$15,496	\$15,496
District-level cost	\$3,438	\$2,676	\$1,952	\$1,454
Annual Additional Cost per EL Student	\$23,283	\$22,521	\$17,448	\$16,950

Note: The cost estimates for very small and small programs uses the statewide weighted average student-level cost estimate (Exhibit 13). The cost estimates midsize and large programs use the weighted average student-level cost estimate that was adjusted for group size (Exhibit 15) since these programs likely to have enough of EL students to provide instructional minutes in small groups. The estimates do not include the additional cost of serving Newcomer/SLIFE EL students.

Policy Considerations

- **The cost estimate in the 2021 Pupil Weighting Factors report on which the revised EL pupil weight is based falls within the range of costs per EL students that were estimated for this study.**

The pupil weight for EL students, which was revised by Act 127 of 2022, assumes that an *average additional cost* for educating an EL student in Vermont is about \$22,947. This amount falls within the range of per EL student costs estimated by this study for students with Levels 1-4 EL proficiency (\$30,579- \$17,457, respectively).¹ (Exhibit E.2)

- **New categorical grants that provide supplemental funding for districts that enroll a small number of EL students offset about 75% of a district's costs to operate their EL program.** Starting in FY2025, districts that enroll 25 or fewer EL students will receive an annual categorical grant to offset the additional cost of operating EL programs with small numbers of students. The total district-level cost for operating a very small EL program with 10 or fewer students is about \$34,381 (\$3,438 per EL student) and \$36,501 (\$7,300 per EL student) for EL programs with 5 or less students. The state's \$25,000 categorical grant for very small programs covers just about three-quarters of the administrative costs for these programs, and likewise the state's \$50,000 categorical grant would offset about 75% of a district's cost of operating an EL program with 25 students.
- **Developing and implementing a new set of pupil weights that differentiate by EL student language proficiency or EL program size would be challenging.** Developing and implementing a new set of pupil weights for EL students with different levels of English proficiency requires annual data on students' WIDA language proficiency levels. AOE currently collects these data; however, AOE may be unable to report this information in places where there are small numbers of EL students. It also is the case that further disaggregating the state's small number of EL students according to language

¹ Several factors may account for difference between the estimate for average additional cost from this report and the earlier estimate from the Pupil Weighting Factors report. First, the additional cost of educating EL students who are also Newcomer/SLIFE is not included in the statewide weighted average generated for this report. The additional cost of educating a Newcomer/SLIFE student is about \$6,113 over-and-above what it costs, on average, to provide EL services to a typical multilingual student. Incorporating counts of these students would increase the statewide average, albeit by how much is unknown. Relatedly, it also could be that the mix of EL students' language proficiency and needs differ from the 2018 EL student cohort. It also is the case that the hybrid evidence-based and professional judgment panel methods used in this report call for costing out a specific list of resources identified by the expert panel that identified at a minimum what would be needed to educate an EL, while the estimates from the 2021 pupil weighting factors report reflect the actual spending by districts for EL students to meet state academic standards. It could be that the resources identified and costed out in this study do not include the full complement of resources used by districts and schools and that the panel's recommendations do not account for all the resources necessary to attain desired outcomes.

proficiency levels could present problems for estimating weights with sufficient precision for policymaking. Additionally, it would introduce additional complexity to the existing formula to create more weights that account for differences in economies of scale among districts' EL programs.

- **It may be more efficient and cost effective for AOE purchase instructional resources on behalf of districts statewide, rather than individual districts purchasing these resources on their own.**

The study's findings and input from AOE's Multi-lingual Advisory Group suggest that it may be more efficient and cost-effective, particularly for the large number of Vermont districts with small numbers of EL students, for AOE to purchase statewide licenses with vendors that provide: (1) translation services; (2) data collection, student monitoring, and professional development using an online platform; and (3) access to online materials for literacy, content, and English language acquisition support.

Introduction

The Vermont Legislative Joint Fiscal Office (JFO) was directed, under Section 11 of the 2022 Acts and Resolves of the Vermont General Assembly (Act 127) to undertake a study that examines:

- (1) The advantages and disadvantages of changing the pupil weight for English learner (EL) students that was revised by Act 127 of 2022 to reflect the cost of providing *varying levels of educational services for students with different levels of English proficiency*.
- (2) *Changing the amount of or eligibility for categorical aid* provided by the state to school districts with 25 or fewer EL students.

The General Assembly's direction stems from questions about whether the EL pupil weight in Vermont's education funding formula appropriately adjusts for the additional cost of educating EL students.

The current pupil weight used in Vermont's education funding formula adjusts for the average additional cost of educating a Vermont EL student to common academic standards but does not account for possible differences in educational costs among EL students with varying needs.

EL students have different levels of English proficiency and as a result may need different types and amounts of instructional supports to attain the high levels of academic achievement required to meet the state's standards. Vermont is also home to EL students who are New Americans (Newcomer) and students with limited or interrupted formal education (SLIFE). EL students who are Newcomer/SLIFE possess a variety of school readiness skills, sociolinguistic proficiencies, content knowledge, and academic ways of thinking that are different from students who have consistently attended school. These may require additional services, above-and-beyond what is provided to a typical EL student (e.g., more intensive home/school communication and coordination) to successfully access and participate in public education.

The existing weight also does not account for the fact that Vermont school districts operate EL programs of different sizes. EL students also comprise a very small share of Vermont's K-12 student population and are unevenly distributed among school districts statewide. ELs were about 2% of the statewide K-12 enrollment for the 2022-23 school year and made up less than 1% of most school districts' total enrollment. The small numbers of EL students make it difficult for most Vermont school districts to operate programs for their EL students at the same scale and cost, as programs in other places who educate larger numbers of EL students.²

² Task Force on the Implementation of the Pupil Weighting Factors Report. (2021)
https://jifo.vermont.gov/assets/Uploads/e11b031427/Final-Report-Weighting-Study-Task-Force-12_17_21.pdf

Act 127 put in place a new categorical aid program intended to offset a portion of the additional cost districts encounter when operating EL programs for very small numbers of students. Starting with FY2025, districts enrolling 1-5 EL students will receive an additional \$25,000 in state aid and districts with 6-25 EL students an additional \$50,000. It is unknown whether these payments are sufficient to offset the cost of operating very small EL programs, particularly in rural districts.

The purpose of this study was to determine the:

- c) Cost of educating EL students with different levels of English language proficiency and for students who are Newcomer/SLIFE, and
- d) Resources districts need to operate EL programs that reflect best practices in the field, regardless of the number of EL students enrolled in the program.

The study draws on statewide data about Vermont's EL student population that were provided by the Vermont Agency of Education (AOE); a review of existing literature on best practices and standards for educating EL students and operating EL programs; and a series of meetings with a panel of experts who provided information on the resources required to educate EL students to meet Vermont's academic standards.

The remainder of this report is organized as follows. The report's first section provides background and context for understanding Vermont's EL student population and the costs of educating EL students. The second section presents findings for the *student-* and *district-level* costs to provide EL services in Vermont. The final section uses the study's findings to consider questions posed by the General Assembly about potential future adjustments to the EL pupil weight and the state's new categorical aid program for districts serving small numbers of EL students.

Study Context

Vermont has an obligation to ensure that EL students can meaningfully participate in their educational programs and services. This obligation exists regardless of the cost of providing EL services. In the following sections, the report describes existing federal and state requirements for serving EL students and the characteristics of Vermont’s EL student population. The report then summarizes what is known about the cost of providing EL services to students and how these costs may vary according to differences in students’ language proficiency and other needs. The section concludes with a description of how Vermont’s funding formula adjusts for the additional costs districts incur when educating EL students to meet the state’s challenging academic standards.

Federal & State Requirements

The state and its school districts share an obligation to ensure that EL programs comply with federal civil rights laws and applicable grant requirements. English learners (EL) are a protected class of students under federal law.³ Title VI of the Civil Rights Act of 1964 (Title VI) requires public schools to take affirmative steps to ensure that students with limited English proficiency can meaningfully participate in their educational programs and services.⁴ Similarly, the federal Equal Educational Opportunities Act (EEOA) affirms that state education agencies and public schools must take steps to overcome language barriers that impede equal participation by EL students in their instructional programs.⁵

To meet federal civil rights requirements, school districts must operate EL programs that meet a three-pronged test, also known as the *Castañeda* standards. Specifically, a school district complies with federal civil rights laws if its EL program:

- (1) Is based on a sound educational theory or research;
- (2) Is implemented with adequate and appropriate resources and in a way that is reasonably calculated to be effective, according to the educational theory adopted by the district; and

³ The Elementary and Secondary Education Act of 1965, as amended by the Every Student Succeeds Act of 2015 (ESSA) defines an EL as an individual who is: (a) aged 3-21; (b) enrolled or preparing to enroll in an elementary or secondary school; (c) who was not born in the US or whose native language is not English, is Native American or Alaska native where a language other than English has a significant impact on an individual’s level of English language proficiency, or is migratory and whose language is other than English; and (d) has difficulties speaking, reading writing or understanding the English language that are sufficient to deny the individual the ability to meet challenging state academic standards, successfully achieve in classrooms where the language of instruction is English, or fully participate in society. (ESEA Sec 8101(20))

⁴ See *Lau v. Nichols*, 414 US 563 (1974), Title VI of the Civil Rights Act of 1964 (42 USC Section 2000 to d-7).

⁵ Equal Educational Opportunities Act (EEOA; 20 USC Sec 1703(f))

- (3) Produces evidence that students' language barriers are overcome within a reasonable period.⁶

Additionally, federal law and regulation requires: (a) translation and interpretation services for families and guardians; (b) annual high-stakes English language proficiency assessments, with a 100% participation requirement; and (c) data reporting and disaggregation by a variety of state and local indicators.⁷ The U.S. Departments of Justice and Education (2015) also clarify federal law to note that the content students receive must be age/grade appropriate, regardless of whether students have the same proficiency level.

In addition, in exchange for federal funding from the federal Title III State Formula Grant Program, Vermont's Agency of Education (AOE) and school districts that receive Title III subgrants must also provide *high quality professional development programs* and implement *high quality language instruction education programs* (LIEP) based on scientifically-based research that enable EL students to speak, listen, read, and write English and meet challenging state content and achievement standards in mathematics, reading or language arts, and science.⁸ Districts that receive Title III funding are *also required to implement parent, family, and community engagement activities* that enhance or supplement their instructional activities for EL students.

Vermont law reinforces existing federal requirements and establishes additional budgeting requirements for school districts to follow when providing EL services. Specifically, each Vermont school district must:

- (1) Screen students to determine which students are EL students and qualify for EL services.
- (2) Assess and monitor EL students' progress.
- (3) Provide EL services, including instructional support personnel and services required under federal law.
- (4) Budget sufficient resources to provide EL services.⁹

⁶ US Court of Appeals for the Fifth Circuit, *Castañeda v. Pickard* (1981; 648 F. 2s 989 (5th Cir. 1981). See also *United States v. Texas*, 601 F.3d 354, 366 (5th Cir 2010), which reaffirms and applies the *Castaneda* test. The US Departments of Justice and Education also apply the *Castaneda* standards when evaluating whether a state education agency (SEA) complies with federal civil rights laws, even if they do not provide direct services to EL students. SEAs are responsible under civil rights laws to provide appropriate guidance, monitoring, and oversight to school districts to ensure that EL students receive appropriate EL services.

⁷ U.S. Department of Justice & U.S. Department of Education (2015). *Dear colleague letter: English learner students and limited English proficient parents*. <https://www2.ed.gov/about/offices/list/ocr/letters/colleague-el-201501.pdf>

⁸ National Clearinghouse for English Language Acquisition. (n.d.) *Title III Grants FAQ*. <https://ncela.ed.gov/title-iii-grants-faq#:~:text=States%20are%20required%20to%20demonstrate,proficiency%20of%20the%20English%20language.>

⁹ 16 VSA Sec 4013(b)(1-4)

Vermont's EL Student Population

Vermont has one of the lowest percentages of EL students in the nation – for the 2023 school year, EL students comprised just 2% of Vermont's K-12 enrollment.¹⁰ (Exhibit 1) Although comparatively small, the number of EL students statewide grew by about 4% between the 2022 and 2023 school years. At the same time, the number of supervisory unions and districts (SU/SDs) that support EL students have also grown. For the 2023 school year, all but 7 of the state's 52 SU/SDs enrolled at least one EL student.

