

HB 3499 and Beyond
Report for the Oregon Department of Education

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Executive Summary

In this report, a thorough analysis of the 529 page National Academies English Language Learner (ELL) report (2017) and the ELL finance literature was conducted to understand evidenced-based and equity-focused practices for ELs. The report analysis suggests six high leverage evidence and equity-based funding practices to improve EL outcomes. These practices are parental engagement, bilingualism/challenging curriculum, professional development, attracting and retaining high-quality teachers, reduce class size, and student assessments. Final recommendations are made to the Oregon Department of Education to implement the HB 3499 expenditure direction.

Background

One of the responsibilities of the U.S. education system is to ensure that all students have an equal opportunity to meet their full potential. The federal education law holds school systems accountable for providing students with the appropriate support and materials they need to be successful. Accordingly, the funding systems that support public schools across the country have a variety of ways of providing additional financial support for students that have different educational needs. English Language Learners (ELLs) are one of the populations to whom financial support is targeted. In the 2017-2018 school year, 51,962 students were identified as current ELLs and 53,329 were identified as former ELLs in the state of Oregon.¹

The U.S. Census Bureau estimates the Oregon population to be 4,217,737 as of July 1st, 2019. The state of Oregon is a majority Anglo state with 86.8 percent of the population identifying as white with 13.3 percent Hispanic or Latino.² However, it must be noted that the majority of Latinos in the US are native born and English only speaking (Zong and Batalova, 2015).

. Oregon has a sizable community of immigrants, many of whom hail from Mexico. Immigrants are an integral part of Oregon's diverse and thriving communities and make extensive contributions that benefit all. Approximately 10 percent of all Oregon residents are foreign-born, while over 12 percent are native-born Americans who have at least one immigrant parent. On the educational spectrum, immigrants in Oregon are concentrated at both ends. For instance, more than a quarter of adult immigrants had a college degree or more education in 2015, while nearly a third had less than a high school diploma. Immigrant workers were most numerous in the manufacturing, food services, health care and social assistance, retail trade, agriculture, forestry, and fishing industries. In 2015, 397,293 foreign-born individuals comprised 9.9 percent of the population of Oregon. The top countries of origin were Mexico (37 percent), China (6 percent), Vietnam (5.2 percent), India (4.1 percent), and Canada (3.6 percent) albeit there are many other communities represented.

Between 2010-2018, Oregon experienced a percent change in immigration population of 15.1 percent. It is clear that over the last decade, the face of Oregon has changed with the arrival of a significant number of immigrants. Historically, Oregon's political leaders distinguished between "desirable" and "undesirable" immigrants on the basis of ethnic and racial origin and developed public policy with this distinction in mind. Historical record demonstrates that inequalities in education are a result from a racially-motivated and explicit public policy whose effects endure today. This includes oppression of Native and indigenous people. Evidence demonstrates that Latinx and other youth of color face challenges in the school environment, where their dropout rates are relatively high and schools have in some cases been slow to develop culturally sensitive programs of assistance and interventions (Bussel, 2008). After a push for an increase in support of ELLs the Oregon Legislature enacted House Bill 3499 which directed the Agency to develop and implement a statewide education plan for kindergarten

¹ 2017-18 Oregon English Language Learner Report

² U.S. Census Bureau. (2019). U.S. Census Bureau Quick Facts: Oregon. <https://www.census.gov/quickfacts/OR>

through grade 12 (K-12) English language learners (ELL). The bill allocated funds to fund activities to improve educational outcomes for English language learners and emergent bilinguals. Through an analysis of school district needs and outcomes, the Agency identified 40 target and transformation school districts to receive funding over a period of four years. To determine the best approach to direct English Language weighted funding for districts that did not meet student progress indicators, it is important to develop funding guidelines for ELL students that are research-based and equity-focused. The goal of this work is to include a detailed review of current research related to EL funding to support the Department of Education of Oregon in determining recommendations and guidelines for the process of implementing such an expenditure direction model.

What is HB 3499?

In Oregon, 34 school districts have a student body population composed of at least 15 percent English Language Learners (ELL). In many of these school districts, there is a significant achievement and opportunity gap between English-speaking students and ELL students. Under current Oregon law, school districts receive a 0.5 additional weight per ELL student. However, other than the additional funding weight, little consistency in accountability, curriculum, benchmarks, and programmatic standards exist among ELL programs. HB 3499 was passed in June 2015 in an effort to improve outcomes for English Language Learner students. The bill, which passed unanimously, allocates \$12.5 million every two years from the State School Fund to English Language Learner (ELL) programs and advisers, in the hopes of improving graduation rates for some of Oregon's most vulnerable K-12 students. It also provides new support for ELL program budget reporting and transparency which was lacking in previous years. The benchmarks that HB 3499 set can dramatically impact districts, schools, classrooms, teachers, and students in the state of Oregon. The Department of Education approaches their advocacy for English Language Learners through an equity stance. Education equity is the equitable implementation of policy and practices that create the dichotomy of beneficiaries and the oppressed and marginalized.

HB 3499 directs the Department of Education to develop and implement a statewide plan to support students eligible for and enrolled in an English Language Learner program. The bill defines “English Language Learner” as a student who has limited proficiency because English is not the native language of the student, or the student comes from an environment where a language other than English has had a significant impact on the student’s level of English language proficiency. It requires the creation of the statewide English Language Learner (ELL) program account for statewide activities related to ELL.

The Department of Education shall transfer \$12.5 million from the State School Fund to the Statewide ELL program Account established under section nine of this 2015 act. Additionally, HB 3499 requires that the Oregon Department of Education convene an advisory group and adopt rules related to developing uniform budget coding and reporting requirements to

provide budget transparency for the spending of monies received by school districts. Under section three of HB 3499, the Oregon Department of Education convened a workgroup related to ELL program policy. The workgroup consisted of educators, parents, community stakeholders, experts on English language learner policy, and experts in collecting and analyzing data. The workgroup identified criteria for determining if a school district is not meeting the needs of students and needs targeted assistance; how school districts shall expend the funds received; and identified culturally appropriate best practices. There was some carryover in personnel when creating the new EL advisory group that is currently in place now. Finally, HB 3499 directs school districts to annually report, by September 1st of each year, allocations and expenditures related to ELL programs, student demographics and progress so that it may be evaluated long term.

Other relevant information includes that school districts who are not meeting objectives and the needs of students eligible and enrolled in an ELL program, taking into account the specific learning challenges and demographics the students, the department and the school district shall establish the expected growth in student progress indicators, and the expected benchmarks for student progress indicators for English Language Learners. The interventions shall be provided for four years after the school district has been identified.

HB 3499 Metrics

District Eligibility and Selection

Eligibility and selection of an ELL transformation or target district were contingent upon enrollment of ELLs on a date specified by the department. There must be at least 20 ELLs enrolled in the district to be eligible. Districts with fewer than 20 ELLs were eligible for other regional based services. A public charter is not eligible for selection as an ELL transformation or target district. However, a public charter school was selected by the Department as a school *within* an identified ELL transformation or target district.

The Department identified school districts that are not meeting the objectives and needs of ELL students, taking into consideration the specific learning challenges and demographics of the students. The Department considered whether the district had demonstrated a history of not meeting objectives and needs of ELL students as compared to other districts relating to ELL students. To identify school districts that were not meeting the objectives and needs of ELL students, the Department considered student progress indicators in identifying the school districts that need improvement. Student progress indicators include, but are not limited to: English Language Proficiency Assessment (ELPA) growth for current English learners in grades 1-12 (Weight= 0.45), five-year adjusted cohort graduation rate for current and former English learners (Weight = 0.35), Smarter Balanced Mathematics growth for current and former English learners in grades 6-8 (Weight = 0.15), and post-secondary enrollment for current and former English learners (Weight = 0.05). Each of these outcomes indicators are weighted on a scale 0 to 100, 0 is low outcome or performance and 100 is high outcome or performance. In addition, the

department also considered the needs of districts by considering learning challenges and demographic information of students enrolled in the district, including, percentage of students living in poverty, the percentage of current and former ELL students who are mobile, homeless, migrant students, recent arrivers, or come from homes that speak unique languages.

Forty Oregon school districts were designated through in-depth analysis of academic outcomes and needs for English Learner students. These districts were identified as Transformation districts, having the greatest need to change outcomes for EL students and receiving the most funding, and as Target districts, also needing to change outcomes for EL students, but with less funding. These districts were included in the first cohort for funding under House Bill (HB) 3499 (Cited in *Progress on HB 3499 Implementation PDF*). These 40 districts created plans and budgets with which they would use their HB 3499 dollars to positively impact student growth and progress in both acquiring English and succeeding in core academic areas.

Languages Spoken: Overall, for 2017-2018 the Department identified 51,956 students as current ELLs and 53,329 former ELLs. ELLs in Oregon speak 66 different home languages with Spanish and Russian the most frequent languages of origin. Spanish was reported as a home language for 6 or more students in 116 districts. Russian was reported as a home language for 6 or more students in 20 districts. Other frequent languages include Chinese, Arabic, Vietnamese, Somali, Japanese, Tagalog, Vietnamese, Hmong, Chuukese, Lao, and Romanian.

Student Achievement Measures: These include assessment performance in the English Language Proficiency Assessment (ELPA), Smarter Balanced Assessment, the 5-year graduation rate, and post-secondary enrollment. One of the key takeaways from this section is that former ELLs graduate within five years at 83 percent, which is higher than the never ELL rate of 80 percent. For the ELPA, the median growth score across all domains was 50 meaning the median student showed growth greater than 50 percent of all students taking the assessment. In math, current ELLs are showing growth slightly below the median for all students and former ELLs are showing growth slightly above the median for all students. For both the math and English language arts assessments, former ELLs perform dramatically better than current ELLs. The gap is biggest in elementary school for math and in high school for English language arts. Additionally, there is a lot of variation across districts. In terms of graduation rates, Statewide for current ELLs, 65 percent graduated with a regular or modified diploma within five years. Former ELLs graduated within five years at a significantly higher rate of 83 percent, which is higher than the statewide rate for never ELLs (80 percent). Finally, for post-secondary enrollment 38 percent of current ELLs who graduated enrolled in a post-secondary institution compared to 49 percent for former ELLs.

Other Relevant Demographic data

ELLs are most likely to be economically disadvantaged compared to those who are not ELLs. For example, statewide, about 89 percent of current ELLs and 80 percent of former ELLs

were economically disadvantaged. For never ELLs, the statewide average is 47 percent of students identified as economically disadvantaged. For districts identified as part of HB3499, ELL demographics are comparable to statewide averages, with the highest-needs districts serving greater proportions of economically disadvantaged ELLs.

Target districts range from 65 percent of current ELLs considered economically disadvantaged to over 95 percent considered economically disadvantaged. Transformation districts ranged from 89 percent of current ELLs considered economically disadvantaged to more than 95 percent. The year-to-year comparison of the five-year cohort graduation rate, a slight upward trend is indicated with increases in each year showing 65 percent of current ELLs and 83.1 percent of former ELLs graduating within five years which is significantly higher than the statewide rate for never ELLs of 80 percent.

The gap, however, becomes wider when we analyze post-secondary enrollment rates for current and former ELLs. This is defined as students who graduated within four years and enrolled in a post-secondary institution within 16 months of graduation. Statewide, 38 percent of those current ELLs who graduated enrolled in a post-secondary institution compared to 49 percent of former ELLs. For all students who graduate high school in four years, 64 percent enter a post-secondary institution within 16 months.

Funding

Background of The State School Fund

With the passage of Ballot Measure 5 and 50 (1990 and 1997 respectively), the funding of Oregon schools dramatically changed — funding shifted from local property taxes to the state General Fund. As a result, Oregon schools are increasingly supported by state, not local, dollars. An important element of the formula is its student weights. The formula assumes that some students will require more services than others, and therefore, will require greater investment to educate them. These additional costs are accounted for in the formula by giving those students additional weight. The weights are based on student and district characteristics and provide additional funding for those characteristics. Students who are not proficient in English get an additional half weight until the student is able to profit from classes taught in English. Students must be receiving additional services to qualify for this weight.

Senate Bill 1541 and expenditure variations

Senate Bill 1541 requires the Oregon Department of Education to conduct a study on the expenditure variations among school districts. The factors that may affect expenditure levels include class size, staff levels, staff compensation, student demographics, the length of school year, the number of days per week, and the number of additional instructional hours in a school year. Finally, the legislation directs the Department to determine whether the expenditure variations are related to student outcomes, including attendance, absenteeism, and graduation rates. There is a statistically significant relationship between how districts allocate their

resources to key expenditure categories and various factors. The primary factors that are associated with variations in the shares of total spending that districts allocate to different categories are overall funding levels, district size, salary levels, class sizes, and the percentage of students who are low-income. For some spending categories, factors such as district locale (rural, town, suburban, city) and the length of the school year, are also related.

What goals and activities were supported by HB 3499 funds?

- Offer professional development in evidence-based practices
- Increase number of bilingual or English for Speakers of Other Languages (ESOL) certified teachers
- Monitor English Learners (track grades, assessment scores, graduation rates, etc.)
- Improve student resources (curriculum, technology supports, Dual-Language resources).
- Hire culturally responsive staff (social workers, family liaisons, counselors, librarians, etc.)
- Offer extended learning activities for English Learners (after school and weekend programming, tutoring, summer school).

HB 3499, directed the state to create a Statewide ELL Program Account for activities related to ELL programs. Funds account with an \$12.5 million “carve-out” from the State School Fund each biennium. However, each district spends the money according to their needs in terms of student demographics, length of school year, students in poverty, transportation, small or large, etc. under the senate bill 1541.

The total amounts of funding allocated to the districts from the State School Fund for students who are eligible for and enrolled in an English Language Learner Program as provided by in ORS 327.013.:

- A total of \$190,662,947 has been allocated via the State School Fund with essentially all (\$190,188,457) ELL revenue expended by districts on programs for ELL students. However, of the 141 districts that received ELL formula funding in 2017-18, 86 reported spending less than the revenue received, while 55 districts reported spending more. These funds come from a supplemental 0.5 weight in Oregon’s funding formula for each ELL student. This added 0.5 weight generates about \$4,200 for each ELL student.
- Overall most of the spending on ELL students is directly for ELL Programs (78%), while the remainder is spent on related services for ELL students such as transportation and student support services.

There is also Title III federal funds that provides \$145 per ELL student.

District Expenditure of Moneys

Under HB 3499, The Department shall direct transformation and target school districts on how to expend all monies received for up to three years, for identified districts that have not met the expected growth in student progress indicators, and the expected benchmarks for student progress indicators that were identified for the school district.

The expenditure direction must be:

- Individualized for each district based on state and district data and the district improvement work from the previous four years
- Aligned with evidence-based practices
- Focused on supporting the district in meeting expected growth in student progress indicators and the expected benchmarks for student progress indicators identified for the school district
- Be communicated to the district in writing and communicate to the district the specific direction of expenditures and the rationale for that direction

Review of the literature Part I: National Academies Report

The first part of the review of the literature will begin with a thorough analysis of the 2017 National Academies Report *Promoting the Educational Success of Children and Youth Learning English*. This report was selected due to the extensive research involved and the weight it carries in the academic community. The literature is organized based around the following outcome metrics: English Language Proficiency, Graduation/Dropout rate, Achievement in Math in elementary and middle school, Achievement in English Language Arts in elementary and middle school, Postsecondary enrollment, and Absenteeism/Attendance, for Current ELLs, Former ELLs, Long Term ELLs, and Newcomers. The analytical focus will be in identifying the evidence-based practices corresponding to the outcome metrics for different types of English Language Learners that can help inform districts and schools about the best practices to service them. This section was divided into State and District recommendations and School recommendations. Due to scope and time, the literature outside of the national academies was not reviewed nor included in this report.

The National Academies report contains 529 pages of well researched recommendations specifically targeted towards EL education and is seen as the gold standard for it. Although the majority of recommendations found in it are classroom and individual school practices, there are sections that focus on district and state practices and policies. The groups of ELLs discussed in the report goes beyond the four ELLs groups listed above as it analyzes strategies for disabled, gifted, economically disadvantaged, mobile ELLs and more, which makes it a very comprehensive and detailed piece of literature. This section starts with information on District and State practices and recommendations followed by school practices where information on all the outcome metrics for the four ELL groups is provided. We felt that it was important to include

the information beyond state and district practices as districts oversee schools so it is important to know about the evidence-based practices within a school district.

District and State Recommendations

Through the Every Student Succeeds Act, there seems to be more state flexibility in accountability, which created concern among civil rights organizations. People's concern regarded ELLs' needs not being met and their legal right to an appropriate education not being protected. As such, the 2015 Dear Colleague Letter provides states with an appropriate framework to ensure that their rights are met. According to the National Academies report, the letter contains guidance in areas that school districts are often noncompliant in such as:

“Identification and assessment of ELs in a timely, valid, and reliable manner; provision of educationally sound language assistance programs; sufficient staffing and support for language assistance programs; equal opportunities for ELs to participate in all curricular and extracurricular activities; avoidance of unnecessary segregation; evaluation of ELs in a timely and appropriate manner for special education and disability-related services, with language needs considered in evaluations for these services; meeting the needs of ELs who opt out of language assistance programs; monitoring and evaluation of ELs' progress in language assistance programs; evaluation of the effectiveness of the district's language assistance programs to ensure that such programs enable ELs to achieve parity of participation in standard instructional programs in a reasonable amount of time; and meaningful communication with parents,” (U.S. Department of Justice and U.S. Department of Education, 2015; National Academies of Science, Engineering, and Medicine, 2017).

State Standards and Qualified Personnel

Addressing state standards, language, and policy is an important aspect of addressing ELLs needs. Ideally, standards should specifically address their needs and have clear statements about the major goals for EL education and how the standards meet those goals. Out of all state standards, the California, Illinois, and New Jersey state standards are great models for the language these should have. California, having a large ELL population “provides a clear statement of philosophy about the goals of DLL learning; establishes a separate set of domains for DLLs on English language and home language development; and addresses DLLs' needs in communication, language, literacy, and social-emotional development (Espinosa & Calderon, 2015; California Department of Education, 2009; National Academies of Science, Engineering, and Medicine, 2017).

In addition to the language used, “state policy regarding K-12 education revolves around finance, identification, reclassification, performance monitoring, standards setting, parent and family involvement, and educator quality,” (U.S. Department of Justice and U.S. Department of Education, 2015; National Academies of Science, Engineering, and Medicine, 2017). When it

comes to financing ELL education, there's very little research and policy discussion that has focused on the associated incremental costs. Due to many schools and districts failing to keep careful records of the expenditure for ELL-specific education, documenting these costs is difficult to do. Even when this documentation is available, it is challenging to determine what the appropriate level of funding is (Jimenez-Castellanos & Topper, 2012; National Conference of State Legislatures, 2005; National Academies of Science, Engineering, and Medicine, 2017).

However, something to note is that under ESSA, grants are awarded to provide professional development aid to educators who work with ELLs. Qualified personnel for ELLs extends past ELA and ESL teachers and includes other teachers, psychologists, guidance counselors, and administrators among other groups. Despite the importance of having qualified and well equipped personnel interacting with ELLs, 32 states have no explicit policies that require teachers and school administrators to undergo training specifically about the education of ELLs beyond federal requirement and "Arizona, Massachusetts, New Mexico, New York, and Virginia are the only states with specific requirements for school administrators focused on research based professional development on addressing the needs of ELs," (National Academies of Science, Engineering, and Medicine, 2017: 457). As such, state and professional credentialing bodies should require for all educators who interact with ELLs, whether it be in a instructional or supporting role, to "be prepared through credentialing and licensing as well as pre- and in-service training to work effectively with DLLs/ELs," (National Academies of Science, Engineering, and Medicine, 2017: 476). After reviewing all the literature, the National Academies recommended that resources should be available for the professional development of all personnel regarding the following topics:

1. An understanding of language development and the relationship between first and second language acquisition;
2. An understanding of the influences of sociocultural factors on language learning;
3. Knowledge of and ability to implement effective practices for promoting the successful education of DLLs/ELLs, including early intervention strategies for DLLs/ELLs with disabilities;
4. An understanding of assessment instruments and procedures and of the interpretation and application of assessment results for DLLs/ ELLs;
5. Development of skills for establishing respectful partnerships with families of DLLs/ELLs; and
6. Development of skills to advocate on behalf of DLLs/ELLs (National Academies of Science, Engineering, and Medicine, 2017: 477).

The use of this type of professional development is not only incredibly beneficial, but also works at reducing educator bias towards ELLs (Briggs et al., 2008; Harris et al., 2009). Although districts may say that they already have professional development that focuses on ELLs, it is important to note that according to the 2011-2012 School and Staffing Survey (SASS), across all schools, 24 percent of teachers reported taking some professional development over the last 12 months with regard to teaching ELLs (Goldring et al., 2013). As

such, very few educators have received proper guidance on teaching ELLs. It is important to note that “research on professional development approaches has led to general agreement that effective professional development for working with ELs requires a sustained, intensive approach that includes modeling of effective instructional methodologies that integrate academic content with English language proficiency instruction and involves actual classroom practice, coaching and mentoring, reflective practice, and communities of learning,” (National Academies for Science, Medicine, and Engineering 2017: 451; August and Shanahan, 2006; Calderon et al., 2011; Darling-Hammond and Richardson, 2009; DiCerbo et al., 2014; National Education Association, 2011; Neuman and Kamil, 2010; Wei et al., 2009).

Assessment and Reclassification

Although assessment practices vary across states, it is important that all school districts within a state have the same assessment practices for identifying students as ELLs and reclassifying them as English proficient (Every Student Succeeds Act, 2015). Within these assessment practices, and practices for identifying ELLs for other programs or support, there are three factors that have a strong influence on the process and outcome: “(1) the assessment tools used, including measures of real-life problem solving; (2) professional development for teachers, which leads to a reduction in their bias toward ELs; and (3) district-level support,” (National Academies of Science, Engineering, and Medicine, 2017: 10). In addition to that, federal and state agencies need to provide families information about valid assessment methods and guidelines for their appropriate use, particularly for ELLs with disabilities (National Academies of Science, Engineering, and Medicine, 2017).