Historically, districts enrolling the largest numbers of EL students are in Chittenden County. Together, Burlington, Winooski, South Burlington, Essex Westford, Colchester, and Champlain Valley school districts educated nearly 70% of the state's EL students during the 2023 school year.¹¹ These are also the only SU/SDs that operate programs with enough EL students to qualify for federal Title III funding. (Exhibit 2) Burlington School District enrolls the largest number of EL students – 510 EL students for the 2023 school year, equivalent to about 27% of the state's EL population. (Exhibit 1) Although Winooski educates fewer EL students - about 255 EL students of 4,440 total students for the 2023 school year - it has the largest concentration of EL students of any district in the state with about one-third of the students enrolled for the 2023 school year identified as ELs.

The other 30% of Vermont's EL students are distributed among the state's remaining SU/SDs, with most of the state's SU/SD's enrolling very small numbers of EL students who are distributed among schools and grade levels within districts.

Between the 2022 and 2023 school years, the bulk of the growth in the state's K-12 EL student population was in SU/SDs outside Chittenden County. (Exhibit 1) For example, Rutland City SD saw a 147% increase in the number of EL students – growing from 19 EL students in 2022 to 47 students in 2023. At the same time Rutland City SD had a 2.2% decline in its overall enrollment. While a small increase in number, Orleans Southwest and Franklin West SU's both saw a triple digit percentage increase in number of EL students. During the same period, Slate Valley, Southwest Vermont, and Mt. Abraham also saw nearly a 67% increase in their numbers of EL students. At the same time, Burlington School District had almost no growth in its EL student population and Winooski saw nearly a 7% decline.

¹⁰ Bialik, K., Scheller, A., & Walker, K. (2018). *6 facts about English language learners in U.S. public schools*. Pew Research Center. <https://www.pewresearch.org/short-reads/2018/10/25/6-facts-about-english-language-learners-in-u-s-public-schools/#:~:text=States%20with%20the%20lowest%20percentages,but%20not%20in%20all%20states>

¹¹ Together, for the 2023 school year these six school districts educate 21.6% of the state's public-school students, with Burlington School District enrolling 4.3% of the public-school population (3,570 students).

Exhibit 1. Number of EL Students, Statewide & by Supervisory Union/District (SY2022 & SY2023; Listed from Largest to Smallest % of Total Enrollment)

	Number of EL Students		EL Students as % of Total Enrollment (SY2023)	Percentage Change in EL Student Enrollment (SY2022 v. SY2023)
	SY2022	SY2023		
Vermont State	1,828	1,902	2.32%	4.0%
Winooski SD	273	255	31.38%	-6.6%
Burlington SD	511	510	14.31%	-0.2%
South Burlington SD	174	181	6.11%	4.0%
Essex Westford SD	187	183	4.95%	-2.1%
SAU 70	12	11	3.40%	-8.3%
Colchester SD	76	79	3.10%	3.9%
Montpelier Roxbury SD	38	44	3.06%	15.8%
Milton SD	36	39	2.41%	8.3%
Champlain Valley SD	95	110	2.17%	15.8%
Bennington Rutland SU	25	25	2.16%	0.0%
Springfield SD	20	25	1.56%	25.0%
Windham Southeast SU	38	55	1.46%	44.7%
Hartford SD	21	15	1.42%	-28.6%
Franklin Northeast SU	25	31	1.28%	24.0%
Addison Central SD	22	23	1.22%	4.5%
Harwood Unified Union SD	17	17	0.92%	0.0%
Rutland City SD	19	47	0.90%	147.4%
Barre SU	19	17	0.84%	-10.5%
Orange Southwest SD	7	9	0.80%	28.6%
Lamoille South SU	14	20	0.79%	42.9%
North Country SU	20	13	0.74%	-35.0%
Windham Northeast SU	8	7	0.74%	-12.5%
Addison Northwest SD	7	8	0.74%	14.3%
Washington Central SU	11	10	0.73%	-9.1%
Maple Run SD	19	20	0.68%	5.3%
Lamoille North SU	12	11	0.67%	-8.3%
Windham Southwest SU	4	4	0.66%	0.0%

	Number of EL Students		EL Students as % of Total Enrollment (SY2023)	Percentage Change in EL Student Enrollment (SY2022 v. SY2023)
	SY2022	SY2023		
Missisquoi Valley SD	11	12	0.59%	9.1%
Kingdom East SD	7	6	0.54%	-14.3%
Mt. Mansfield Unified Union School District	13	10	0.49%	-23.1%
Slate Valley Unified Union School District	6	10	0.46%	66.7%
Two Rivers SU	4	3	0.44%	-25.0%
White River Valley SU	6	5	0.44%	-16.7%
Southwest Vermont SU	15	25	0.43%	66.7%
Orange East SU	7	6	0.42%	-14.3%
Mt. Abraham Unified SD	6	10	0.42%	66.7%
Central Vermont SU	5	6	0.38%	20.0%
Caledonia Central SU	5	6	0.38%	20.0%
Windsor Southeast SU	4	0	0.36%	-100.0%
Rutland Northeast SU	5	6	0.33%	20.0%
St. Johnsbury SD	2	1	0.28%	-50.0%
Windham Central SU	2	3	0.27%	50.0%
Orleans Southwest SU	2	5	0.20%	150.0%
Grand Isle SU	1	0	0.19%	-100.0%
Franklin West SU	1	3	0.05%	200.0%
Essex North SU	0	0	0.00%	0.0%
Greater Rutland County SU	0	0	0.00%	0.0%
Mill River Unified Union SD	0	0	0.00%	0.0%
Orleans Central SU	0	0	0.00%	0.0%
Rivendell Interstate SD	0	0	0.00%	0.0%

Note: Supervisory unions/districts and school districts listed in order from those with the largest to the smallest shares of EL students as a percentage of total enrollment

Source: Tabulations provided by the Vermont Agency of Education.

Exhibit 2. Title III Subgrants (FY2021-FY2024)

	FY2021	FY2022	FY2023	FY2024
Burlington SD	\$125,692	\$120,746	\$125,020	\$118,126
South Burlington S	\$40,110	\$42,896	\$43,285	\$42,079
Winooski SD	\$64,362	\$66,493	\$64,006	\$59,823
Colchester SD	\$18,821	\$16,420	\$16,577	\$17,744
Essex Westford SU	\$35,445	\$42,631	\$40,292	\$46,896
Champlain Valley SD	\$23,320	\$19,594	\$19,570	\$24,081
	\$307,750	\$308,780	\$308,750	\$308,750

Source: Tabulations provided by the Vermont Agency of Education.

Most of the state’s EL students are in the elementary grades. For the 2021 school year, about 60% of EL students were in grades K-5, down from about 65% during the 2017 and 2018 school years. (Exhibit 3) By comparison, about 42% of all students statewide are in grades K-5. As the share of EL students in elementary grades has declined, the share of students in the middle grades has increased. For the 2021 school year, about 19% of the state’s EL students were in grades 6-8, up from about 14% for the 2017 school year. Historically, just about 20% of the state’s EL students are in the secondary grades (9-12).

Vermont’s EL students have varying levels of need, ranging from students who are learning basic oral English language to those who are working to acquire specialized or technical English language that are reflective of the content areas at grade level. To determine language proficiency, Vermont EL students are tested each year.

Vermont participates in the WIDA consortium of state departments of education. WIDA designs and implements proficiency standards and assessments for use with English language learners in grades K-12, including the WIDA ACCESS 2.0. The ACCESS 2.0 is a standardized measure of academic language proficiency that provides each EL student with a proficiency score that describes the student’s performance in terms of the six WIDA English Language Proficiency Levels:

- Level 1 – *Entering*
- Level 2 – *Emerging*
- Level 3 – *Developing*
- Level 4 – *Expanding*
- Level 5 – *Bridging*
- Level 6 – *Reaching*

Students with proficiency at Levels 1-4 have a higher level of need and require more services than students with proficiency at Levels 5-6 who are in “monitor status” and no longer must participate in the ACCESS test each year.¹²

The test results and proficiency levels allow states and districts to assess and monitor individual EL student progress on an annual basis and serve as one of the criteria educators consider as they determine whether EL students have attained an English language proficiency level that allows them to meaningfully participate in English language classroom instruction.¹³

Vermont school districts are required to administer WIDA’s ACCESS 2.0 assessment at least annually to all students identified as English language learners using the K-12 Home Language Survey.¹⁴ The assessment is administered to Vermont EL students by district and school EL program coordinators and teachers. Teachers who administer the WIDA assessment must undergo annual training to administer the WIDA assessment.

For the 2023 school year, the majority of Vermont’s EL students tested using WIDA’s ACCESS 2.0 assessment were at either a Level 2 or Level 3 English language proficiency (54%), and about one-quarter were at a Level 4 (27%). (Exhibit 4) Just about 13% of Vermont’s EL students were at a Level 1 English language proficiency. Another 6% were either at Level 5 or 6, a point at which they no longer receive direct EL services and instead receive targeted supports for a minimum of two years.¹⁵

Statewide, Vermont SU/SDs educate ELs with differing levels of English language proficiency. Some SU/SDs serve much larger shares of EL students with proficiency Levels 1-3. For instance, for the 2023 school year, more than three-quarters of EL students enrolled in the Lamoille North (83%), Lamoille South (77%), North Country (77%), Springfield (86%), Windham Southeast (79%), and Winooski (84%) SU/SDs were at a Level 1-3 English language proficiency. (Exhibit 5) In other places – notably Addison Central (64%) and Barre (64%) – the share of EL students with higher levels of need (Level 1-3 proficiency) significantly increased between the 2022 and 2023 school years.

¹² The State of Vermont requires students at WIDA Levels 5 and 6 English proficiencies be monitored by school districts for two years after then receive the minimum required score on the ACCESS test. During this time, EL teachers review student academic records, assessment results, and consult with teachers to ensure that the student’s academic progress is not hindered by language proficiency.

¹³ *Access for ELLs: Interpretive guide for score reports, Grades K-12. Spring 2023.* WIDA: <https://wida.wisc.edu/sites/default/files/resource/Interpretive-Guide.pdf>

¹⁴ Vermont’s LEAs must administer the State’s Home Language Survey to all kindergarten students and to all students in other grades entering Vermont’s public schools for the first time to identify those who may be entitled to language and academic support services.

¹⁵ Districts can make the local decision to extend this monitoring period to four years.

Exhibit 3. Statewide EL Student Count, by Grade Level (SY2017-2021)

	2017		2018		2019		2020		2021	
	# EL	% of Total	# EL	% of Total	# EL	% of Total	# EL	% of Total		% of Total
Kindergarten	181	Elementary Grades	208	65.9%	168	64.5%	167	61.1%	141	59.5%
Grade 1	205		196		213		160		153	
Grade 2	197		201		200		201		143	
Grade 3	206		193		200		186		175	
Grade 4	121		193		174		195		164	
Grade 5	84		115		153		143		139	
Grade 6	74	Middle Grades	78	13.4%	104	15.0%	117	17.8%	107	19.3%
Grade 7	69		72		79		105		106	
Grade 8	72		75		74		85		84	
Grade 9	118	Secondary Grades	85	20.7%	97	20.5%	91	21.1%	82	21.1%
Grade 10	62		116		78		96		79	
Grade 11	80		73		109		79		74	
Grade 12	50		74		68		97		90	
Total	1,519		1,679		1,717		1,722		1,537	

Source: Tabulations reported by the Vermont Agency of Education (July 29, 2021): <http://tinyurl.com/mrywd5dc>

Exhibit 4. Statewide EL Student Count, by WIDA Proficiency Levels (SY2017-SY2023)

WIDA Proficiency Level	2017		2018		2019		2020		2021		2022		2023	
	# EL	% of Total	# EL	% of Total	# EL	% of Total	# EL	% of Total	# EL	% of Total	# EL	% of Total	# EL	% of Total
Level 1 (Entering)	271	18.2%	220	13.5%	222	13.3%	179	10.9%	152	10.2%	222	14.1%	211	13.3%
Level 2 (Beginning)	301	20.3%	306	18.8%	313	18.8%	275	16.7%	275	18.5%	250	15.9%	294	18.6%
Level 3 (Developing)	503	33.8%	575	35.3%	569	34.1%	564	34.3%	512	34.5%	599	38.1%	553	34.9%
Level 4 (Expanding)	326	21.9%	381	23.4%	440	26.4%	495	30.1%	412	27.8%	390	24.8%	428	27.0%
Level 5 (Bridging)	80	5.4%	126	7.7%	111	6.7%	118	7.2%	113	7.6%	96	6.1%	83	5.2%
Level 6 (Reaching)	5	0.3%	23	1.4%	14	0.8%	14	0.9%	19	1.3%	17	1.1%	15	0.9%
Total	1,486	100%	1,631	100%	1,669	100%	1,645	100%	1,483	100%	1,574	100%	1,584	100%

Note: The EL count reported for a particular year represents the number of EL students who participated in the annual January Access 2.0 assessment and not necessarily the total number of EL students statewide. Performance levels were rounded down (e.g., a performance level of 2.9 was coed as a performance level of 2).