When it comes to assessing for reclassification, it is vital for the state and districts to follow the nine points provided in the 2015 Guidelines of the Council of Chief State School Officers for ELL Reclassification:

1. In strengthening reclassification policies and practices, states and districts should clearly define intended purposes and outcomes—and anticipate and address unintended negative consequences—for ELLs.
2. States and districts should select reclassification criteria that directly relate to students’ uses of language needed to carry out grade-level practices in academic content areas and to meet grade-level content standards.
3. States should establish the “English proficient” performance standard on the state ELP assessment using methods that take into account ELL students’ academic proficiency on content assessments.
4. States and districts should make ELL reclassification decisions using more than an annual summative ELP assessment result; they should also examine ELL students’ classroom language uses as an additional reclassification criterion.
5. States and districts should ensure that local educators have training, tools, and ongoing support to effectively and consistently apply the classroom language-use

criterion for reclassification decisions and are held appropriately accountable for doing so.

6. States and districts should establish common reclassification criteria and processes within states, with a goal of strengthening the reliability and validity of inferences made from local educator input and the accuracy of decisions based on multiple sources of evidence.

7. States in consortia should move toward a common English proficiency performance standard on any shared ELP assessment and acknowledge variability of other ELL reclassification criteria and processes across states. They should ensure complete transparency and examine cross state comparability as new criteria and processes are implemented.

8. Consortia, states, and districts should carefully examine the application of reclassification criteria and processes for primary grade ELL students, and ELL students with disabilities, in order to maximize validity, reliability, and fairness.

9. Consortia, states, and districts should, as part of ensuring the consequential validity of reclassification criteria and processes, carefully examine the subsequent academic performance of reclassified ELLs for as long as these students remain in the district or state. (Linguanti & Cook, 2015; National Academies of Science, Engineering, and Medicine, 2017).

For the most part, reclassification tests have not been based on empirical data and validated theories of language proficiency and language development. Despite this, many districts use the cut of score to deem students proficient and reclassify them, often removing all specialized services and support (National Academies of Science, Engineering, and Medicine, 2017). As such, some of these students are not ready to academically succeed without some level of support and proceed to struggle academically once they are reclassified. Therefore, it is important to assess what support these students may still need.

Language

Language development is delved into more deeply in the school recommendations, where there is a discussion on the importance of ECE for ELLs and its effect on graduation rates, proficiency, and post secondary enrollment. At a district and state level, it is necessary to understand that language development in students' primary language is as important as the development of their secondary language. As such, it is important to provide more pre-K programs that develop students L1 while also developing English proficiency particularly academic language (National Academies of Science, Engineering, and Medicine, 2017).

Practices

Although the vast majority of recommendations in the report were at the school level, district and state recommendations did appear. To begin with, it is important that there be a strong connection between early learning programs and K-12, especially the early grades of K-3,

in order to create a more aligned educational experience (National Academies of Science, Engineering, and Medicine, 2017; Bornfreund et al., 2015; Ritchie & Gutmann, 2013). Along with an aligned educational experience, it is important to address the district's culture. Oftentimes districts have low expectations for ELLs and individuals within the district believe the ELLs are at fault or incapable of learning and advancing. As such it is important to shift the focus from adults to the students under the premise that "the only reason an adult is in this district is because it is a position that is necessary to support school learning" (David & Talbert, 2012: 19). With this mantra the shift in blame goes from low performance students to adults at all levels not providing adequate support (National Academies of Science, Engineering, and Medicine, 2017).

Despite there being a shift in blame it is important to note that there shouldn't be a punitive approach to accountability, as when this happens it creates a system with no capacity for improvement. A punitive approach also serves "to narrow the curriculum to reading and math, especially in the grade levels where assessment was required," (National Academies of Science, Engineering, and Medicine, 2017: 46). In addition to shifting focus from adults to students, it is also important to have a culture of caring mutual respect at all levels between administrators, teachers, students, and parents (Kirp, 2013; National Academies of Science, Engineering, and Medicine, 2017).

There are multiple instructional strategies that have been used as a way to help ELLs that also benefit other students. One such strategy is the direct instructional approach, which was particularly successful in Sanger Unified School District in California. The way it worked was by "presenting information, modeling, checking for understanding, guided practice, closure, and independent practice, convinced the district that this was a suitable strategy for ELs requiring language support," (National Academies of Science, Engineering, and Medicine, 2017: 273; David & Talbert, 2012). This can be beneficial due to the scaffolding involved and the multiple steps to it where student understanding can be checked.

In addition to that, some districts have been experimenting with departmentalization of instruction. "This practice appears to be driven by policy changes, increased testing pressures, and spending cuts in education that have placed teachers at risk for burnout and emotional distress, leading ultimately to high teacher turnover rates in many districts," (National Academies of Science, Engineering, and Medicine, 2017: 297; Gewertz, 2014; Hood, 2009). The reason why some districts prefer this method of instruction is that teachers can specialize in a content area instead of having to meet the full needs of students in every content area. This method could also help with the shortage of teachers in a student's home language, as instead of just being able to provide one group of students instruction or instructional support in that language, one teacher can provide this instruction to 5-6 groups of students per day. Typically ELLs have some experience with a small level of departmentalization in the shape of an ELL specialist who may pull them out and provide instruction separately from the primary teacher. Although departmentalization could be very helpful, there isn't a lot of research that has been

done on the effects of different types of instructional arrangements for ELLs (National Academies of Science, Engineering, and Medicine, 2017).

Family Engagement

Family and parental engagement is an important part of language development and academic achievement, a topic that is discussed under school recommendations. Parental engagement for ELL is encouraged under Title IV of ESSA and grants “will be awarded to statewide organizations for the establishment of family engagement centers to implement parent and family engagement programs and provide training and technical assistance to state and local education agencies and organizations that support family-school partnerships,” (National Academies of Science, Engineering, and Medicine, 2017: 55; Every Student Succeeds Act, 2015).

At the state and district level, out of the 50 states, 13 reported to have engagement policies for ELL families. Out of those, 10 reported that this included parent advisory committees at the district or school level. Some examples of these levers for parental engagement include:

- ❖ New York: District and school orientation sessions on state standards, assessments, school expectations, and general EL program requirements for parents of ELLs.
- ❖ North Dakota: School support teams that included parents of ELLs. This would be a place in which ELLs could discuss their educational and language needs.
- ❖ Texas: The use of district-level language proficiency committees, which included a professional bilingual educator, a professional transitional language coordinator, a parent of an EL, and a campus administrator to review all relevant information on ELLs, make recommendations on program placement and advancement, review student progress at the end of each school year, monitor the progress of former ELLs, and determine the appropriateness of programs that extend beyond the school year. (National Academies of Science, Engineering, and Medicine, 2017; Education Commission of the States, 2015).

School Recommendations

English Language Proficiency

Current ELLs. Although current ELLs is a broad term, the majority of recommendations found in the report are applied to this general category. It is important for schools and teachers to be aware that it takes longer to become proficient in academic language compared to social language (Cummins, 2008). So while there may be students who appear to be proficient speakers, their performance and participation in the classroom may still be hindered. Gaining enough academic language to be able to participate in the school’s curriculum without any support can take from five to seven years (National Academies of Science, Engineering, and Medicine, 2017).

In order to best help students, more attention and focus is needed on building academic language in the early grades, especially in K-5 (Thompson, 2015; Umansky & Reardon, 2014; Valentino & Reardon, 2015). It is also important to note that bilingual programs help continue to develop the students L1 while also developing their English proficiency. This allows them to keep learning subject matter while strengthening both of their language skills (National Academies of Science, Engineering, and Medicine, 2017). After this point, in middle school and high school the focus should be on the following nine recommendations:

1. Develop Academic English as Part of Subject-Matter Learning
2. Integrate Oral and Written Language Instruction into Content Area Teaching
3. Provide Regular Structured Opportunities to Develop Written Language Skills
4. Develop Reading and Writing Abilities of ELs Through Text-Based Analytical Instruction Using a Cognitive Strategies Approach
5. Provide Direct and Explicit Comprehension Strategy Instruction
6. Provide Opportunities for Extended Discussion of Text Meaning and Interpretation
7. Foster Student Motivation for and Engagement in Literacy Learning
8. Provide Regular Peer-Assisted Learning Opportunities
9. Provide Small-Group Instructional Support for Students Struggling with Literacy and English Language Development (Baker et al., 2014; Gersten et al., 2007; Kamil et al., 2008; U.S. Department of Education et al., 2012)

Oftentimes, students who have been identified as ELLs are placed in remedial classes with little access to grade level content. This results in them not acquiring the grade level academic language in each subject, as a result making it more difficult for these students to be reclassified as former ELLs. In order for current ELLs to advance, they need access to grade level content. Records show that in some schools “ELs are blocked from access to a large proportion of the core curriculum, electives, and advanced placement classes because they are locked into ELD and/or intervention classes, sometimes for much of the school day.” This not only affects their language development but can also affect their ability to enroll for a post-secondary education (National Academies of Science, Engineering, and Medicine, 2017: 315; Callahan, 2005; Kanno & Kangas, 2014).

In order to reach proficiency and to academically succeed, the focus needs to extend past classroom and teaching practices. Family engagement is another important factor that affects students English language proficiency and also plays a role in graduation rates and post secondary education (Ferguson, 2008; Henderson & Mapp, 2002; Lindholm-Leary, 2015). As a result, the school should have a strong focus on parental and family engagement. Recommendations for parental engagement can be found under the state and district recommendations section of this report.

Lastly, although English language proficiency assessments are done every year, it is important to note that researchers have expressed concern about the uses of standardized tests. The following recommendations are meant to help mitigate the effects of standardized tests:

“Some assessment error is due to norming samples, complexity of language used, and administration procedures. To compensate for the psychometric weaknesses of current standardized tests of language proficiency within the DLL population, most researchers have recommended that assessors use multiple measures administered by bilingual, bicultural, multidisciplinary team members. These measures may include standardized tests and curriculum-embedded assessments in addition to narrative language samples and observation of children’s language usage in natural settings” (National Academies of Science, Engineering, and Medicine, 2017: 406; Espinosa, 2008; August & Shanahan, 2006; Gutiérrez-Clellen et al., 2006; National Association for the Education of Young Children, 2005; Neill, 2005).

Former ELLs. There was very little information provided about former ELLs and language proficiency in the report. Findings suggest that this group was more likely to be bilingual and score higher on standardized tests in Spanish than current ELLs. There also was a strong correlation between the Spanish scores and their English test scores, showing that “the highest EL achievers were those who maintained and continued to develop their Spanish” (National Academies of Science, Engineering, and Medicine, 2017: 229).

Although Former ELLs are often seen as a group that no longer needs school help when they get reclassified, this isn’t necessarily what needs to be done. Once they get reclassified, specialized services tailored to meet their English language learning needs are withdrawn, modified, or reduced on the assumption that they are ready to benefit from instruction in English without such support. For the most part, the tests used to make these determinations have not been based on empirically validated theories of language proficiency for academic purposes and its development,” (National Academies of Science, Engineering, and Medicine, 2017: 220; Lindholm-Leary, 2001; Lindholm-Leary & Hernández, 2011; Lindholm-Leary & Howard, 2008). As a result it is important to assess the needs of former ELs and make sure that they are given valid and reliable instruments and support in order to succeed.

Long Term ELLs. Long term ELLs are English Language Learners who have not been reclassified after an extended period of time. There currently is a lack of a common definition for this particular group, which makes it difficult to draw conclusions from the limited research on long term ELLs (National Academies of Science, Engineering, and Medicine, 2017). This is a group that has often been ignored despite them making up a sizable segment of the ELL population. In places with a high concentration of minorities and migration, Long term ELLs can make up anywhere from 25 to 50 percent of the ELL population (Menken, 2013; Olsen, 2010).

Long term ELLs often are proficient in everyday uses of English “but have low levels of proficiency in academic language and literacy in both English and their L1. Commonly, LTEL students reach a plateau at intermediate or lower levels of language proficiency,” (National Academies of Science, Engineering, and Medicine, 2017: 234; Olsen, 2010; Kieffer, 2008; Mancilla-Martinez et al., 2011; Nakamoto et al., 2007; Umansky & Reardon, 2014). This plateau, which often occurs in middle school, may be the result of an increase in academic tracking during this period of schooling. ELLs get assigned into low-level academic classes “presumably in an effort to support their learning, but often resulting in reducing their chances of advancing beyond EL status. Because they are in classrooms that lack academic rigor, it is difficult for many of these ELs to meet the academic standards in English needed for reclassification,” (National Academies of Science, Engineering, and Medicine, 2017: 234-235; Umansky & Reardon, 2014; Callahan, 2005; Callahan et al., 2008, 2010; Kanno & Kangas, 2014). These students have been provided with the same remedial content for years, and they oftentimes do have fairly good decoding skills for English but can’t make sense of the material. Due to this, LTELs don’t need the same remedial classes they have received, but “rigorous, intensive, and relevant support in small groups, supported by teachers who can offer the kind of attention they need to discover how language works in texts. They need to learn to use strategies such as those used in the Pathway Project,” (National Academies of Science, Engineering, and Medicine, 2017).

Newcomers. Newcomers tend to fare better than Long term ELLs and some other ELL groups. Although many of them may have gone through intensive travel and traumatic events, they also tend to have more access to “specific protective factors that build resilience in children, such as high rates of father involvement, child-centeredness and family warmth, stronger family and ethnic community supports, strong beliefs in education, and trust in and respect for educational and health professionals (Toppelberg & Collins, 2010) which explains why some new arrivals fare better in certain developmental domains than their U.S.-born peers,” (National Academies of Science, Engineering, and Medicine, 2017: 176-177).

Graduation and Attrition Rate

Current ELL. ELLs face a lower graduation rate than other student groups due to the difficulties they face. During the 2013-2014 school year, the national average for the four year adjusted cohort high school graduation rate was 82 percent compared to 63 for ELLs (National Center for Education Statistics, 2015). Besides facing academic struggles, there are a multitude of problems that they may be dealing with outside of school. “For many ELs whose families are struggling economically, the temptation to leave the unsatisfying experience of school behind and take a job to help their family survive economically or to get their own life started can be irresistible, particularly for those from cultural groups that regard the onset of adolescence as the beginning of adulthood rather than as a separate stage of life,” (National Academies of Science, Engineering, and Medicine, 2017: 316; Arnett, 2003; Esparza & Sánchez, 2008). One way to

increase graduation rates is through family engagement. As mentioned in the previous section, engaging families leads to higher proficiency, graduation rates, and post secondary enrollment (Ferguson, 2008; Henderson & Mapp, 2002; Lindholm-Leary, 2015).

Former ELLs. There was no information on former ELLs graduation rate in the National Academies report. It is important to note that former ELLs tend to do very well in HS in terms of academic achievement.

Long Term ELLs. Although there weren't any solutions for increasing the graduation rate for this specific group, the parental engagement still applies to every ELL group. However, long term ELs face a few more problems academically than their peers. Due to their status as LTEL oftentimes they face "less access to classes required for high school graduation and admission to postsecondary education as well as higher high school dropout rates" (National Academies of Science, Engineering, and Medicine, 2017: 236; Callahan, 2005; Kanno & Kangas, 2014; Parrish et al., 2006). By creating these barriers to more advanced and core classes the school itself can be hindering the possibility of graduation.

Newcomers. Very little information was provided about new arrivals and their graduation rates. In cases where students arrive without documentation they are "seldom able to go to college, cannot work legally in the United States without DACA status, in some states cannot obtain a driver's license or attend public universities, and cannot put their education to good use," (National Academies of Science, Engineering, and Medicine, 2017: 90; Gonzales, 2007). This leads to students getting discouraged and dropping out of school. However, other new arrivals may also be "honor roll students, class officers, and valedictorians and aspire to give back to their communities by becoming teachers, doctors, lawyers, and social activists," (National Academies of Science, Engineering, and Medicine, 2017: 90; Gonzales, 2007).

Achievement in Math

Current ELLs. When it comes to math, high quality ECE has been shown to have positive effects, which means that there should be a strong focus on instruction in the early grades (Downer et al., 2012; Espinosa, 2010, 2013). One particular program that has shown positive effects is the SEAL program. Students who participated starting in preschool and continued to do so in K-3 had higher scores in English proficiency, ELA, and math than those who hadn't been in the program since then (Lindholm-Leary, 2015). In addition to the success of this program, research shows that when a preschool dual language learner knows a math concept in their L1 they likely know it in the L2 or can learn it rather easily (Sarnecka et al., 2011). "This finding indicates that conceptual knowledge about numbers appears to transfer across languages and in turn, that preschool teachers should learn about both the salient features of DLLs' L1 and what mathematical concepts they know in that language" to better help them understand the concepts (National Academies of Science, Engineering, and Medicine, 2017: 174).

Other program models that have shown positive effects on math scores are Dual Immersion and Bilingual programs. Although in the early grades students in DI programs have lower test scores in math and ELA compared to ELLs in English immersion, and those in bilingual programs have higher scores than those in EI, by seventh grade both DI and bilingual programs have much higher scores than ELLs in EI only classrooms (Umansky & Reardon, 2014; Valentino & Reardon, 2015).

Former ELLs, Long Term ELLs and Newcomers. No specific recommendations were provided for these groups. This does not mean that there is no available research but it was not part of the national academies report.

Achievement in ELA

Current ELLs. Although ELLs in Dual Language programs and Bilingual programs were reclassified at a lower rate compared to English only programs in the elementary grades, they had a higher overall reclassification rate, higher ELA scores, and higher scores in reading and speaking tests in the long run and a higher long term likelihood of being proficient (Umansky & Reardon, 2014; Valentino & Reardon, 2015). The gaps between test scores between the different types of programs, as seen in the previous section can be seen starting in second grade but by 7th grade ELs in dual and bilingual programs have higher ELA test scores (Valentino & Reardon, 2015). This shows that students benefit from these types of programs in the long run compared to English immersion.

Due to Common Core State Standards, the responsibility for literacy development is spread throughout the content areas. This means that literacy is not only addressed by ELA and ESL teachers. As such, “some have proposed that all mainstream teachers be required to take a minimum of one course specifically dedicated to teaching ELs,” (López et al., 2013; Lucas et al., 2008). This would make all teachers more equipped and able to address the needs of these students.

Former ELLs, Long Term ELLs and Newcomers. No specific recommendations were provided for these groups. This does not mean that there is no available research but it was not part of the national academies report.

Post-Secondary Enrollment

Current ELLs. ELs can face a number of problems when it comes to post secondary enrollment such as being locked into certain academic tracks that exclude them from applying to a four year college program (Callahan, 2005; Kanno & Kangas, 2014). In addition to this, ELLs “must meet graduation requirements as well as state standards for ‘career and college readiness’ and enroll in non remedial classes that prepare them for postsecondary education,” (National Academies of Science, Engineering, and Medicine, 2017: 315; Callahan, 2005). This can be difficult to achieve when they are blocked from a number of core curriculum classes, electives, and advanced placement classes due to ELL remedial classes.

Although there was little mention about this topic in the National Academies report, studies in it do show that “children who attend high quality preschool programs are more likely to graduate and enroll in post secondary education, (National Academies of Science, Engineering, and Medicine, 2017: 188; Barnett, 2008; Campbell et al., 2012; Heckman et al., 2015). Which shows that there should be more of an emphasis in preschool education particularly for ELs.

Former ELLs, Long Term ELLs and Newcomers. No specific information was provided for these groups. This does not mean that there is no available research but it was not part of the national academies report.

Absenteeism/Attendance

According to the report, research has generally not focused on factors related to the social and emotional side of academic performance for ELLs, including school and class attendance (National Academies of Science, Engineering, and Medicine, 2017). As such, there are no recommendations that can be gathered from the National Academies on this topic. This does not mean that there is no available research but it was not part of the national academies report.

Conclusions

1. Low/no cost classroom practices

There are seven classroom practices to help increase students proficiency and scholastic achievements that have low to no cost. They include:

- Focus on the development of academic language in subject matter learning (Gersten et al., 2007)
- Providing regular peer assisted learning opportunities (Gersten et al., 2007)
- Use written and oral language instruction (Baker et al., 2014)
- Regular opportunities to develop written language skills (Gersten et al., 2007)
- Developing reading and writing skills through text-based analytical instruction using a cognitive strategies approach (U.S. Department of Education et al., 2012)
- Fostering student engagement in and motivation for literacy learning (Kamil et al., 2008)
- Access to grade level content and being able to enroll in advanced classes and electives despite their label as an English Language Learner (Callahan, 2005; Kanno & Kangas, 2014).

2. Parental engagement.

Parental engagement is an incredibly important achievement as it increases students’ proficiency, graduation rate, and post secondary enrollment. The fact that it comes up as something that positively increases multiple outcome metrics shows how important it is and, in addition to that, it may also help in other outcome metrics that aren’t as well studied. Although

there are multiple ways to achieve parental engagement for ELL families, and many districts may think that they are already doing this, it's important to note that out of 50 states, there are only 13 states who reported having engagement policies for ELL families.

3. Professional Development

School districts may say that they already do professional development that focuses on ELs. However, according to the 2011-2012 School and Staffing Survey (SASS), across all schools, 24 percent of teachers reported taking some professional development over the last 12 months with regard to teaching ELLs (Goldring et al., 2013). It is important that everyone within a district and school, no matter at what level they are, understand that the reason they are there is to help every child get a better education. Educators should go through continual and intensive professional development on teaching ELLs, including classroom coaching (Zaslow et al., 2010). The professional development should occur through a “sustained, intensive approach that includes modeling of effective instructional methodologies that integrate academic content with English language proficiency instruction and involves actual classroom practice, coaching and mentoring, reflective practice, and communities of learning,” (August & Shanahan, 2006; Calderon et al., 2011; Darling-Hammond & Richardson, 2009; DiCerbo et al., 2014; National Education Association, 2011; Neuman & Kamil, 2010; Wei et al., 2009). In addition, students interact with more than just content teachers, they interact with the counselors, school psychologists, and other groups who should be knowledgeable on how ELLs need to be taught. Having principals and other administrators go through this professional development and be aware of what the best practices are is also beneficial as when they are observing a classroom they can be better at recognizing what is working or isn't working for these students in the classroom.