Source: Tabulations provided by the Vermont Agency of Education.

Exhibit 5. EL Student County by WIDA Proficiency Levels & Vermont Supervisory Unions/Districts (SY2017-SY2022)

	2019				2020				2021				2022				2023			
	WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6	
	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%
Addison Central SD	6	24.0%	19	76.0%	2	11.8%	15	88.2%	4	28.6%	10	71.4%	3	25.0%	9	75.0%	14	63.6%	8	36.4%
Addison Northwest SD	4	33.3%	8	66.7%	*		*		*		*		*		*		*		*	
Barre SU	10	52.6%	9	47.4%	11	52.4%	10	47.6%	6	37.5%	10	62.5%	5	33.3%	10	66.7%	9	64.3%	5	35.7%
Bennington Rutland SU	*		*	*	11	84.6%	2	15.4%	7	53.8%	6	46.2%	20	83.3%	4	16.7%	17	68.0%	8	32.0%
Burlington SD	406	77.8%	116	22.2%	351	69.1%	157	30.9%	313	72.1%	121	27.9%	330	74.8%	111	25.2%	291	69.1%	130	30.9%
Champlain Valley SD	53	52.0%	49	48.0%	54	56.3%	42	43.8%	39	52.7%	35	47.3%	46	59.0%	32	41.0%	55	60.4%	36	39.6%
Colchester SD	50	61.7%	31	38.3%	45	52.9%	40	47.1%	31	51.7%	29	48.3%	43	55.1%	35	44.9%	41	59.4%	28	40.6%
Essex Westford SD	72	50.3%	71	49.7%	65	46.1%	76	53.9%	102	56.7%	78	43.3%	111	62.7%	66	37.3%	98	57.0%	74	43.0%
Franklin Northeast SU	*		*		*		*		*		*		11	64.7%	6	35.3%	12	52.2%	11	47.8%
Franklin West SU	*		*		*		*		*		*		*		*		n/a		n/a	
Hartford SD	11	73.3%	4	26.7%	11	61.1%	7	38.9%	7	41.2%	10	58.8%	12	52.2%	11	47.8%	7	36.8%	12	63.2%
Harwood Unified Union SD																	8	53.3%	7	46.7%
Kingdom East SD	8	72.7%	3	27.3%	*		*		*		*		*		*		*		*	
Lamoille North SU	*		*		*		*		*		*		10	90.9%	1	9.1%	10	83.3%	2	16.7%
Lamoille South SU																	10	76.9%	3	23.1%

	2019				2020				2021				2022				2023			
	WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6		WIDA Levels 1-3		WIDA Levels 4-6	
	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%	# EL	%
Maple Run SD	9	56.3%	7	43.8%	13	81.3%	3	18.8%	10	66.7%	5	33.3%	8	47.1%	9	52.9%	10	55.6%	8	44.4%
Milton SD	14	58.3%	10	41.7%	15	57.7%	11	42.3%	17	65.4%	9	34.6%	15	50.0%	15	50.0%	17	53.1%	15	46.9%
Missisquoi Valley School District									*		*		6	54.5%	5	45.5%	*		*	
Montpelier Roxbury SD	23	56.1%	18	43.9%	20	48.8%	21	51.2%	12	37.5%	20	62.5%	29	59.2%	20	40.8%	23	63.9%	13	36.1%
North Country SU																	13	76.5%	4	23.5%
Rutland City SD	13	81.3%	3	18.8%	15	71.4%	6	28.6%	13	68.4%	6	31.6%	10	47.6%	11	52.4%	9	50.0%	9	50.0%
SAU 70																	5	41.7%	7	58.3%
South Burlington SD	82	53.2%	72	46.8%	86	50.3%	85	49.7%	90	56.6%	69	43.4%	79	53.7%	68	46.3%	99	61.5%	62	38.5%
Springfield SD	9	75.0%	3	25.0%	8	66.7%	4	33.3%	*		*		12	80.0%	3	20.0%	12	85.7%	2	14.3%
Two Rivers SU	3	25.0%	9	75.0%	*		*		*		*		0		0		*	*	*	
Windham Southeast SU	6	30.0%	14	70.0%	5	38.5%	8	61.5%	16	66.7%	8	33.3%	34	87.2%	5	12.8%	26	78.8%	7	21.2%
Winooski SD	229	80.6%	55	19.4%	205	78.8%	55	21.2%	184	78.0%	52	22.0%	194	84.7%	35	15.3%	186	83.8%	36	16.2%

* Number suppressed to protect student privacy.

Note: The EL count reported for a particular year represents the number of EL students who participated in the Access 2.0 assessment and not necessarily the total number of EL students statewide. Performance levels were rounded down (e.g., a performance level of 2.9 was coed as a performance level of 2). Some SU/SDs do not have data for all years due to districts closing, opening, or merging.

Source: Tabulations provided by the Vermont Agency of Education.

Costs of Educating EL Students

Varying Resource Requirements

The resource requirements to educate EL students and operate EL programs differ according to student need and school district context. ELs may require different levels of support based on their language proficiency, linguistic and academic histories, and age or grade level. For instance, EL costs may be higher for students with lower levels of English proficiency as well as for Newcomer/SLIFE students (APA Consulting, 2015; Jacobsen et al., 2022; Sugarman, 2016; Umansky et al., 2018).

Similarly, districts and schools require different resources to operate their EL programs based on the varying student needs, program size, and the infrastructure in place for serving EL students (Jimenez-Castellanos & Topper, 2012; Jacobsen et al., 2022; Sugarman, 2016; Umansky et al., 2018). For instance, EL programs that provide services to smaller numbers of students have higher per student costs than larger programs that serve more students (Jacobsen et al., 2022; Sugarman, 2016). There may also be higher initial EL program costs for districts that do not have a history of serving EL students (Jimenez-Castellanos & Topper, 2012; Steele et al., 2018).

Variation in EL student costs are particularly challenging to estimate for districts and schools that serve very small EL student populations (Jacobsen et al., 2022). In contexts with very small numbers of EL students, staff member responsibilities are frequently divided between providing EL services and their other educational responsibilities. This makes it difficult to capture the full cost of resources for individual students or determine how spending varies according to student characteristics using budgets or expenditure information that is contained in district and school financial information systems (Lee & Hawkins, 2015).

In prior research, differences in the resources required to educate students with varying needs and in different district contexts have been organized and documented according to general EL program elements and resource categories (APA Consulting, 2015; Gandara & Rumberger, 2008; Jacobson et al., 2022; Jimenez-Castellanos & Topper, 2012). These categories and functions include:

- 1) **Instructional services**, including the time spent by teachers, paraprofessionals, curricular experts, and other instructional staff providing educational services to EL students.
- 2) **Additional academic supports and services**, including tutoring provided during extended day and summer programs.
- 3) **Screening and assessment**, including formative and summative assessments and academic or language screeners to determine and monitor EL language proficiency and the tailored instructional materials that are developed to support EL programs.

- 4) **Supplies, materials, and technology**, including educational technology to support English language development or core content learning; access to online coursework in languages other than English; bilingual dictionaries and textbooks; and headphones with microphones.
- 5) **Family/home communications and connections**, including additional support from counselors, social workers, and EL program coordinators of family liaisons to engage and help families navigate the school system and connect them with school resources. Also, family support and engagement activities and events.
- 6) **Translation services**, including interpreters and software for preparing required home-school communications.
- 7) **Professional development and training**, for general education and EL teachers.
- 8) **Special programs for Newcomer/SLIFE EL students**, who need targeted and intensive supports to address gaps in academic or literacy skills and knowledge to facilitate access to core grade-level instruction.
- 9) **Program administration and compliance**, including staffing allocations for implementing EL programs as well as providing support for staff in developing curricula and adapting instruction. Also, for ensuring compliance with federal and state laws and program/funding requirements.

Together these program elements and resource categories serve as the building blocks districts and schools use to implement effective EL programs (Jacobsen et al., 2022; Sugarman, 2016).

Findings from Cost Studies in Vermont

In the past decade, Vermont conducted two education cost studies, both of which produced estimates for the additional cost of educating the state's EL students: 1) The Picus, Odden & Associates adequacy study (2016);¹⁶ and 2) The Pupil Weighting Factors Study (2020).

The "Picus Report"

The first study, *Using the Evidence-based Method to Identify Adequate Spending Levels for Vermont Schools* (the "Picus Report"), was submitted to the Vermont General Assembly in 2016. For this study, Picus, Odden, & Associates used an evidence-based approach to identify the resources that a **prototypical school** should have to provide its students with an adequate education. While the study did not specifically focus on costing out what is needed to provide Vermont's EL students with an adequate education, the model did include assumptions for the

¹⁶ Odden, A., Picus, L., Griffith, M., & Hoyer, K. (2016). *Using the evidence-based method to identify adequate spending levels for Vermont schools*. <https://lifo.vermont.gov/assets/docs/education/adequacy/17e5b10a4a/VT-EB-Analysis-20.1.pdf>

personnel resources a prototypical school should have. Specifically, a prototypical school should have the following staff to support its EL students:

- One FTE tutoring position for every 125 EL students
- One FTE extended day position for every 120 EL students
- One FTE summer school position for every 120 EL students
- One FTE additional pupil support position for every 125 EL students
- One FTE language resources position per 100 ELL students

Altogether, the Picus Report's staffing model translates to about 4.2 positions for every 100 EL students in a school, or put differently, each group of about 23 EL students triggers an additional licensed position.¹⁷ The model's *estimated cost for a prototypical school* was equal to an additional \$3,502 per EL student in 2016 dollars or about \$4,539 in 2023 dollars.¹⁸ The Picus Report's cost model does not consider how student-level resources might vary according to different levels of English proficiency or economies of scale when districts operate comparatively smaller and larger EL programs.

The Pupil Weighting Factors Study

The Pupil Weighting Factors Study (2020) was completed by a team of school finance experts from the University of Vermont, The American Institutes for Research, and Rutgers University.¹⁹ The study derived estimates for the average additional *cost of educating EL students to meet Vermont's education standards* using a cost function modeling approach. The study's findings are the basis for the revised EL pupil weight that will go into effect for FY2025.

The study found that for FY2018, the *average* additional cost of educating an EL student to common outcomes was \$22,947. The estimate represents the *average additional expenditure by Vermont districts* to educate an EL student to meet state academic proficiency standards in math and English language arts, over-and-above what is spent for a general education student with no additional needs. Due to data limitations, the study did not develop estimates for the average cost of educating EL students with varying levels of English proficiency or program size. Cost function models also cannot explain how dollars were spent by districts and schools to attain outcomes.

¹⁷ Although not specified, the cost estimates derived from the Picus Report's evidence-based models assume that the staffing resources specified by the model are sufficient for: (a) EL program administration activities; (b) student assessments; (c) family/home communication; (d) interpretation and translation services; and (e) other non-personnel expenses for supplies, materials, and technology.

¹⁸ The 2016 cost estimate was adjusted for inflation using the US Bureau of Labor Statistics' CPI Inflation Calculator (Link: https://www.bls.gov/data/inflation_calculator.htm). The updated estimate is reported in November 2023 dollars.