4. Dual Language/Maintenance Bilingual program

Although it may not be feasible in the short term, one long term goal would be to have districts develop dual language or maintenance bilingual education programs. In the long term, these programs have been shown to be more effective at helping ELLs become proficient and have higher academic achievements. Although it can be costly to implement such programs and would take a few years to properly develop, the long term benefits are superior. When implementing these programs it is important to note that in the early grades that students in Dual Language or Bilingual programs have lower scores but by seventh grade they already perform academically better than English Immersion Only students (Umansky & Reardon, 2014; Valentino & Reardon, 2015).

5. Missing Data

One big issue seen throughout the report is missing data. Missing data is the result of there not being explicit recommendations regarding those topics within the National Academies and Diane August reports. This is due to there not being research, or enough research, and

empirical evidence on particular topics at the time of publication. Even though these reports are seen as the gold standard, there may be other sources and research that is not captured in the National Academies report that you may want to look at. Our focus was on empirical research and evidence as these are not just hypotheses on how to help ELLs, but ideas that have gone through an extensive process to make sure these practices are effective, helpful, and meet ELLs needs.

When there are gaps in research this does not mean that there is nothing that Districts can do to help. For the most part, the outcome metrics did have recommendations under the Current ELL category which is a broad term for ELLs. What applies to one group may be used to help another. In situations where there are absolutely no recommendations for a particular outcome metric, although there is currently no evidence based practices that are known, that doesn't mean that there districts should stop trying to help. Recommendations that appear under multiple outcome metrics might alleviate some of the low numbers in other areas. In addition, getting schools, community specialists, families, and students involved to figure out areas they feel need improvement or that affect their learning and discuss and brainstorm ways to improve.

As seen throughout the report, the majority of the data falls under the Current ELL category. This is due to Current ELL being a general term that all ELLs fall under. Although every ELL falls under this category, it is still important to address the needs of subgroups as those are particular to the situations those students face. Although this report only focuses on four groups of ELLs, it is important to note that there are many other groups of ELLs that form part of the community and knowing what groups make the community up is important in order to be able to properly address their needs and set them up for success. A school can be fulfilling a number of helpful practices for ELLs, but if that ELL isn't getting proper attention for a disability, or is facing issues such as homelessness, poverty, or other issues that aren't being addressed by the school, then the district fails to meet their obligation to help all students have the education they need.

Another key problem we stumbled across with the missing data was the lack of financial literature involved. It's important to note that both reports used in this section do not address the financial aspect of implementing these best practices. Seeing as one of the major parts of this paper is looking at the financing of ELLs, we found it necessary to look beyond these two reports and delve into the limited financial literature on ELLs.

Literature Review Part II: School Finance Literature for ELLs

This part of the review of the literature will focus on the ELL cost study/finance literature to understand the funding recommendations to adequately and equitably fund ELLs.

Background on Cost Studies

The primary method for determining the costs associated with educating K-12 children, including ELLs, has been through the use of costing out studies. Currently, the four prominent cost study methodologies are professional judgment panel (PJP), successful school model

(SSM), evidenced-based (EB) approach, and cost function analysis (CFA). Costing out studies, in general, seek to determine what resources are needed to provide an adequate education to public school students, how much an adequate education should cost, and how revenue should be generated. Adequacy looks at whether schools and districts have sufficient resources to prepare students to meet the minimum standards on state achievement tests. By focusing on outcomes, adequacy refocuses school finance back on improving student learning.

Professional Judgement Panel (PJP)

The PJP approach is currently the most commonly used costing out method. Panelists are asked to assign costs to the services and programs needed to allow students to meet specified performance outcomes in various prototypical schools or districts. Prototypical schools or districts are constructed to represent the average student population in districts of different sizes. Most PJP studies include additional weights for students classified as ELL or low income or for students with other special needs (Gándara & Rumberger, 2007). The PJP studies varied substantially both in the number of panels held and the number of panelists, which could reflect the size of the state or the financial resources of the study. All of the PJP studies sought panelists who were experienced educators, with preference given to those coming from high-performing schools or districts. Researchers attempted to design heterogeneous panels that represented diverse professional occupations (i.e., teacher, principal, superintendent, school business official) and district types (i.e., small district, very large district). The PJP approach has several advantages over the other models. These strengths include that it is fairly standard and transparent, easier to articulate findings to a policymaking audience, it engages input from local experts, and it recommends how districts should use resources.

Successful School Model (SSM)

The SSM approach was first employed in 1997 by John Augenblick and John Meyers as part of an Ohio State Supreme Court school finance case (R. C. Wood & Associates, 2005; Rebell, 2007). The SSM approach focuses on schools that perform substantially well despite student body characteristics. To conduct an adequacy study using this technique, researchers first identify districts with a high proportion of students passing the state standardized exam. Data on current expenditure levels are then used to estimate funding levels for all districts after controlling for student characteristics (Gándara & Rumberger, 2007; Lawrence O. Picus & Associates, 2003). Like the PJP approach, SSM is fairly transparent and its findings can be easily articulated to a policymaking audience. Moreover, proponents of this method believe it is a more reliable way than other approaches to calculating costs because it reflects the actual costs of districts that are meeting state standards.

Evidence-Based Approach (EB)

There are many similarities between the PJP approach and the EB model. First, both rely on experts to define the resources needed to provide an adequate education. The expert in this

model is the research literature on programs and practices that have shown evidence of positively influencing student academic outcomes (Jimenez-Castellanos & Topper, 2012). Given that the EB approach generates program, staffing, and funding recommendations based on the evidence in the research literature, understanding how studies are selected for inclusion in this model is a necessary step in interpreting recommendations. The costs of the various programs are estimated and aggregated to produce state- and district-level costs (Gándara & Rumberger, 2007). The strengths of the EB model lie in its transparency, its reliance on the expertise of “experts” (i.e., the vetted research literature), and the specific recommendations on how resources should be used.

Cost Function Analysis (CFA)

The CFA approach is the newest of the four costing out methodologies. The authors of studies that used the CFA approach tended to be from universities instead of the private sector. Despite the technical complexity of the cost function approach, the technique is fairly transparent. This statistical approach depends on access to reliable district-level data on expenditures (e.g., per pupil expenditures, teacher salaries), student characteristics and performance outcomes, and geographic cost differences. These data are used first to create a measure (costs indices or per pupil weights) to capture the effect of external factors on spending to meet a specified performance outcome and then to determine how much funding is needed across districts to meet any given performance level (Duncombe, 2002). Jimenez-Castellanos & Topper (2012) found that the general formula for a cost function is:

$$S_{it} = h(T_{it}, P_{it}, Z_{it}, F_{it}, \epsilon_{it}, u_{it}),$$

where expenditures in district i during year t (S_{it}) are a function of performance outcomes (T_{it}), input prices (P_{it}), student characteristics (Z_{it}), district characteristics (F_{it}), unobserved district characteristics (ϵ_{it}) and random error (u_{it}). In summary, the cost function formula allows researchers to estimate the minimum amount of funding needed to meet performance goals, given the student characteristics of each district, by holding the performance outcomes constant and adjusting for the characteristics of each district. Cost functions are superficially attractive because they give the impression of objectivity, holding out the promise of scientifically estimating the cost of achieving specified levels of performance from actual data on spending.

Methodology

The majority of literature that discusses ELLs is embedded in the cost study literature. The cost study literature that we analyzed for this review was selected from 70 empirical cost studies that met the basic criteria below:

- peer-reviewed journal articles and commissioned reports that used one of the four cost-out methodologies (PJP, SSM, CFA, EB)

- Published after 1990 that focused on generating funding recommendations at the district level

Because this particular review focused on understanding the funding recommendations to adequately and equitably fund ELLs, we refined our research further by focusing on the cost studies that not only mentioned ELLs in their analysis but also gave specific recommendations for ELLs beyond the weight (n=28). This literature was organized in an Excel Spreadsheet³ by cost study method used, type of recommendation, and rationale for that specific recommendation. The caveat in this review is that only four cost studies have specifically targeted ELLs (Arizona Department of Education, 2001; Gándara & Rumberger, 2008; Rice. et al, 2008; National Conference of State Legislatures, 2005). These studies will be discussed more in-depth in the latter part of this review. The four studies whose analytical focus was ELLs, utilized either the SSM approach (Gándara & Rumberger, 2008; Arizona Department of Education, 200), the PJP approach (National Conference of State Legislatures, 2005), or a combination of both SSM & PJP (Rice et. al, 2008). We prioritized studies that utilized the PJP and SSM method in general because of their reliance on evidence-based practices. Additionally, because the literature highlights several studies that utilize a combination of methods to determine best funding practices for ELLs, we perceived it wise to include findings and recommendations of those studies that utilize the EB approach in conjunction with PJP and or SSM.

In order to expand our view and make the most relevant recommendations, we also analyzed the finance literature beyond cost studies.⁴ We approached this particular body of research the same way we approached cost studies. That is, by keeping the ELL population at the forefront of our analysis and seeking the best funding practices for ELL students that are researched-based and equity focused. The general themes that emerged in this body of literature are discussed later as well. We end this review with six recommendations that are proven to improve ELL outcomes.

Review of the Cost-study literature

We will summarize the key findings of the cost studies that not only mentioned ELLs, but also gave funding recommendations for that student population. It is worth reiterating that while these studies mentioned ELLs, their analytical focus was not ELLs. Those studies whose analytical focus was ELLs were excluded from this section but will be discussed more in-depth in the section that follows. We organized this review by methodological approach. The first method we will discuss is PJP, the most commonly used costing out method. Then, the EB method follows. The last two parts include those studies that used multiple methodologies.

³ This will be provided to ODE

⁴ See page 42 of this document.

PJP

Out of the 28 studies we reviewed, five of them utilized the PJP method to determine the costs associated with educating ELLs. General funding recommendations generated in the PJP studies include providing additional support in the form of personnel and other school-related costs to service ELLs (Verstegen, 2004; National Conference of State Legislatures, 2005). It is common practice to adjust the foundation guarantee for cost pressures beyond the control of the school district. For example, Verstegen (2004) noted that some districts have more students with disabilities, limited English Proficiency or economic disadvantages that require higher costs to educate to State standards and objectives. The district level costs include additional expenditures beyond school site costs or costs that cannot be disaggregated to schools, such as district administration, central office costs, transportation, plant maintenance and operations. To these costs, adjustments can be made to provide additional assistance to students with special needs, such as exceptional children, children who are English language learners, and economically disadvantaged children. In addition to base costs, districts would need to spend on average between \$817 and \$858 per Limited English Proficient student or student at-risk (Verstegen, 2004). Panels provided adjustments to general “ingredients” and resource items as needed for students with disabilities, Limited English Proficiency, economic disadvantages and gifted and talented students, based on actual demographics. The rationale for *how to spend* the additional funds went no beyond recommending personnel requirements of K-12 prototype school to achieve state standards and objectives.⁵

Other panels highlighted that there is concern with staffing for students with a non-English home language (Calvo et. al, 2000). They concluded the funding for schools with higher concentrations of non-English speaking students or with higher numbers of different languages spoken would be under-funded⁶ at the levels suggested in the original model (Calvo et. al, 2000). They stressed, however, that the Model is not a substitute for local decision-making about how resources are best used to meet student needs. While the Model provides detailed information on the resources needed to operate schools for high performance, it does not prescribe how individual districts and schools should use those resources. Those decisions are best made locally. However, the Commission feels student performance must continue to improve. There are too many students not at standard and disaggregated data show students from low income

⁵ See Verstegen 2004 (Tables 4A, 4B, and 4C) for resource configurations. When reviewing these tables it is important to keep in mind that the figures indicate the resource needs of schools, not the manner that resources should be deployed and used in schools and in classrooms. When determining personnel units, panels distinguished between general education students and special needs students while treating each group of special needs students as separate. In practice it is possible that there is some overlap between special student populations, however, leading to some extra resources due to double counting, but this may be warranted to some extent. For example, a student receiving special education services may also be an English language learner.

⁶ See Oregon Quality Education Commission, 2000 for recommendations to the ODE Office of Student Services staff. Recommendations include: look more closely at data from districts, evaluate demographic changes, and provide program development assistance.

families, students of color, and English Language Learners are all disproportionately represented in the lower achievement ranks.

The panel in the Norman (2002) study concluded that we must pay special attention to the categories of students with special needs identified by the Court: students with disabilities, students from poor households, and students with limited-English proficiency. A finance system that does not do so is at great risk of being declared unconstitutional, should a suit attacking financing for these students reach the Supreme Court. For students who need help in acquiring and/or improving English-language skills, they must be provided with appropriate instruction and class support, under state law. This study identified seven critical resources for effective learning:

- Small schools: Elementary schools with a maximum of 350 students, middle schools with a maximum of 500, and high schools with a maximum of 800.
- Small classes: A maximum of 20 students in kindergarten through third grade (15 in high-poverty schools), 22 students in fourth and fifth grade, and 25 in sixth through twelfth grade.
- Broad curriculum options: Art, music, foreign language at all grade levels, and advanced courses, including Advanced Placement, at all high schools.
- Higher pay and ongoing training for teachers: Staff development time averaging one period daily for each teacher and a staff position to coordinate staff development; an across-the-board wage increase of 5% for all teachers; and salary incentives to teach in high-poverty and rural schools.
- Sufficient access to technology: Five computer terminals for every 20 students, regularly upgraded.
- Supplemental funding for rural schools, and supplemental services for low-income children: Tutoring and enrichment programs, summer school, and all-day four-year-old kindergarten.

These were quantified and priced. The result was that to ensure all schools the ability to afford the targeted resources, districts would need at least \$8,500 per general student, with additional allocations for students with disabilities or with limited-English proficiency, children from families in poverty, and rural schools. The most relevant recommendation as it pertains to ELLs was that there be a full reimbursement for services for students with disabilities and students with limited-English proficiency.⁷ Students with limited English proficiency need special programs, regardless of whether they are among a group of at least 10 — or 20 — similar students in a particular district. Therefore, it is recommended that state financial support is expanded to include all students in need of English proficiency. Besides the general reimbursement recommendation, there were no other tangible and or specific staffing requirements in this study. Moreover, while Norman (2002) explicitly identified panelists with

⁷ Norman (2002) explained that there is no reason to require a school district to pay extra costs to educate these children and to have to take the additional amounts from their regular operational funds.

expertise in teaching ELL or English as a second language, no information was provided on their educational backgrounds, certification, years of experience working with ELLs, or school background (e.g., large ELL population). Meanwhile, professional judgement panels in the Picus (2003) study generated recommendations for funding English Language Learners in the form of teacher-student ratios. In forming their “prototypical” school, they took into account ELLs and other struggling student populations. They recommended one teacher for every 15 ELL students in Elementary and Middle school; and one teacher for every 20 ELL students in high school. Otherwise, this study ignores ELL services costs.

SSM

The SSM studies we reviewed (Gandara & Rumberger, 2008; Arizona Department of Education, 2001) will be discussed in the following section of this report where we go in-depth about the findings of the four studies that targeted ELLs.

EB

The studies that utilize the evidence-based approach are grounded in generating best practices based on the available research literature. Any recommendations they pose for ELL students are primarily in the form of teacher-to-student ratios instead of in absolute spending recommendations. We looked at four EB studies whose primary authors were Odden & Picus (2003-2007).⁸ It is important to note that there is significant overlap between these four studies. Their findings are discussed below.

The model used by Lawrence O. Picus and Associates relies on the evidence-based approach, developed by the firm’s principal partners Allan Odden and Lawrence Picus. Lawrence O. Picus and Associates conducted an extensive review of the resources needed to ensure that Wyoming students will have access to an educational basket designed to help them meet state proficiency standards, and developed a funding model to allocate resources to each of the 48 school districts in the state.⁹ In this particular Odden & Picus study, the final result was a new funding model for the State of Wyoming. It is important to note that this new model was school rather than district based. In other words, the model builds resources from the school level up to the district level, generating resources for individual schools on the basis of school enrollment, and the characteristics of the children attending the school. In addition to providing teaching resources, strategies for at risk children, school site administration and professional development are addressed based on the evidence from current research. The model also provides resources for instructional materials, technology and student activities.

⁸ For reference, visit the following studies: Picus L., 2005; Odden and Picus 2006; Odden and Picus 2003; Odden and Picus 2007.

⁹ Picus, L., and Associates, (2005). An evidenced-based approach to recalibrating Wyoming's block grant school funding formula. Prepared for the Wyoming Legislative Select Committee on Recalibration.

Recommendations for ELL in Odden & Picus studies.

The general recommendation as it relates to ELLs was in the form of teacher-student ratio. The researchers recommended one additional FTE teacher position for every 100 ELL in the form of a licensed tutor. One of the most telling findings of the Odden & Picus (2005) Wyoming study was that, because not all students will learn to performance standards with just the core instructional program, districts and schools should design a powerful sequence of additional effective strategies for at-risk or struggling students, i.e., students who must work harder and who need more time and help to achieve the state standards. Rather than simply providing a pot of dollars, the state's current approach, they recommend a series of specific, cost-based extra-help programs for at-risk students:

- Tutoring, i.e., immediate, intensive assistance to keep at-risk students on track
- Sheltered English and ESL instruction for ELL students
- Extended day programs
- Summer school for at-risk students still needing extra help to achieve to state standards
- An Alternative school mainly for secondary students who need an environment outside of the regular school structure to succeed.
- Continued 100 percent cost reimbursement for special education.
- Finally, they propose to increase pupil support resources as the numbers of at-risk students in a school increases.

Odden & Picus (2005; 2003) also found that the most powerful and effective strategy to help at-risk students meet state standards is individual one-to-one tutoring provided by licensed teachers. Students who must work harder and need more assistance to achieve proficiency levels (i.e. students who are ELL, low income, mobile, or have minor disabilities) especially benefit from preventative tutoring.¹⁰

Next to providing extra teachers for ESL instruction to students for whom English is not their primary language, research shows that ELL students need a solid and rigorous core curriculum as the basis from which to provide any extra services (Odden & Picus, 2006)¹¹ Also, it is proven that English language learners from lower income, and generally less educated, backgrounds struggle in school and need extra help (Odden & Picus 2005). Triggering tutoring resources on the basis of the economic background of students as previously recommended would provide most of the extra help resources needed for struggling English language learners while having a minimal effect on costs because the ELL numbers do not add many students to the unduplicated count. However, research, best practices, and experience also show that when students are both from a low-income background and English language learners, some additional

¹⁰ When provided by a trained professional, tutoring provides the precise and appropriate substantive help the student needs to overcome the learning challenge.

¹¹ Results from their analysis of (Gandara, Rumberger, Maxwell-Jolly, & Callahan, 2003) concluded that ELL students need qualified teachers, adequate instructional materials, good assessments, rigorous curriculum and courses for all ELL students, and professional development for all teachers, focusing on sheltered English teaching skills.

assistance is needed that include some combination of small classes, English as a second language classes, professional development for teachers to help them teach “sheltered English classes, and “reception” centers for districts with large numbers of ELL students that arrive at different times during the school year (Odden & Picus, 2005). This allocation would cover the needs of students from low income backgrounds, students whose native language is not English and are learning English, and the learning disabled. Schools should be free to use the resources for whatever strategy they select, but should be held accountable for having these students learn to proficiency levels (Odden & Picus 2003)

The researchers hasten to note that these are not the only resources provided for ELL students. All ELL students are included in the at-risk counts, which trigger tutoring, extended day and summer school resources, so all of these resources would be available for ELL students as well. For example, if a 100 at-risk count consisted of just free and reduced price lunch and no ELL students, it would trigger 1.0 tutor position, plus the extended day and summer school resources below. But if the 100 at-risk student count consisted of just ELL students, it would trigger the initial 1.0 tutor position, *plus an additional 1.0 tutor position*, as well as the extended day and summer school resources below .14. Thus, because the Wyoming at risk student count includes all ELL students, this element of the at-risk proposal simply ensures that more resources are provided when those at-risk students are ELL, allowing an even fuller array of services to be provided. Odden & Picus (2007) state that they are confident that this figure in the form of additional 1.0 FTE position for every 100 ELL is a good estimate of what the combined evidence-based recommendations, which include some of the most desired and highest-cost educational strategies, would cost on a national average basis. And they are confident that if such resources were provided on average to each district and school, price adjusted to insure parity of the purchasing power of the education dollar across states and districts, that schools would have a sufficient set of resources that would allow them to deploy a series of strategies that would allow them to produce substantial improvements in student academic achievement.

Mixed Methodologies

In this section we will review the studies that utilized a mixed-method approach to generating funding recommendations for ELLs.

PJB & SSM & EB

Two studies that we reviewed utilized three cost-study methodologies (Chambers et. al 2008; Wood R.C. & Associates 2007). Their funding recommendations for adequate education of ELLs are similar to previous studies outlined in this report. For instance, Wood R.C. (2007) found that well-documented best practices with regard to improving ELL student learning through assessment include regular review of assessment data to monitor teaching and learning, as well as adjusting instructional planning based on student performance. In the context of ELL instruction, assessment can be particularly important for gauging progress in English acquisition, as well as in academics. Beyond the issue of data collection, R.C. Wood (2007) also highlighted

that, while there is no singular method that uniformly promotes academic excellence among ELL students, there are several factors that can play a vital role in fostering successful outcomes.

School administrators identified the following as critical components to reaching program goals:

- Providing adequate staff capacity to address ELL needs;
- Focusing on schoolwide English language skills development and standards-based instruction techniques;
- Sharing priorities and expectations for ELL education;
- Using and applying systematic, ongoing assessments and data-driven decision-making techniques.

R.C. Wood (2007) concludes that rather than looking to the past to define best practices in ELL education and program administration, states should consider evaluating how their current systems are functioning towards meeting future goals, which are likely to start with enhanced systems to collect and track ELL student progress. Only from that point can policymakers truly make informed decisions regarding how precious funding should be spent to close ELL achievement gaps and promote better educational outcomes.