¹⁹ Kolbe, T., Baker, B., Atchison, D. & Levin, J. (2020). *Pupil weighting factors report*. <https://legislature.vermont.gov/assets/Legislative-Reports/edu-legislative-report-pupil-weighting-factors-2019.pdf>

Findings from Recent Cost Studies in Other States

While most state education cost studies consider the resources required to educate EL students in their overall estimates, just a handful of studies have specifically focused on EL students and how the costs of educating EL students vary according to student and district characteristics (Jimenez-Castellanos & Topper, 2012; Jacobsen et al., 2022).

Two recent studies develop cost estimates for EL students that explicitly consider language proficiency and district size: (1) the Professional Judgment Study Report, which was conducted as part of a review of Nevada’s school funding system (2015);²⁰ and (2) the Ohio English Learner Study, which assessed the cost of implementing EL programs in Ohio’s public schools (2022).²¹

Nevada

Augenblick, Palaich, and Associates (APA) developed estimates for the base cost and adjustments needed for Nevada’s EL students to meet state standards. Estimates were derived using a hybrid professional judgment and evidence-based approach to identify the resources required to provide EL services and valued these resources with local Nevada prices (e.g., teacher wages).²²

The study estimated *school-level costs* per EL student, differentiated by three levels of EL proficiency and grade level. (Exhibit 6) The *school-level* per student costs ranged from \$3,482 (\$4,571 in 2023 dollars) for elementary grade EL students with WIDA Level 1 or 2 English proficiency to \$768 (\$1,008 in 2023 dollars) for high school grade EL students with WIDA Level 5 or 6 English proficiency.

While panelists identified a broad range of resources required to implement comprehensive EL programs in Nevada’s public schools,²³ the representative schools on which the estimates are based are problematic for generalizing the study’s findings to the Vermont context.

²⁰ Augenblick, Palaich, and Associates (APA) (2015). *Professional judgment study report*. Lincy Institute. https://www.unlv.edu/sites/default/files/page_files/27/Lincy-ProfessionalJudgmentStudyReportAPA.pdf

²¹ Jacobsen, A., McClellan, P., Ferrell, R., Porter, L., Brown, A., Silverstein, J., & Piscatelli, J. (2022). *Ohio English learner cost study: An assessment of the costs to implement English learner programs in Ohio’s schools*. WestEd. <https://education.ohio.gov/getattachment/Topics/Student-Supports/English-Learners/English-Learner-Programs/English-Learners-Cost-Study.pdf.aspx?lang=en-US>

²² The professional judgment approach – also known as the resource cost model, market-basket approach, or ingredients approach – is the most used approach to developing estimates for education policy and program costs (Baker, Taylor & Vedlitz, 2005). Expert panel(s) are asked to identify the services and programs that students need to meet specified performance outcomes in prototypical districts or schools. Researchers then assign market prices to each resource to develop a total cost estimate. The evidence-based approach uses existing research and accepted standards to identify the types and quantities of resources required educate students to state standards. Like the professional judgment approach, identified resources are valued using market prices to develop a cost estimate.

²³ The estimates assume small class sizes (15:1 for K-3 and 25:1 for grades 4-12); professional development and instructional coaches for teachers; student support counselors and social workers; technology rich environments; time for teacher collaboration; and extended day and summer school opportunities for L1-L4 students.

Assumptions for average school size for Nevada elementary and middle schools are much larger than what is found in Vermont. (Exhibit 7) Panelists also assumed larger numbers and concentrations of EL students than are found in Vermont schools.

For instance, the prototypical Nevada elementary school enrolled at least 225 EL students, middle school enrolled 375 EL students, and high school enrolled 650 EL students. For all schools, panelists *also assumed that at least 50% of enrolled students received EL services*. The panelists translated these assumptions to recommendations for an EL instructional model that would be impossible to replicate in Vermont since no schools serve similarly large numbers or percentages of EL students or operate programs of a similar scale.

Exhibit 6. Summary of School-level Per Student Costs from Nevada EL Cost Study (2015)

	Elementary School (Grades K-5)	Middle School (Grades 6-8)	High School (Grades 9-12)
Levels 1 & 2	\$3,482 (\$4,571)	\$2,749 (\$3,608)	\$3,021 (\$3,966)
Levels 3 & 4	\$2,617 (\$3,435)	\$2,749 (\$3,608)	\$2,898 (\$3,804)
Levels 5 & 6	\$1,063 (\$1,395)	\$1,140 (\$1,496)	\$768 (\$1,008)

Note: The three EL categories considered by the panel were based on the following WIDA proficiency classifications: (1) L1 (entering) and L2 (beginning) students; (2) L3 (developing) and L4 (expanding) students; and (3) L5 (bridging) and L6 (monitoring) students. Updated estimates reported in November 2023 dollars are reported in parentheses.

Source: APA, Professional Judgment Study Report (2015)

Exhibit 7. Description of Representative Schools Used to Develop Nevada’s EL Cost Estimates

	Elementary School (Grades K-5)	Middle School (Grades 6-8)	High School (Grades 9-12)
Enrollment	450	750	1,300
Counts of students requiring EL services			
Levels 1 & 2	68	75	65
Levels 3 & 4	135	225	325
Levels 5 & 6	23	75	260
Overall concentration	50%	50%	50%

Source: APA, Professional Judgment Study Report (2015)

Ohio

A team of researchers from WestEd and APA conducted a comprehensive study of the cost of operating EL programs in Ohio’s public schools. The team developed two sets of estimates. The first are based on a *statewide survey with school districts* and the second were developed using a professional judgment approach that generated estimates for *prototypical Ohio schools*. Taken together, the two approaches provide a complementary picture of “what is” (based on survey results) an “what should be” (based on judgment by a panel of experts). Both approaches consider how the cost of educating an EL student varies according to the size of a local education agency’s (LEA) EL population and the additional cost of educating EL students who are Newcomer/SLIFE.

Exhibit 8 presents estimates for the per EL student cost, by *district program* size, that were derived from the statewide survey with Ohio’s school districts. The estimates reflect the cost of the *actual resources used by Ohio school districts to provide EL services and operate their EL programs*.

The findings show that the per pupil costs for EL programs decrease as program size increases. The average cost estimate for *districts* that operate *very small programs*, comprised of *four EL students*, is \$21,300 per EL student (about \$23,262 in 2023 dollars) and about \$13,300 per EL student for LEAs operating small EL programs with just 16 students (about \$14,525 in 2023 dollars). LEAs operating medium sized EL programs spent, on average, \$10,400 per EL student (about \$11,358 in 2023 dollars). To put these numbers in context, the majority of Vermont SU/SDs operate either “small” or “very small” EL programs, as defined by researchers for the Ohio study; just one Vermont SU/SD operates a “large” EL program (Burlington).

Exhibit 8. Estimated Per EL Student Cost for Ohio School District, by Program Size (Statewide Survey Results)

LEA Program Size	Average Additional Per EL Student Cost	Median Additional Per EL Student Cost
Very Small (4 ELs)	\$21,300 (\$23,262)	\$19,300 (\$21,078)
Small (16 ELs)	\$13,300 (\$14,525)	\$8,000 (\$8,737)
Medium (50 ELs)	\$10,400 (\$11,358)	\$6,500 (\$7,099)
Large (265 ELs)	\$6,700 (\$7,317)	\$4,200 (\$4,587)

Note: Calculations are based on **district responses** to a survey about the resources they use to provide services to EL students and operate their EL programs. The researchers excluded district estimates that were more than two times the standard deviation for the overall estimate. Estimates converted to November 2023 dollars are reported in parentheses.

Source: Jacobson et al., 2022.

The study's professional judgment panel drew on the experience and expertise of a statewide panel of educators to identify the resources a set of *prototypical schools* need to have in place to ensure that their EL students met state standards. Panelists recommended a program model that include resources for instruction, student support and family engagement, program administration, and non-personnel supports for all EL students. The panel also recommended additional supports for Newcomer/SLIFE EL students.

Exhibit 9 presents estimates for the per EL student cost, by *school* program size, that were derived from the professional judgment panel recommendations. The estimates reflect the cost of the *resources that were recommended by panelists for Ohio's schools to provide EL services and operate their EL programs.*

When developing their recommendations for how instructional services for EL students should be provided to best serve students, the panelists made a noteworthy distinction in their recommended staffing models for *schools* with EL student enrollments that are less than 1% of their total enrollment.

Specifically, the Ohio professional judgment panel determined that basing cost estimates on instructional FTEs (student-to-staff ratios) is not practicable. Instead cost estimates should be based on assumptions about the number of *minutes per week* students receive services from a qualified EL teacher. The professional judgment panel assumed that in these settings students are generally served individually, with a small percentage of overlapping time (10%) to allow for minimal economies of scale. Specifically, the panel recommended that cost estimates for EL students in districts with small or very small EL programs assume *150 minutes per week of EL services from a TESOL-endorsed instructor*, rather than a prescribed staffing ratio.

For schools with EL enrollments that are larger than 1% of its student population, the professional judgment panelists assumed staffing ratios of: (a) 15 students to one TESOL teacher for students with "emerging" language proficiency; (b) 30:1 for students with "progressing" language proficiency; and (c) 100:1 for students who were proficient and transitioning from the EL program. For a typical school, the weighted average was a student-teacher ratio of about 25:1. An additional consideration is that content presented to students must be age appropriate.²⁴ This poses an added complication when determining whether to provide students with EL services individually or in a small group.

²⁴ When grouping students, the U.S. Departments of Justice and Education clarify in their 2015 "Dear Colleague Letter" that instructional content must be age appropriate. As a result, districts cannot necessarily group students of multiple ages/grades together if they have the same proficiency level. This is an important consideration in places where there are small numbers of students receiving EL students distributed across multiple ages/grades.

Like the cost estimates based on the statewide survey with LEAs, the estimates based on the professional judgment panel's recommendations decrease as the number of EL students in a school increase. The average additional per EL student cost for *schools* with "very small" programs (with 10 EL students) was \$10,496 (\$11,463 in 2023 dollars), while the per student cost for school with 125 EL students was \$5,866 (\$6,406 in 2023 dollars).

Panel recommendations were also used to estimate the additional cost, over-and-above the per student EL cost estimate, for providing additional services and supports to Newcomer/SLIFE EL students. (Exhibit 9) When developing their recommendations, the panel recognized that Newcomer/SLIFE EL students should be provided additional support from TESOL-endorsed staff, counselors, and social workers, and at the secondary level, a credit program supervisor. The panelists recommended more resources for Newcomer/SLIFE EL students in the secondary grades, compared to those students in the elementary grades, because the impact of students' having interrupted formal education is a deeper issue to address in high school and there is a sense of urgency with efforts to help students learn the language and gain the credits they need to graduate.

On average, the average additional cost of educating a secondary-level Newcomer/SLIFE EL student was \$8,639 (\$9,434 in 2023 dollars), and just \$597 per elementary level student (\$652 in 2023 dollars).

Exhibit 9. Estimated Per EL Student Cost in Ohio, by Number of EL Students in a School (Professional Judgment Panel Results)

School Program Size	Average Additional Per EL Student Cost	Grade Level	Additional Costs for Newcomer/SLIFE Students
Very Small (10 ELs)	\$10,496 (\$11,463)	Elementary	\$597 (\$652)
Small (25 ELs)	\$8,275 (\$9,037)	Middle	\$4,752 (\$5,189)
Medium (125 ELs)	\$5,866 (\$6,406)	Secondary	\$8,639 (\$9,434)
Large (375 ELs)	\$5,892 (\$6,434)		
Very large (1,200 ELs)	\$5,566 (\$6,078)		

Note: Calculations are based on professional judgment panel recommendations for the resources they use to provide services to specific numbers of EL students in a **school**. The panelists used different assumptions for the number of EL students in a school, whereas the unit was **the LEA (or district)** for the survey findings (Exhibit 7). For instance, the panelists identified a **school** with a “very small” EL program as having 10 EL students, whereas the survey findings defined a “very small” **school** EL program as having 4 EL students. Updated estimates reported in November 2023 dollars are reported in parentheses.

Source: Jacobson et al., 2022

Generalizing the cost estimates based on Ohio’s *professional judgment panel recommendations* to the Vermont context is potentially problematic for two reasons.

First, the prototypical schools that panelists used to determine staffing levels were larger than most Vermont schools, especially at the elementary and middle grade levels. The panel considered the resources necessary for an elementary school with 425 students, a middle school with 500 students, and a high school with 600 students. Most Vermont schools will not enroll enough EL students for Ohio’s professional judgment panel’s recommended staffing ratios, and resulting cost estimates, to apply.