The second mixed-methodology study was the one conducted by Chambers et. al (2008). They found that for schools with higher levels of ELs, panelists made several modifications to the originally designed high poverty program. Both panels increased the number of bilingual and ELD teachers and aides to either assist current teachers or teach core subject classes. In addition, one panel specified the need to have an elementary level bilingual program whose exact orientation (i.e. – dual immersion, early exit bilingual, etc.) would be determined by the community. Additional funds for EL specific curriculum, technology, software and supplies were also allocated by the panelists. In addition, it was requested that support personnel such as administrators, clerical staff and a parent liaison have experience with English learner populations and have bilingual capabilities.

PJP & SSM

_____ Augenblick & Myers (2001-2011) were the primary authors of studies that utilized a combination of both PJP & SSM methodologies. In a decade of studies, they found that the added per-student cost of educating students who are English language learners triples from the smallest to the largest districts.¹² Their most recent study (Augenblick & Myers 2011) found that educating ELL students costs 51 to 125 percent more than the base cost per ELL student depending on school district size. Districts spend more in educating students with limited-English proficiency (LEP) or students who are at risk of failing in school, which is strongly associated with the socio-economic characteristics of students' families.

The other PJP & SSM study conducted by Silverstein et. al (2007) also found that other teachers or support staff, such as instructional aides, counselors or school resource officers, to

¹² Augenblick, J., Brown, A., DeCesare, D., Myers, J., & Silverstein, J. (2006). Estimating the cost of an adequate education in South Dakota (Denver: Augenblick, Palaich and Associates). There are not many details about *how* funds should be used. However, this study looked at successful districts.

address the needs of LEP and at-risk students. In this study, the purpose of the PJP work was not to specify exactly *how* funding should be spent, but instead to estimate the level of funding necessary to provide programs and resources such as the ones mentioned above. Silverstein et. al (2007) found that there are some district costs associated with students with special needs, that may reflect a specialized facility, such as an alternative setting school in large and very large districts (which would be attributable to the costs for at-risk students), central services for special education (including diagnostic services or services that are shared across schools), and the cost of language interpreters (attributable to the cost of LEP students).

PJP & EB

Three studies utilized the combination of PJP & EB methodology to generate their funding recommendations (Picus & Associates, 2005; Odden & Picus, et.al 2003b¹³; Odden, A., Picus, L., Fermanich, M., & Goetz, M, 2004). It is important to note that similar to the studies that exclusively used the EB approach, the primary authors of those studies used PJP as a supplement. So, an overlap in findings is expected such as an emphasis on the recommendation to include an additional FTE position. However, Odden & Picus et. al (2004) study found that best practices and experience also show that when students are both from a low-income background and English language learners (ELL), some additional assistance is needed beyond that just for poverty. Thus, the Committee recommends that every 100 students who are both ELL and from a poverty family trigger an additional 1.4 teacher positions, rather than the 1.0 if just from a poverty family. This is a 0.4 FTE increase to their original recommendation.

There are also additional findings that show that in order to make the maximum impact, resources need to be used to deploy a more effective curriculum program, from too much whole language reading today to a balanced, research-based approach with more phonics and phonemic awareness in the early elementary years, from just basic skills in mathematics today to mathematical concepts with applications to real-world problems, from little science today to science concepts again with applications to real-world issues, and to a stronger approach to U.S history (Odden & Picus et. al, 2003). ELLs often are the prime beneficiaries of new instructional programs that expect them to learn to those levels, and provide the extra assistance some might need to perform to those levels (Odden & Picus et. al 2004).

The need for tutoring services is also reiterated in the Picus & Associates “Lead with Five” (2005) study. Students who need extra help — English Language Learners, children in poverty, children with some learning disabilities — get extra one-on-one tutoring help in reading every day. The authors state that the most powerful and effective strategy is individual one-on-one tutoring provided by certified teachers, especially in the area of reading. Virtually all research in this area suggests that such tutoring is extremely effective — that the benefit to struggling students is even greater than to other students — and that the benefits of early one-on-one reading tutoring continue to grow for students over time, at least in the elementary grades.

¹³ Odden, A., Picus, L., and Fermanich, M. (2003), Evidence-Based Approach to School Finance Adequacy in Arkansas, prepared for Arkansas Joint Committee on Educational Adequacy.

However, the mere idea of tutoring help for students isn't enough all by itself. The research focuses on the effectiveness of tutoring in reading specifically, and most programs call for a 20-minute period for tutoring each day. Additionally, the use of certified teachers as tutors, rather than para-professionals or peers is recommended. As one review of the literature put it, a certified teacher's "judgment, flexibility, and knowledge of how children learn" is vital to the success of a tutoring program. They also conclude that educational improvement is not a static process. School districts and individual schools will also have to develop the capacity to track student and teacher performance as well as some school-level trends.

Review of the Four major studies

———This section will review the four studies that Jimenez-Castellanos & Topper (2012) identified as having an analytical focus that was ELLs. We decided to focus on these particular studies extensively because of the connection between their research question and ours — how to adequately fund ELLs. We organized this section once again by methodological approach starting with the PJP study from the National Conference of State Legislature's (2005), followed by SSM studies Gandara and Rumberger (2008) and Arizona Department of Education (2001); and ending with the Rice et. al (2008) study which utilized a combination of the PJP and SSM methods.

PJP: National Conference of State Legislature (2005)

In 2002, the Arizona Legislature contracted with the National Conference of State Legislature's (NCSL) and the National Center on Education Finance (NCEF) to identify the total and incremental costs associated with educating English Language Learners (ELLs) in Arizona. Using the professional judgment approach, "education experts" are identified and convened into a panel that discusses the appropriate inputs required for students to meet specified education standards. For this study, NCSL convened two panels, one with ELL education experts from Arizona, and one with national ELL education experts. NCSL received input from Arizona Department of Education officials, legislative staff, and other individuals who would be appropriate to participate in the panels. Multiple perspectives on ELL education were represented in the state and national panel discussions led by NCSL.

Identifying ELL program Costs. The NCLS administered surveys to selected Arizona school districts. The survey provided school districts with a means of reporting what materials and personnel costs are currently incurred for services to ELL students. The data from the district surveys provided the basis for estimating current expenditures made by school districts for providing ELL instruction in Arizona. The criteria for selecting school districts for inclusion in the sample is below:

Urban and rural, size, percentage of ELL pupils, types of school districts (elementary, union and unified), including at least one Native American school district, at least two charter schools, one of which having at least 100 ELL students comprising at least 50

percent of the student population, one high school district, one rural district other than a Native American school district and one urban school district.

38 public school districts were eligible for inclusion in the sample.

As they pertain to a school district's ELL programs, incremental costs are those that provide ELL programs in addition to the regular costs of conducting programs for English-proficient students. Incremental costs to educate ELL students do not include costs that replace the same types of services provided to English-proficient students. The school district survey identified incremental costs associated with instructing ELL students in the classroom. These costs may include salaries, benefits, and supplemental pay (such as stipends, bonuses and special pay) for teachers and classroom aides. In addition, they may also include any other salaries and benefits, purchased services, textbooks, instructional aides and materials (such as computer software, workbooks, etc.), other teaching supplies, and travel.¹⁴ Among the panel's recommendations impacting the cost of educating ELL students are reduced class sizes, additional ELL support staff, compensatory education services, and after school programs. Members of the state panel agreed that targeting resources at younger ELLs would likely facilitate the overall development of ELL student language, academic, and social skills.¹⁵ The state panel also concluded that an average incremental spending increase of \$1,550 per ELL in Arizona's K-12 system is needed in order to provide an adequate education. The national panel concluded that various incremental costs were required for ELLs in Arizona based on their level of English proficiency (high need or lower need ELLs), grade level (elementary, middle, and high school), and socio-economic status (SES) as defined by eligibility for the federal free and reduced price lunch program (FRPL). The range of incremental funding levels went from \$1,026 for lower need high school ELLs, to \$2,571 for high need elementary ELLs.

ELL teacher salaries and benefits that can be attributed to ELL reduced class size as compared to the district's average non-ELL class size. An example of how this may be calculated would be:

$1 - (\text{average ELL class size} / \text{average non-ELL class size}) \times \text{average teacher salary and benefits} \times \text{number of ELL teachers}.$

So, if the average non-ELL class size is 25 students; the average ELL class size is 20 students; the average salary and benefits of the district's teachers is \$30,000 (excluding stipends, bonuses and special pay); and there are 4 ELL teachers. Then the incremental cost to include on the worksheet would be $[1 - (20/25)] \times \$30,000 \times 4 = \$24,000.$

As well as having appropriate curricula and well-prepared teachers, ELL students also must be assessed fairly and accurately. States and local school districts must involve all students, including ELLs, in large-scale testing. This component includes incremental costs associated with assessing and testing students to identify ELL students, monitor their progress and follow

¹⁴ A description of each component appears below along with an average of the related cost figures reported by districts that responded to the survey in NCSL (2005) pg. 15-17.

¹⁵ The state panel recommended that greater financial resources be directed at ELLs in kindergarten through grade two (\$1,785), than in grades 3-12 (\$1,447).

up with exited students. These costs include salaries, benefits, purchased services, supplies (including testing materials), and accommodations including purchased services and supplies (i.e., gasoline) for transporting students for assessment if applicable.

Additionally, engaging ELL parents in order for them to be more involved in school activities and their children's education is of utmost importance. Parent engagement efforts provide districts with opportunities to be strategic about how they build capacity in the community. The work that districts engaged in included increasing parent knowledge regarding accountability systems and policies, as well as services and supports available to English Learners. This component includes incremental costs associated with the administration of ELL programs such as communicating with parents, processing waivers, providing interpreters, and evaluating programs. Costs may include salaries, benefits, purchased services, supplies, and travel.

Other Cost Factors for Educating ELLs. Both state and national professional judgement panels identified cost factors associated with educating ELL students. The panels also identified other support staff and services required for an effective ELL program. However, since these staff and services are also available to non-ELL students and were not thought to be required in greater quantity for ELL students, such as the school principal, guidance counselors, psychologists, and custodians, no incremental cost was incurred.

The cost factors are summarized below

- Reduced class size:
 - State panel Recommendation: five students per class all grades
 - National Panel Recommendation: four to 12 students per class depending on student SES and grade-level
- Lead ELL teacher
- Additional paraprofessional
- Additional library media
- Technology
- Professional development
- Instructional supplies
- Equipment Technology Assessments (state panel only)
- District ELL coordinator
- District English language acquisition specialist
- ELL specialist supervisor
- Interpreter or translator
- Parental involvement staff
- Compensatory education
- After school programs

SSM: Gandara & Rumberger (2008) and Arizona Department of Education (2001)

The two studies that will be discussed below utilized the SSM approach. While in general the SSM approach is of limited use for understanding the costs associated with ELL students given that schools and districts that do well on state performance outcomes typically have lower percentages of linguistic minority students or students with special needs, Gándara & Rumberger (2008) and Arizona Department of Education (2001) focused solely on schools and districts that had high proportions of ELL students. Linguistic minority students face poorer conditions for learning in school. Gandara & Rumberger (2008) identified seven inequitable conditions that affect students' opportunities to learn and that are linked to resources. These are:

- 1) Inequitable access to appropriately trained teachers,
- 2) Inadequate professional development opportunities to help teachers address their instructional needs,
- 3) Inequitable access to appropriate assessment to measure their achievement, gauge their learning needs, and hold the system accountable for their progress;
- 4) Inadequate instructional time to accomplish learning goals,
- 5) Inadequate access to instructional materials and curriculum,
- 6) Inequitable access to adequate facilities, intense segregation into school and classrooms.