This suggests that the cost estimates for “very small” school programs (i.e., 4 EL students) may be the most relevant comparison since most Vermont schools’ EL enrollments do not exceed one percent of their total enrollment. Cost estimates for Ohio’s very small school programs are based on assumptions about minutes of service for an EL student, not staffing ratios.

Second, the assumptions for the number of minutes of EL instructional services per week used to estimate the costs for very small EL programs *are inconsistent with the minimum levels of required EL services provided by a certified ESL or bilingual teacher that have been agreed upon by the US Office of Civil Rights (OCR) and US Department of Justice (DOJ) in settlements and agreements with school districts nationwide.*

Exhibit 10 provides an overview of recent agreements and settlements by school districts with OCR/DOJ, which can be interpreted as what is *minimally* required by law.²⁵ The Ohio panel recommended 150 minutes per week, whereas most OCR/DOJ agreements and settlements stipulate *at least 225 minutes per week of EL services*, and some instances even more time for students with Level 1 and 2 English proficiency or Newcomer/SLIFE EL students.

The Ohio professional judgment panel recommendations are also inconsistent with other states' guidelines. For instance, Montana's Office of Public Instruction recommends the following minimums for the number of minutes for English language development support:

- Levels 1-2: 300-675 minutes/week; 60-135 minutes/day; 5 days per week; and
- Levels 3-5: 225-450 minutes/week; 45-90 minutes/day; 5 days per week.²⁶

EL Pupil Weights in Vermont's Education Funding Formula

In Vermont, weights are used to calculate the number of equalized pupils in a school district. An equalized pupil can be thought of as an average pupil in terms of educational costs in a school district. That is, an equalized pupil in a school district will have the same cost as any other equalized pupil, even though the actual per pupil cost of an individual student varies.

Vermont's current formula includes a weight for English language learners. This weight is used to adjust a district's membership to account for the additional cost of educating students with limited English proficiency. Starting July 1, 2024, the weight for EL pupils included in a district's long-term membership shall receive an additional weight of 2.49 (16 VSA Section 4010(d)(3) for each EL student.²⁷

In addition to the EL weight, starting July 1, 2024, school districts that have 1-5 EL students will receive a categorical grant of \$25,000 and districts with 6-25 EL students will receive a categorical grant equal to \$50,000 for that school year.

²⁵ While recent agreements and settlements can be interpreted as what is minimally required by law, this may not be proven as best practice nor most effective and as a result districts implementing these minimums could still fall short of meeting the *Castañeda* standards.

²⁶ Montana Office of Public Instruction (n.d.) *Recommended minute requirements per WIDA proficiency level (K-12)*. <http://tinyurl.com/35je8hs4>

²⁷ Prior to July 1, 2024, the adjustment was equal to multiplying 0.20 by the count of resident students in a district for whom English is not their primary language.

Exhibit 10. Office of Civil Rights/US Department of Justice Agreements or Settlements on Minimum Levels of Required EL Service Provided by a Certified ESL/Bilingual Teacher

School District	Settlement Year	Settlement Terms
Colton Joint Unified School District	2020	At least 1 period daily, equivalent to core subjects (~225 minutes per week)
Coolidge Unified School District	2020	300 minutes/week for elementary grade students; 250 minutes per week for secondary students
Arlington Public Schools Settlement	2019	1 "period" daily (~225 minutes per week) An additional daily period for WIDA Levels 1-2 (~225 additional minutes per week)
Martin Luther King Jr. Charter School	2019	45 minutes daily (~225 minutes per week)
Nashua School District	2019	1 "period" daily (~225 minutes per week) An additional daily period for WIDA Levels 1-2 (~225 additional minutes per week)
Adams 12 Five Star School District	2018	45 minutes daily, all proficiency levels and grades (~225 minutes per week)
Providence Schools	2018	1 daily period (~225 minutes per week)
Union Public Schools	2018	1 daily period (~225 minutes per week)
Westminster Public Schools	2018	45 minutes daily (~225 minutes per week) An additional daily period for WIDA Levels 1-2 (~225 additional minutes per week)
Clay County School District	2017	At least 1 class period (approximately 45 minutes) daily (~225 minutes per week)
Horry County Schools	2017	45 minutes daily or 225 minutes per week
Rowan-Salisbury Board of Education	2017	225 minutes per week An additional daily period for Newcomers & WIDA Levels 1-2 (~225 additional minutes per week)
Prince William County Schools	2016	30 minutes daily (or equivalent per week) (~150 minutes per week)
Lau v. San Francisco Unified School District (Lau v. Nichols) 2015 Modified Consent Decree	2015	30 minutes designated ELD daily Additional required integrate ELD for all (unspecified amount of time)
Crestwood OCR Agreement	2014	Level 1: 120 minutes daily, or two periods (~600 minutes per week) Levels 2-3: 60 minutes daily, or one period (~300 minutes per week) Levels 4-5: 30 minutes daily
Stamford Public School District	2013	Level 1: 1 period (45 minutes/day) + 1 sheltered period daily (approx. 10 hours/week) (~600 minutes per week) Level 2: 1 period (45 minutes/day) +1 sheltered period daily (approx. 8-9 hours/week) (~540 minutes per week) Level 3: 1 period (45 minutes day) + 1 sheltered period daily (approx. 6-8 hours/week) (~480 minutes per week) Level 4-5: 2.5 hours per week (~150 minutes per week)
San Bernardino City USD	2010	1 daily period (225 minutes per week)
Somerville	2008	1 daily period (~225 minutes per week) To the extent practicable, 2.5 hours/day for Newcomers
Worcester Public School District	2008	1 daily period (~225 minutes per week)
Bound Brook Settlement	2004	45 minutes daily, grades 3-6 (~225 minutes per week) 150 minutes/week for grades K-2, 7-12
North Plainfield Board of Ed	2004	150 minutes per week
Plainfield Board of Ed	2003	150 minutes per week

Source: Adapted from Schwaller, (n.d.) *Does Michigan mandate a specific number of ELD instructional minutes for English learners or a minimum staffing ratio?*

Cost Estimates for Educating EL Students in Vermont

This study used a hybrid evidence-based and professional judgment panel approach to identify the tangible resources Vermont districts and schools need to educate EL students with varying levels of English proficiency at different grade levels. Together, evidence from prior research and the professional judgment of practitioners in the field were used to develop detailed profiles of the resources that *should* be used to educate a student and operate effective EL programs.

The initial evidence-based cost model draws on existing research and accepted standards in the field to identify specific types and quantities of resources. Then, the study used a professional judgment approach to further clarify and refine the initial evidence-based cost models. The AOE's Multi-lingual Advisory Group (ML Advisory Group) served as the professional judgment panel to provide input on the cost models. ML Advisory Group members include researchers, technical assistance experts and practitioners in the field with expertise providing services to EL students and developing and implementing EL programs that comply with federal and state requirements.²⁸

Both approaches produce cost models that identify the tangible resources required to provide EL services and implement successful EL programs in districts and schools that are compliant with federal law and regulations and then assign a value to each resource using market prices.²⁹ This bottom-up approach to estimating education program costs is particularly useful for developing estimates that reflect differences in the types and quantities of resources needed to educate students with varying levels of English proficiency, across different grade levels and educational contexts.

Two distinct cost estimates were developed for the study. The first is an estimate for the *student-level cost* to provide EL services to a student with limited English proficiency. For this estimate, the study developed a cost model that identified the specific resources (types and quantities) required to provide a student with EL services, including:

- a) The number of instructional minutes by a licensed teacher.

²⁸ The ML Advisory Group reviewed and provided input on the cost models at three separate meetings during Fall 2023. Each meeting lasted at least 120 minutes and the Group systematically considered whether the models included the types of resources necessary to educate EL students and operate a successful EL program, and if so, whether the quantity of resources specified in the model was adequate and appropriate to students' needs.

²⁹ Most of the resources used to provide EL services and operate SU/SD EL programs are time spent by district and school staff. Staff time was valued using Vermont's average wage and benefit rates for specific personnel categories (e.g., elementary school teachers) during the 2023 school year. The source for this information was tabulations prepared by the Vermont Agency of Education using its data files that track compensation, by staffing category, statewide. Non-personnel resources were either valued using the fair market rate in Vermont or a fixed amount recommended in research or by the ML Advisory Group.

- b) Additional academic supports and services.
- c) Time spent by teachers collaborating to provide instruction and support to an EL student.
- d) Extended learning time (afterschool and summer school).
- e) The time spent by teachers and EL coordinators administering the ACCESS 2.0 assessment, reviewing a student's scores, and using this information to develop curricula and instructional plans to support the student.
- f) Time spent by EL teachers communicating with parents about their EL student.
- g) Non-personnel spending for a student, including supplies, materials, and technology; student activities; and translation and interpreter services.

Estimates based on this first model can tell us about the extent to which, and in what ways, the cost of educating EL students differ according to their varying needs and where they attend school.

The second model identifies the resources *districts* need to operate successful EL programs and comply with federal and state laws. District-level EL program costs can be fixed, variable, or lumpy.³⁰ Resources for which the quantity required is constant, regardless of the number of program participants being served in each context, represent fixed costs. By comparison, variable costs are resources for which the quantity varies directly in proportion to the number of participants served. Resources for which quantity steps up at intervals represent lumpy costs. Understanding how district costs vary across these three dimensions is important for evaluating whether the categorical grant program initiated by Act 127 will appropriately offset differences in EL program costs across districts that serve different numbers of EL students.

Student-level Cost Estimates

Exhibit 11 presents the initial resource assumptions for the student-level cost model. The initial assumptions were generated using evidence from prior EL cost studies, research on the annual cost of providing EL services, and settlements and agreements between school districts and OCR/DOJ.

³⁰ Cost Analysis Standards Project. (2021). *Standards for the economic evaluation of educational and social programs*. American Institutes for Research. <https://www.air.org/sites/default/files/Standards-for-the-Economic-Evaluation-of-Educational-and-Social-Programs-CASP-May-2021.pdf>

Exhibit 11. Initial Resource Assumptions for Student-level Cost Model Presented to AOE’s Multilingual Education Advisory Group for Discussion

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ³¹	New-comer/SLIFE ³²	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Instructional Minutes by Licensed Teacher³³	120 mins daily/2 class periods	60 mins daily/1 class period	60 mins daily/1 class period	Monitoring 30 min/week	30 min/day	120 mins daily/2 class periods	60 mins daily/1 class period	60 mins daily/1 class period	Monitoring 30 min/week	30 min/day	120 mins daily/2 class periods	60 mins daily/1 class period	30 mins daily	Monitoring 30 min/week	30 min/day
Instructional Aides³⁴										4 periods per day in core content					4 periods per day in core content

³¹ Assumes that reclassified students should be supported for two years after reaching proficiency.

³² Assumes that Newcomer/SLIFE students receive additional supports and services, beyond what they would receive based on their WIDA proficiency level. This assumption is consistent with what was recommended by the professional judgment panels that informed the Ohio and Nevada EL cost studies (Jacobson et al., 2022; Professional Judgment Study Report, 2015).

³³ This is the number of minutes of instructional support a student receives. The predominant model in most SU/SD’s is to provide individualized instruction (pull out or push in) since there are too few students to group by proficiency level and age. Students also are frequently distributed among different schools within a district. The initial recommendation to the ML Advisory Group for the number of minutes (by grade level and English proficiency level) was what was stipulated in the agreement between the Crestwood School District and the US Department of Justice. (Link: <https://www.justice.gov/sites/default/files/crt/legacy/2014/08/27/crestwoodagree.pdf>)

³⁴ Instructional aides provide additional push-in support to students in general education classrooms; they do not provide primary instruction. The professional judgment panel for the Ohio EL cost study recommended that middle and secondary grade Newcomer/SLIFE EL students have additional support in the general education classroom during instruction in core academic content (Jacobsen et al., 2022).

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ³¹	New-comer/SLIFE ³²	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Teacher collaboration time (EL teachers with general education teachers)³⁵	30 min/Week	30 min/week	30 min/week	30 min/week		45 min/Week	45 min/week	45 min/week	45 min/week		45 min/Week	45 min/week	45 min/week	45 min/week	
Extended Learning Time³⁶	60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)			60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)			60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)	60 min 4 days/week (10:1 teacher ratio)		
Summer School³⁷	3 hrs/day 5 days per week for 4 weeks	3 hrs/day 5 days per week for 4 weeks				3 hrs/day 5 days per week for 4 weeks	3 hrs/day 5 days per week for 4 weeks				3 hrs/day 5 days per week for 4 weeks	3 hrs/day 5 days per week for 4 weeks			

³⁵ Per student cost estimates presented in the Professional Judgment Study Report (Nevada, 2015) included time for classroom and EL teachers who are pulling students out of classrooms to communicate about and collaborate around a student's needs.

³⁶ Extended learning time may occur before or after school, or on weekends, to provide additional support and services to students. The estimate should include instructional time as well as supplies and materials and transportation. Initial time estimates were based on recommendations made by the professional judgement panel for the Nevada EL cost study (2015).

³⁷ The professional judgement panel for the *Ohio English Learner Cost Study* recommended a summer school program for 100% of "emerging" and 50% of "progressing" students that is 3 hours a day, 5 days a week for 4 weeks and staffed by a TESOL-endorsed instructor at a 12:1 ratio (Jacobson et al., 2022).

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ³¹	New-comer/SLIFE ³²	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Assessment, ACCESS Test, & Service Plans³⁸															
Parent Communication³⁹	15 min/week	5 min/week	5 min/week			15 min/week	5 min/week	5 min/week			15 min/week	5 min/week	5 min/week		
Technology & Software⁴⁰	\$200	\$200	\$200			\$200	\$200	\$200			\$200	\$200	\$200		
Supplies & Materials⁴¹	\$100	\$100	\$100			\$100	\$100	\$100			\$100	\$100	\$100		
Student Activities⁴²	\$50	\$50	\$50			\$50	\$50	\$50			\$50	\$50	\$50		

³⁸ There was no initial recommendation to the ML advisory group; instead, the group provided estimates for the actual amount of time spent on assessment-related activities for a particular student.

³⁹ There was no initial recommendation to the ML advisory group; instead, the group provided estimates for the actual amount of time spent communicating with parents.

⁴⁰ Includes technology and software not available to all students through the general education program, such as headphones with microphones, iPhones, tablets, 1:1 laptop computer, and specialized software. The initial recommendation to the ML advisory group was based on recommendations by the professional judgment panel that informed the Nevada EL cost study (Professional Judgment Study Report, 2015).

⁴¹ This category includes textbooks, interventions, and other materials. The initial recommendation to the ML Advisory Group was based on recommendations from the professional judgment panel that informed the Ohio EL cost study (Jacobson et al., 2022).

⁴² This category includes student activities like field trips to allow EL students to work on their language skills in different real-world settings. The initial recommendation to the ML Advisory Group was based on recommendations from the professional judgment panel that informed the Ohio EL cost study (Jacobson et al., 2022).

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ³¹	New-comer/SLIFE ³²	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Translation/Interpreter Services ⁴³	\$400	\$400	\$400			\$400	\$400	\$400			\$400	\$400	\$400		

⁴³ This category includes spending on translation and interpretation services to support families whose native language is not English. The initial recommendation to the ML Advisory Group was based on recommendations from the professional judgment panel that informed the Ohio EL cost study (Jacobson et al., 2022).

The initial model was updated for input from the ML Advisory Group. Exhibit 12 presents the final cost model that was used to develop the student level estimates, which reflects the Group's input. Changes to the initial model, based on ML Advisory Group feedback, are noted in red (additions) and with strikeouts (subtractions). Specifically, the final cost model assumes:

1) Students with varying levels of language proficiency, and in different grades in school, require more and less instructional minutes with a licensed teacher.

Students with the lowest levels of English proficiency (Level 1) receive 120 minutes of daily EL instruction and students with Levels 2-4 English proficiency receive 60 minutes of daily EL instruction. Students with Level 5 and 6 English proficiency receive 30 minutes of contact with an EL teacher per week, primarily for monitoring their progress toward EL proficiency. Newcomer/SLIFE students receive an additional 30 minutes per day of instructional time with a licensed teacher. The initial recommendations are based on what was stipulated in the agreement between the Crestwood School District and the US Department of Justice (2014). This instructional profile is also consistent with what is recommended by the State of Montana for instructional minutes for students with different levels of English language proficiency.

2) EL teachers need time to collaborate with general education teachers to communicate about and work together to meet an EL student's needs.

The per student cost estimates presented in Nevada's EL cost study (APA, 2015) included time for classroom and EL teachers who are pulling students out of classrooms to communicate about and collaborate around a student's needs.

3) EL students need additional academic support outside the regular school day and year.

EL students benefit from additional tutoring and homework help after the school day and continued English language instruction during the summer months. The student-level cost model includes estimates for the number of additional instructional minutes with a licensed teacher after school and during summer school. The estimates are based on recommendations by the professional judgment panels for the Ohio and Nevada EL cost studies (Jacobson et al., 2022; APA, 2015).

4) EL teachers must spend time administering, reviewing, and utilizing results from a student's ACCESS 2.0 assessment.

Members of the ML Advisory Group reported that EL teachers and coordinators spend, on average, six hours per year for each student in preparation for and administration of the WIDA ACCESS 2.0 assessment, reviewing student scores, and developing curricula and instructional plans that reflect the assessment's findings.

5) EL teachers spend time communicating with an EL student’s parents and family.

Members of the ML Advisory Group reported that EL teachers spend time communicating each week communicating with a student’s parents and family, usually in writing (e.g., E-mail). On average, teachers spend more time communicating a Level 1 English proficiency student’s parents, about 15 minutes per week, and spend about 5 minutes per week communicating with the parents and family of an EL student with a Level 2-4 English proficiency.

6) Districts and schools purchase materials, supplies and technology to support an EL student’s learning.

Districts purchase specific educational technology to support an EL student’s *specific* learning needs, including laptops or tablets for Level 1 proficiency and Newcomer/SLIFE students, headphones with microphones, and specialized instructional software. Panelists for the Ohio EL cost study recommended \$100/student for supplies and materials and additional \$100 to purchase other forms of technology (Jacobson et al., 2022). That said, this is an average per student spending amount, and ML Advisory Group members noted that technology expenses for a student with low levels of English proficiency can be much higher.

7) An EL student should participate in activities that allow them to work on their language skills in real-world settings.

Panelists for the Ohio EL cost study recognized that schools should provide an EL student with opportunities to practice their language skills away from school and recommended \$50 per pupil to pay for student activities like field trips (Jacobson et al., 2022). The ML Advisory Group concurred with this recommendation and noted that costs may be higher than this amount if the district or school provides a student with transportation for the activity.

8) Districts and schools must pay for translators/interpreters to communicate with a student’s parents and family.

Translation and interpretation services are one the largest non-personnel costs districts incur when educating an EL student. Districts translate materials for students and their families and hire interpreters to communicate with and support families whose first language is not English. This includes interpreters for face-to-face meetings as well as translating required notifications and other school-home communications into languages that students’ parents or family can read and understand. Panelists for the Ohio cost study recommended \$400 per student to pay for translation and interpreter costs (Jacobson et al., 2022), and the ML Advisory Group concurred with this recommendation.

While the final cost model presented in Exhibit 12 incorporates most categories and types of resources needed to educate EL students with varying levels of English proficiency and different grade levels according to federal and state requirements, the model reflects the value of the resources needed to provide EL services to a typical – or average – EL student at a specific proficiency level. The types and quantities of resources can and will vary, student-to-student. Additionally, the cost model assumes that a student is primarily served individually by using a “pull out” or “push in” service delivery model. This assumption is based on conversations with AOE’s program staff who are familiar with how EL services are delivered statewide. Districts’ decisions to serve students individually is largely due to districts operating very small or small EL programs, where grouping students by proficiency, age, or even within a school cannot happen because there are not enough students to do so. As a result, the student-level cost models make assumptions based on the number of instructional minutes with a licensed teacher, as opposed to applying staffing ratios. This approach reflects the Vermont educational context and is consistent with professional judgment panel recommendations for the recent Ohio EL cost study (Jacobson et al., 2022).

Exhibit 12. Final Resource Assumptions for Per EL Student Cost Estimates

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary	
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ⁴⁴	New-comer/SLIFE ⁴⁵	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3
Instructional Minutes by Licensed Teacher⁴⁶	120 mins daily/ 2 class periods	60 mins daily/ 1 class period	60 mins daily/ 1 class period	Monitoring 30 min/week	30 min/day + an initial 8 hours ⁴⁷	120 mins daily/ 2 class periods	60 mins daily/ 1 class period	60 mins daily/ 1 class period	Monitoring 30 min/week	30 min/day + an initial 8 hours	120 mins daily/ 2 class periods	60 mins daily/ 1 class period
Instructional Aides										4 periods per day in core content ⁴⁸		

⁴⁴ Assumes that reclassified students should be supported for two years after reaching proficiency.

⁴⁵ Assumes that Newcomer/SLIFE students receive additional supports and services, beyond what they would receive based on their WIDA proficiency consistent with what was recommended by the professional judgment panels that informed the Ohio and Nevada EL cost studies (Jacobson et al., 2015; Judgment Study Report, 2015).

⁴⁶ Members of the ML Advisory Group noted that the number of minutes per day/week for students with different levels of language proficiency was noted that the time spent should be for substantially equal allocations throughout the week, and not for less frequent and longer blocks of time.

⁴⁷ Members of the ML Advisory Group reported that EL teachers spend an additional 8-10 hours with a Newcomer/SLIFE EL student and their family at school. This time is spent orienting the student and family to school, making connections with school and community resources, and providing extra support to begin English language instruction.

⁴⁸ Members of the ML Advisory Group did not recommend an instructional aide for Newcomer/SLIFE EL students during core academic instruction. Aides were dropped from the final cost estimate.

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ⁴⁴	New-comer/SLIFE ⁴⁵	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Teacher collaboration time (EL teachers with general education teachers)	30 min/Week	30 min/week	30 min/week	30 min/week ⁴⁹		45 min/Week	45 min/week	45 min/week	45 min/week		45 min/Week	45 min/week	45 min/week	45 min/week	
Extended Learning Time	30 ⁵⁰ min 4 days/Week (5:1 teacher ratio) + Trans. \$5/day ⁵¹	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day			30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day			30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day	30 min 4 days/week (5:1 teacher ratio) + Trans. \$5/day		

⁴⁹ The ML Advisory Group noted that the time for teacher collaboration for EL students with Level 5 and 6 proficiency was unnecessary. As a result, this time was dropped from the initial cost model.

⁵⁰ The ML Advisory Group noted that more than 30 minutes of extended learning time after school was not practicable given student schedules, and for younger students, fatigue at the end of the school day. The Group recommended reducing the amount of extended learning time to 30 minutes per day.

⁵¹ The ML Advisory Group noted that most students who stay after school require transportation after participating in extended learning time programming (e.g., tutoring; homework help). Transportation services may be more difficult and costly to provide in rural areas. The per student cost reflected here represents the Group's estimate for the average cost to a school for student transportation using regular bus service.

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ⁴⁴	New-comer/SLIFE ⁴⁵	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Summer School	3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day ⁵²	3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day				3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day	3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day				3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day	3 hrs/day 5 days per week for 4 weeks + Trans. \$10/day			
Assessment, ACCESS Test, & Service Plans⁵³	6 hours/year	6 hours/year	6 hours/year			6 hours/year	6 hours/year	6 hours/year			6 hours/year	6 hours/year	6 hours/year		
Parent Communication	15 min/week	5 min/week	5 min/week			15 min/week	5 min/week	5 min/week			15 min/week	5 min/week	5 min/week		

⁵² The ML Advisory Group noted that most students who participate in summer school will require transportation. Transportation services may be more difficult and costly to provide in rural areas. The per student cost reflected here represents the Group’s estimate for the average cost to a school for student transportation using regular bus service (for arrival and departure). The Group also noted that most summer programs will not have enough students for a 10:1 student teacher ratio and instead recommended a 5:1 ratio.

⁵³ Based on ML Advisory Group members’ experience, EL teachers and/or program coordinators spend approximately six hours per year per student administering the ACCESS 2.0 assessment, reviewing results, and developing learning plans based on the data and collaborating with other teachers to implement these plans.

Resource	Elementary Grades (K-5)					Middle Grades (6-8)					Secondary Grades (9-12)				
	Lev 1	Lev 2/3	Lev 4	Lev 5/6 ⁴⁴	New-comer/SLIFE ⁴⁵	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE	Lev 1	Lev 2/3	Lev 4	Lev 5/6	New-comer/SLIFE
Materials, supplies, and technology⁵⁴	\$200	\$200	\$200			\$200	\$200	\$200			\$200	\$200	\$200		
Supplies & Materials	\$100	\$100	\$100			\$100	\$100	\$100			\$100	\$100	\$100		
Student Activities	\$50	\$50	\$50			\$50	\$50	\$50			\$50	\$50	\$50		
Translation/Interpreter Services⁵⁵	\$400	\$400	\$400			\$400	\$400	\$400			\$400	\$400	\$400		

⁵⁴ The ML Advisory Group recommended combining the Supplies & Materials and Technology categories. They also recommended an average per student spending amount of \$200 for the revised category.

⁵⁵ The ML Advisory Group noted the high cost of obtaining translation and interpreter services, as much as \$45-60 per hour for in-person. Schools are increasingly using software and on-call interpretative services to reduce spending in this category.

Exhibit 13 presents cost estimates that are based on the final student-level cost model. Estimates differ according to a student's level of English proficiency and grade level and the model also estimates the cost of the additional resources needed to effectively serve a Newcomer/SLIFE student.

Student-level costs are highest for students with very limited English proficiency and lowest for those that are most proficient and transitioning from needing EL services. EL services for a student with a Level 1 English proficiency range from \$29,664 per school year for an elementary level student to \$31,310 for a secondary level student. Likewise, student-level costs for students with Level 2 or 3 proficiency fall between \$19,622 and \$21,077 per school year and between \$17,593 and \$15,003 for students with Level 4 English proficiency. The cost of providing EL services for a student with a Level 5 or 6 English proficiency is about \$1,700 per school year and the additional cost of serving a Newcomer/SLIFE EL student – over-and-above the cost of their EL services – is about \$6,100 per year.

The count of Vermont students statewide with different levels of English proficiency (Exhibit 4) and the average cost per EL student for each proficiency level can be used to create a weighted average cost for providing EL services to Vermont's students.

The statewide average student-level cost of providing EL services is \$19,845 for the 2023 school year. (Exhibit 13) By comparison, the pupil weighting study found that the statewide average additional cost for educating a student receiving EL services to meet state standards was \$22,947 in 2018 dollars.

Several factors may account for differences between the estimate for average additional cost from this report and the earlier estimate from the Pupil Weighting Factors report.

First, the additional cost of educating EL students who are also Newcomer/SLIFE is not included in the statewide weighted average generated for this report. The additional cost of educating a Newcomer/SLIFE student is about \$6,113 over-and-above what it costs, on average, to provide EL services to a typical multilingual student. Incorporating counts of these students would increase the statewide average, albeit by how much is unknown. Relatedly, it also could be that the mix of EL students' language proficiency and needs differ from the 2018 EL student cohort.

It also is the case that the hybrid evidence-based and professional judgment panel methods used in this report call for costing out a specific list of resources identified by the expert panel that identified at a minimum what would be needed to educate an EL, while the estimates from the 2021 pupil weighting factors report reflect the actual spending by districts for EL students to meet state academic standards. It could be that the resources identified and costed out in this study do not include the full complement of resources used by districts and schools and that the panel's recommendations do not account for all the resources necessary to attain desired outcomes.

Exhibit 13. Student-level Cost Estimate, by EL Student Language Proficiency & Newcomer/SLIFE Status and Grade Level

Student Grade Level	Language Proficiency				Newcomer/ SLIFE
	Level 1	Levels 2/3	Level 4	Levels 5/6	
Elementary Grade Student (K-5)	\$29,664	\$19,622	\$17,593	\$1,724	\$6,075
Middle Grade Student (6-8)	\$30,762	\$20,720	\$19,776	\$1,724	\$6,075
Secondary Grade Student (9-12)	\$31,310	\$21,077	\$15,003	\$1,755	\$6,190
Average Cost by Proficiency Level	\$30,579	\$20,473	\$17,457	\$1,734	\$6,113
Weighted Average Student-level Cost for SY2023	\$19,845*				

Note: See Exhibit 12 for the final set of assumptions that were used to estimate the costs reported in this table. The weighted average cost was calculated using the count of Vermont students statewide with different levels of English proficiency (Exhibit 4) and the average cost per EL student for each proficiency level (Exhibit 13).

*The weighted average does not include the additional cost of educating Newcomer/SLIFE students.

Best practices in estimating educational program costs call for *sensitivity tests* that help explain how *costs vary with changes to key assumptions* (CASP, 2021). Two sensitivity tests were applied to the cost estimates presented in Exhibit 13 – specifically, the estimates were recalculated using alternative assumptions for:

1. The number of **instructional minutes** an EL student receives from a certified teacher; and
2. Instructional **group size**.

Alternative assumptions for number of instructional minutes (sensitivity test 1). The cost of the number of instructional minutes an EL student receives from a certified teacher is the most influential assumption in the student-level cost model. In the final model, we use evidence from recent settlement and agreements with OCR/DOJ and other states’ policies (e.g., Montana) to support our assumptions. Both sources of evidence provide evidence for a minimum level of EL services provided by a certified ESL/Bilingual teacher, that vary according to different levels of English language proficiency.

That said, exhibit 10 also identifies OCR/DOJ agreements and settlements where the minimum number of instructional minutes *did not* vary according to a student’s English language proficiency. In these cases, the most common minimum level of required EL services by a certified ESL/Bilingual teacher is *225 minutes per week*, regardless of an EL student’s language proficiency.

Exhibit 14 reports estimates for an alternative student-level cost model that assumes 225 minutes instructional minutes per week for students with *Levels 1-4* English language proficiency. The revised assumption lowers the cost per EL student. EL services for a student

with Levels 1-3 English proficiency range from \$17,111 per school year for an elementary level student to \$18,519 for a secondary level student. Student-level costs for students with Level 4 proficiency fall between \$15,082 and \$17,561 per school year. The assumptions for students with Level 5 or 6 English language proficiency and Newcomer/SLIFE were not modified and the cost estimates are the same as what was reported above in Exhibit 13.

The statewide weighted average student-level cost of providing EL services if all students with Levels 1-4 English language proficiency receive 255 instructional minutes per week is \$16,589 for the 2023 school year.

Exhibit 14. Alternative Student-level Cost Estimate, Using Different Assumptions for the Number of Instructional Minutes (Sensitivity Test 1)

Student Grade Level	Language Proficiency				Newcomer/ SLIFE
	Level 1	Levels 2/3	Level 4	Levels 5/6	
Elementary Grade Student (K-5)	\$17,111	\$17,111	\$15,082	\$1,724	\$6,075
Middle Grade Student (6-8)	\$18,209	\$18,209	\$17,265	\$1,724	\$6,075
Secondary Grade Student (9-12)	\$18,519	\$18,519	\$17,561	\$1,755	\$6,190
Average Cost by Proficiency Level	\$17,946	\$17,946	\$16,636	\$1,734	\$6,113
Weighted Average Student-level Cost for SY2023	\$16,589*				

Note: The estimates reported in this table are based on an alternate set of assumptions for the number of instructional minutes with a licensed teacher for EL students with Level 1-4 language proficiency. Specifically, the cost model assumes students in each proficiency category receive 225 minutes per week of EL services from a licensed teacher. The weighted average cost was calculated using the count of Vermont students statewide with different levels of English proficiency (Exhibit 4) and the average cost per EL student for each proficiency level (Exhibit 14).

*The weighted average does not include the additional cost of educating Newcomer/SLIFE students.

Alternative assumptions for instructional group size (sensitivity test 2). Findings from an AOE survey with district and school EL program directors suggests that in most schools statewide, EL students are served individually rather than in small groups or dedicated EL classrooms. This is because there are insufficient numbers of EL students in schools to provide instruction in groups, in ways that comply with federal law. Accordingly, the cost estimates based on the final student-level cost model (Exhibit 13) assume that each EL student is generally served individually, with a small percentage of time (10%) for overlap with services provided to other students to allow for minimal economies of scale.⁵⁶

It is also the case that the Vermont school districts that serve the largest numbers of students receiving EL services may have enough students (by grade and school) to provide services in small groups or dedicated classrooms. Where this occurs, teachers can provide EL services to groups of students, allowing the cost of a teacher’s time to be distributed across multiple students.

Exhibit 15 reports estimates for an alternative student-level cost model that assumes that EL students’ instructional minutes with a licensed teacher – both during and outside the regular

⁵⁶ The Ohio EL cost study made a similar assumption in its analyses and the ML Advisory Group and AOE confirmed that the Vermont EL students who attend schools with very small numbers of EL students (<3) are typically served individually. Although EL student counts were unavailable at the school level, the very small numbers of EL students reported for LEAs suggests that most Vermont EL students attend schools with very small numbers of EL students.

school day - are in a group setting with at least one other EL student. The revised assumptions lower the cost per EL student. For instance, EL services for a student with Level 1 English proficiency fall between \$23,527 and \$27,583, depending on student grade level. By comparison, the average additional annual cost of providing EL services to a student with Level 4 English proficiency is between \$10,340 and \$15,572. The assumptions for students with Level 5 or 6 English language proficiency and Newcomer/SLIFE were not modified, and the cost estimates are the same as what was reported above in Exhibit 13.

Using the revised assumptions instructional group size, the weighted average student-level cost of providing EL services is \$15,496 for the 2023 school year. *This estimate is **only generalizable to Vermont schools that enroll at least two EL students who can be served together in an age/grade-level appropriate group setting.***

Exhibit 15. Alternative Student-level Cost Estimate, Using Different Assumptions for Instructional Group Size (Sensitivity Test 2)

Student Grade Level	Language Proficiency				Newcomer/ SLIFE
	Level 1	Levels 2/3	Level 4	Levels 5/6	
Elementary Grade Student (K-5)	\$23,527	\$12,369	\$10,340	\$1,724	\$6,075
Middle Grade Student (6-8)	\$24,625	\$13,467	\$12,253	\$1,724	\$6,075
Secondary Grade Student (9-12)	\$27,583	\$22,214	\$15,572	\$1,755	\$6,190
Average Cost by Proficiency Level	\$25,245	\$16,016	\$12,811	\$1,734	\$6,113
Weighted Average Student-level Cost for SY2023	\$15,496*				

Note: The estimates reported in this table are based on an alternate set of assumptions about whether EL students are served individual or in a group. Specifically, the cost model assumes EL students receive instructional minutes with a licensed teacher in a group with at least one other EL student, except for students with Level 1 English proficiency. The model assumes that Level 1 English proficiency receive 1:1 instruction with a licensed teacher for 300 minutes per week and group instruction with at least one other EL student the other 300 minutes per week. The weighted average cost was calculated using the count of Vermont students statewide with different levels of English proficiency (Exhibit 4) and the average cost per EL student for each proficiency level (Exhibit 15).

*The weighted average does not include the additional cost of educating Newcomer/SLIFE students.

School District Cost Estimates

Vermont school districts must operate EL programs that are based on sound educational theory and research and are implemented with appropriate resources. To do so, they must screen, assess, and provide high-quality educational services to EL students. Districts are also compelled to provide ongoing professional development for their staff, including their EL and general education teachers, and parent, family, and community engagement activities. The resources required for, and the costs associated with, these activities *are in addition to what is needed to provide direct services to EL students.*

Exhibit 16 presents the resource assumptions for a district-level cost model. The initial assumptions were generated using findings from other cost studies, federal and state requirements districts must follow when operating their EL programs, and input from the ML Advisory Group. Specifically, the model assumes Vermont school districts:

- 1. Require different types and numbers of staff to successfully administer their programs.**

Districts need staff to provide support to their teachers and schools, including personnel such as curriculum directors who oversee curriculum, instruction and student services, program coordinators, and testing and compliance support staff. All districts have responsibilities for ensuring their EL programs meet federal and state laws and as a result require a minimum number of staff to manage and oversee their district-wide programming. The types and numbers of central office staff districts need increase both with district size (e.g., number of schools providing EL services) and the number of students receiving EL services.

- 2. Require staff who support and engage EL students and their families.**

EL students can have complex language, social, legal, emotional, and educational needs that require intensive support and services. Successful EL programs also recognize, respect, and address EL students' cultural and class difference and engage in a meaningful way with students' parents and families. To do so, all Vermont districts need student support and family engagement staff who are available to help EL students and their families, including school counselors, social workers, and family liaisons. The amount of staff time a district needs will depend on both the number of EL students as well as their needs. Districts serving larger numbers of Newcomer/SLIFE EL students need additional school counselor and social worker staff to help these students and their families build the necessary foundation to thrive both socially and academically in their school and community. This is particularly the case for secondary level students where there is some urgency to earn the credits required for high school graduation.

- 3. Must provide professional and training opportunities for their EL teachers.**

Districts are expected, and in some instances required by Title III, to ensure that their EL and general education teachers participate in specialized, high quality professional development that will improve the skills and qualifications of staff who provide EL services. All teachers administering the WIDA ACCESS 2.0 assessment must undergo annual training for each grade level module they administer. In districts with small EL programs, a single teacher may need be trained to administer multiple modules, whereas in large districts a teacher may require training for only one grade level module.

4. Need appropriate and adequate instructional resources to support teaching and learning.

Effective EL programs utilize a broad range of instructional resources to support teaching and learning. All districts should provide literacy materials that are appropriate to a student's age, core instructional content that is presented at different reading levels, and other instructional resources that support English language development. Since most districts operate small or very small EL programs that serve students across multiple schools, the ML Advisory group recommended that to the extent possible districts provide online instructional resources, so they can be easily accessed by teachers and students in multiple locations. There are both fixed and variable costs associated with online instructional resources. For instance, some online resources have an annual licensing fee, whereas for other resources districts only pay for the number of students who access the service.

The district-level cost model was estimated for four prototypical Vermont school districts that have smaller and larger numbers of EL students. Specifically, cost estimates were developed for districts operating *very small* (10 EL students), *small* (25), *midsize* (125), and *large* (375) EL programs.⁵⁷ The district-level cost model specifies the types and minimum quantities of resources for each district prototype. Experts on the ML Advisory Group noted that *districts* may need additional resources to implement best practices for teacher professional development, training, and collaboration; community engagement; and utilizing instructional resources and technology.

Exhibit 16 presents estimates for the *annual district-level cost per EL student* for each prototypical district. Cost estimates range from \$3,348 for the district operating a very small EL program to \$1,454 for the district operating a large EL program. Differences in cost between smaller and larger programs are largely due to districts with smaller programs having fewer students across which to distribute the fixed costs of operating their EL program. For instance, all districts have similar compliance and reporting requirements, regardless of EL enrollment, and online instructional resources that have a flat fee for use are more expensive, on a per student basis, to districts with smaller EL programs.

⁵⁷ The EL program size for the prototypical Vermont school districts used to develop district-level cost estimates were initially aligned with how the Ohio EL cost study categorized school-level EL programs, by size. The EL enrollment in the midsize and large program categories midsize were subsequently revised to generalize to the scale of EL programs operated by Vermont districts.

Exhibit 16. Resource Assumptions for District-level Cost Estimates

Resource	Very Small Program (10 EL Students)	Small Program (25 EL Students)	Midsize Program (125 EL Students)	Large Program (375 Students)
Personnel⁵⁸				
<i>Program Administration</i>				
Curriculum director	0.1 FTE	0.25 FTE	0.10 FTE	0.10 FTE
ESL Coordinator			1.0 FTE	1.0 FTE
Testing/compliance support staff	0.04 FTE	0.10 FTE	0.25 FTE	1.30 FTE
<i>Student Support & Family Engagement</i>				
Counselor/social worker	0.04 FTE	0.10 FTE	0.5 FTE + 1.0 FTE per every 50 ⁵⁹ Newcomer/SLIFE EL student	1.5 FTE + 1.0 FTE per every 50 Newcomer/SLIFE EL student
Family Liaison	0.05 FTE	0.10 FTE	0.6 FTE	2.0 FTE
Credit Program Supervisor/Alternate Supports Aide				1.0 FTE for every 10 secondary-level Newcomer/SLIFE EL student ⁶⁰
<i>Professional Development & Training</i>				
Annual professional development for EL Teachers	\$500/EL Teacher			

⁵⁸ The types and amounts of time spent by district-level staff for program administration and student support and family engagement are based on evidence from the Ohio EL cost study (Jacobson et al., 2022) and input from the ML Advisory Group. Staff time was valued using SY2023 statewide average compensation for a job title. AOE provided these data.

⁵⁹ The cost for the additional counselor/social worker to provide supports to Newcomer/SLIFE EL students is not included in the annual district-level cost estimates presented below. This adjustment will apply only to districts that have more than 50 middle- and secondary-level Newcomer/SLIFE EL students.

⁶⁰ The cost for the credit program supervisory/alternate supports aide is not included in the annual district-level cost estimates presented below. This adjustment will apply only to districts that have more than 10 secondary-level Newcomer/SLIFE EL students.

Resource	Very Small Program (10 EL Students)	Small Program (25 EL Students)	Midsize Program (125 EL Students)	Large Program (375 Students)
Teacher time to participate in WIDA ACCESS 2.0 training	4 hours per grade level			
Non-personnel⁶¹				
Literacy resources (online)	Translated Books (with online access for home and school) Example: Polylino @\$18/EL student ⁶²			
English language development support (online)	Example: Lexia English \$40 per EL student ⁶³			
Online core content published at different reading levels (online)	Example: Newsela ⁶⁴ \$6,000/school & \$18/EL student per year			
Other non-personnel resources	\$200/EL student			
Total Annual District-level Cost	\$34,381	\$66,898	\$244,118	\$545,254
Annual District-level Cost per EL Student	\$3,438	\$2,676	\$1,952	\$1,454

⁶¹ The types and amounts of non-personnel resources are based ML Advisory Group recommendations.

⁶² Polylino is a digital book solution for preschool and schools, with a focus on students with multilingual abilities, reading and writing difficulties, and emergent literacy. Members of the ML Advisory Group identified Polylino as an example for the type of digital literacy resources all districts should have in place to support EL students' literacy development. (Link: <https://www.ilteducation.com/us/about-us/>)

⁶³ Lexia English Language Development is an online adaptive blended learning program that supports Emergent Bilingual students' English language acquisition through academic conversations. The ML Advisory Group identified Lexia English as an example for the type of online English language development support all districts should have in place to support EL students' language development. (Link: <https://www.lexialearning.com/lexia-english>)

⁶⁴ Newsela is a digital service that provides core academic content aligned with grade level standards at different reading levels and in a read-aloud format to for students with limited English proficiency. The ML Advisory Group identified Newsela as an example for the type of instructional resource districts should have in place to help EL students achieve grade level standards in core academic subjects. (Link: <https://newsela.com/about/solutions/english-language-learners/#ell-example-cards>)

Policy Considerations

The purpose of this study is to provide the Vermont General Assembly with new information about the extent to which:

1. The cost of providing EL services differs for students with and varying levels of English proficiency; and
2. Districts that operate EL programs with smaller and larger enrollments incur higher and lower per student costs.

This information can be used to evaluate whether recent changes to the State's education funding policies appropriately adjust for differences in the cost of educating EL students with varying levels of need and who attend districts that operate EL programs at different economies of scale.

Taken together, the study's findings suggest the following:

- **There are large differences in the average additional cost of providing EL services to students with varying levels of English proficiency.**

The pupil weight for EL students, which was revised by Act 127 of 2022, adjusts for the additional cost of educating an EL student to meet Vermont's academic standards. However, the adjustment is based on an estimate for the *average* additional cost of educating an EL student – about \$22,947. This estimate is consistent with findings from the Pupil Weighting Factors Study (2020), suggesting that the EL pupil weight that goes into effect for FY2025 appropriately adjusts for the average additional cost of educating a Vermont EL student.⁶⁵ (Exhibit 17)

That said, this study's findings show that the *average additional cost varies for EL students with different levels of English proficiency*. Students with very limited English proficiency require more EL services and as a result are more costly, and Newcomer/SLIFE EL students require intensive supports and services that are above-and-beyond what is provided to other EL students with similar English language proficiency. As EL students' English proficiency improves, the cost of providing EL services decreases. For instance, the average additional cost of providing EL services to a student with a WIDA Level 1 English proficiency is \$30,579 (Exhibit 13), whereas the additional cost of providing EL services to a student

⁶⁵ The study's student-level cost estimates are also consistent with the estimated per EL student cost, by program size, that were based on the statewide survey of the actual resources used by Ohio's school districts.

with a WIDA Level 5 or 6 English proficiency is \$1,734. The additional cost of providing intensive services to Newcomer/SLIFE EL students is \$6,113.

Developing and implementing a new set of pupil weights for EL students with different levels of English proficiency could be challenging. To do this, AOE would need to collect and report in a timely way information on EL students’ language proficiency so that this information could be incorporated in the State’s statistical models that determine pupil weights. However, AOE may be unable to report this information in places where there are small numbers of EL students. Additionally, further disaggregating the state’s small number of EL students according to language proficiency levels could present problems for estimating weights with sufficient precision for policymaking.

- **Districts with smaller numbers of EL students must spend more, on a per student basis, to ensure their students equitable access to EL services than districts with larger EL programs.**

The cost to Vermont school districts to ensure EL students have equitable access to comparable EL services varies according to the size of a district’s EL program. The average additional annual cost per EL student for a district operating a very small program with 10 EL students is \$23,283, whereas the cost per EL student is \$16,950 for a district operating a large EL program with 375 students. (Exhibit 17)

Exhibit 17. Average Annual Additional Cost per EL Student for EL Programs of Different Size

	Very Small Program (10 EL Students)	Small Program (25 EL Students)	Midsize Program (125 EL Students)	Large Program (375 Students)
Student-level cost	\$19,845*	\$19,845*	\$15,496*	\$15,496*
District-level cost	\$3,438	\$2,676	\$1,952	\$1,454
Annual Additional Cost per EL Student	\$23,283	\$22,521	\$17,448	\$16,950

Note: The cost estimates for very small and small programs uses the statewide weighted average student-level cost estimate (Exhibit 13). The cost estimates midsize and large programs use the weighted average student-level cost estimate that was adjusted for group size (Exhibit 15) since these programs likely to have enough of EL students to provide instructional minutes in small groups. The estimates do not include the additional cost of serving Newcomer/SLIFE EL students.

**The average student level cost does not include the additional cost of educating Newcomer/SLIFE students.

It could be difficult to develop a larger number of weights that account for differences in the economies of scale among districts’ EL programs. Instead, the Task Force on the Implementation of the Pupil Weighting Factors Report (2021) and subsequently Act 127 of 2022 both recognized that districts with fewer than 25 students must spend more per student to operate in a manner that meets federal and state requirements. Starting in FY2025, districts that enroll five or fewer EL students will receive an annual \$25,000

categorical grant and districts enrolling 6-25 EL students will receive an annual \$50,000 grant.

The study's findings suggest that the total district-level cost for operating a very small EL program with 10 or fewer students is about \$34,381 (\$3,438 per EL student) and \$36,501 (\$7,300 per EL student) for EL programs with 5 or less students. The state's \$25,000 categorical grant for very small programs covers just about three-quarters of the administrative costs for these programs. Similarly, the study's findings suggest that the total district-level cost for operating an EL program with 25 students is about \$67,000. The state's \$50,000 categorical grant would offset about 75% of these costs.

The study's findings and input from the ML Advisory Group also suggest that it may be more efficient and cost effective for AOE to purchase instructional resources that districts statewide could use, rather than individual districts purchasing these resources on their own. Doing so, would especially benefit the large number of Vermont districts with small numbers of EL students. Specifically, AOE could purchase statewide licenses with vendors that provide:

- (a) Translation assistance, such as a statewide license with TransAct (approximate annual cost of \$151,140).
- (b) Data collection, student monitoring, and professional development through a platform such as Ellevation (approximate annual cost, \$160,0000).
- (c) Access to online materials for literacy, content, and English language acquisition support, such as a user license for Polyino (approximate cost for a three-year contract for school and home, \$30,829 per year).

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