In order to determine the costs of educating ELLs, it is necessary to specify the goals of instruction. Gandara & Rumberger (2008) outlined four possible standards for an adequate education of linguistic minorities, which would have implications for different types of expenditures as well as different outcomes for students.¹⁶ Their goal was to address the weaknesses of costing out studies which is that they fail to identify the premises behind their outcome standards.

The studies also mentioned the need for high-quality teachers and staff.¹⁷ With some additional effort in recruiting teachers with bilingual and bicultural skills, and possibly some additional incentive for them to come into education and remain there, as well as resources to aid teachers in becoming multilingual, most of the resource needs could be met (Gandara & Rumberger, 2008). Once teachers are recruited and retained, the need for professional development is enforced. With respect to professional development, collaboration among teachers becomes a need — the need to share knowledge and skills with each other, and also the opportunity to plan and organize the curriculum both horizontally among peers at the same grade level and vertically among teachers serving the same students in the EL program. This

¹⁶ These four goals are: 1) Reclassification to FEP only; 2) Reclassification and maintenance of academic proficiency; 3) Reclassification with biliteracy and 4) Reclassification and closing of achievement gaps.

¹⁷ Gandara & Rumberger (2008) explain that good faculty must be recruited and retained to meet the needs of ELLs. The strength of the leadership in the school, the environment in which teachers work, and the compensation they are provided are known to be key features recruiting and retaining teachers. There are some costs associated with recruitment of specialized personnel, and additional costs implicated in creating an environment that will retain them. All other things being equal, school districts that can pay more for specialized skills, like bilingualism, probably can attract more qualified people.

component should include incremental costs associated with recruiting ELL staff and providing professional development services for ELL staff. Costs may include salaries, benefits, purchased services, supplies and travel (i.e., hotel, transportation, and per diem expenses). Also include costs for reimbursing tuition and books to staff for taking ELL courses. Providing substitutes for the times that teachers are out of the classroom for collaborative activity is costly (Gandara & Rumberger, 2008).

The importance of regular and appropriate assessment was also reiterated. Primary language assessment, for example, may also be designed to be useful for assessing skills of those students acquiring other languages, and certainly skilled, multilingual teachers and other staff would be a tremendous asset to any school also wanting to provide language enrichment for its English-only students.¹⁸

Other district specific costs, including attracting qualified teachers, providing staff training and regular assessments, that Gandara and Rumberger (2008) discussed are outlined in the Arizona Department of Education (2001) study. The following discussion describes these services in further detail and outlines the associated incremental costs.¹⁹

1. Attracting and retaining staff. Utilizing the SSM approach, the Arizona Department of Education (2001) found that to attract teachers qualified to provide services to its LEP population, the district provides a stipend of \$2,000 to teachers possessing an ESL or Bilingual endorsement and \$800 for provisional ESL or provisional Bilingual endorsements.
2. Staff training and development. Optional training on LEP methods is offered throughout the year to all teachers in the successful districts they analyzed. Many of these capacity building workshops take place on Saturdays and the teachers must attend on their own time; however, the district pays the cost of the training course itself. Staff training and development in LEP teaching methods results in \$15,000 of incremental costs. A rich array of staff development workshops — in-service training — has been provided for teachers of English Language Learners including the following:
 - Balanced literacy instruction — as previously discussed.
 - Integrated Language Approach workshops by Dr. George Gonzalez on techniques for using classroom literature texts to build oral language, reading and writing.
 - ESOL teachers are trained in implementing the Developmental Reading Assessment (DRA) to evaluate student progress in oral reading and comprehension. They have established the benchmark levels for

¹⁸ One high school employed a person to conduct primary language assessment and argued that this was critical to their goals of retaining and argued that this was critical to their goals of retaining and graduating ELs (Gandara & Rumberger 2008).

¹⁹ See Arizona Department of Education (2001) for the complete list.

determining when LEP students move from Beginner to Intermediate to Advanced status.

- Reading Recovery Teacher Leaders are trained for a full year for providing student tutorials and for training district teachers in Reading Recovery and balanced literacy approaches.
3. Assessments, Reassessments, and Reclassification. The Assessment Department is staffed with nine people who are in charge of purchasing, administering, and grading all testing materials. The study identified approximately \$206,333 in incremental costs related to the assessments, reassessments, and reclassifications including staff time to administer and grade the test and the cost of the testing materials.
 4. Reduced Class Size. While the average student to teacher ratio at the two middle schools is 31 to 1, analyzed in the study. The ESL classrooms have, on average, a student to teacher ratio of 18.5 to 1.²⁰ There are 11 full-time equivalent teachers instructing these reduced size classes in the two middle schools; thus, the schools are not employing these teachers in a full-sized class and incur incremental costs involved with teaching fewer students. With classes reduced to an average of 18.5 students and 11 teachers instructing these classes, the Arizona Department of Education (2001) identified \$165,580 in incremental costs relating to reduced class sizes.

In sum, English learners and other linguistic minority students do require additional resources, above and beyond other students, but their needs appear to differ more in kind than in quantity from those of poor and low-income students who are also struggling with developing broader vocabularies, a command of academic English, and familiarity with the cultural capital that are such important academic assets for the middle class. This highlights the importance of disaggregating ELLs and other at-risk student populations.

PJP & SSM: Rice et. al (2008)

The study was commissioned by the New York Immigration Coalition (NYIC), an umbrella policy and advocacy organization for approximately 200 groups in New York State that work with immigrants and refugees. It follows an extensive review of earlier cost studies in New York and elsewhere that did not have as their focus the particular needs of ELL students, often treating ELLs under a rubric of poverty or special needs and without bringing to bear concentrated expertise in the area of ELL education. However, we chose to highlight this study, along with the three studies above, because of its analytical focus on finding the costs to educate ELL. The intent of the study was to yield information that addresses the fiscal resources question

²⁰ It is important to note that different cost study methodologies generate different student-teacher ratios. Here, the student-teacher ratio is greater than Picus (2003) study.

and provides a bottom line in terms of the costs of ensuring an adequate education for English Language Learners.²¹

This study found that ELL student education requires an extra funding weight of approximately twice that of regular education students. Currently, ELLs generate a supplemental weight of approximately half that (Rice et. al, 2008). But in the real world, where school budgets reflect a combination of state, local, and federal funding sources and a myriad of competing needs and choices, it is not at all clear that even the currently generated supplemental resources are in fact being spent on the specific educational needs of ELL students. Additional costs associated with district and state level administration of ELL programs were also factored as well as the costs of training substantially larger numbers of ESL and bilingual teachers needed for ELL students. The research team provided the Professional Judgment Panels in the Rice et. al (2008) study with a brief overview of research evidence of some of the elements found in schools which are considered successful in helping ELL students meet high academic goals. The elements are: an elementary school class size of 15,²² extended learning time,²³ pre-school, tutoring, student and family support, technology, professional development²⁴, professional support, and adequate materials.²⁵

District level costs. Similarly to the Arizona Department of Education (2001) study, this study generated district and state level costs of providing an adequate education for ELLs in New York. Among the district level ELL program costs are the cost of preschool programs for age three and four, costs of district oversight and management of the ELL school programs, and assessment and screening costs for potential and current ELL students. The details for these three costs are outlined below.

Pre-school. To estimate the cost of adequate preschool Rice et. al (2008) reviewed several earlier studies and found that Gandara & Rumberger (2007) suggested that a quality part-day preschool program for ELL students in California in 2005 would be approximately \$ 5,500.

²¹ Rice et. al (2008) acknowledges the contributions of Dr. Diane August, cited in the first part of this report.

²² Odden et. al. also found that a variety of studies, including large scale randomized experimental studies, have shown the benefits in terms of student achievement of elementary school class sizes of 15. Additionally, a study of the impact of elementary school class size reduction on student achievement in Los Angeles found that ELL students with three years of reduced class sizes had significantly higher gains than ELLs with only one year in reduced size classes.

²³ Gandara and Rumberger (2007) also state that additional time such as a longer school day or year is critical for ELL students so that they can meet the goal of a comprehensive instructional program that addresses both English language development and the core curriculum.

²⁴ There need to be sufficient numbers of teachers in a school who have specific knowledge about the structure of language, know how to use assessments to measure language proficiency and are bilingual according to Gandara and Rumberger (2007). They also state that there is a need for ongoing professional support for teachers with a significant focus on the teaching of ELLs

²⁵ For ELL students, however, there is a need for an even greater variety of instructional offerings. Schools serving ELL students need libraries and materials that span more than one language and often many grades. Gandara and Rumberger (2007).

Additionally, given that teachers for preschool ELL students should be certified in bilingual education, and further taking into consideration the cost of unique considerations such as the extra costs of hiring staff who can engage with non-English speaking parents, preschool programs for ELL students will cost somewhat more than preschool programs for non-ELL students.²⁶

Oversight and Management of ELL school programs. Although much of the work of curriculum development takes place at the school level, in a district with ELL programs spread through several schools, Rice et. al (2008) stated that there is a need to assure that the curriculum for ELL students is consistent across schools. Moreover, parent and community engagement is critical to the education of all students and particularly so for English language learners whose families may be newcomers and unfamiliar with schooling in this country and the role that parents and families play in ensuring their children are provided a quality education. Asked to rate factors or strategies for success on a 1-5 scale, principal rated parent training as a 4 plus only slightly behind professional development opportunities for teachers and the use of student academic data. The school places a heavy focus on the education of parents in working with ELL students and believes that there are needs for parental education that are unique to immigrants and crucial for immigrant ELL students to succeed. After parent training, another critical part of serving this school's ELL immigrant ELL population is the role of the bilingual/bicultural social worker. After consultation with national experts who administer ELL programs, elements and resources necessary for adequate ELL family involvement beyond those identified by the PJP were projected by the research team. The elements are: school or district hosted meetings for parents and guardians, staff to support on-going involvement by ELL families; provision of ESL, GED or computer classes offered to ELL parents and families; and, materials provided to the participants. Additional resources are needed for costs associated with the family/parent school meetings including custodial time, food, and childcare. For each elementary, middle and high School, 50 and 150 ELL prototype, a cost of \$12,980 was added to enable these family/parent activities.

Assessments. In their discussion of district level costs attendant to an ELL program, the panelists pointed to administrative, management and assessment functions that went beyond those required for regular education students. For example, all students are screened with a Home Language Survey to determine if a language other than English is spoken at home. Where a non-English home language is indicated, students are given a battery of Language Proficiency tests which form the basis for initial ELL program assignment. Such assessments take place throughout the school year and can lead to re-designation as no longer ELL or movement along a continuum of intervention options. There would be central district staffing of 2.0 FTE — an ELL director/supervisor and curriculum/assessment coordinator, clerical support, and one coach for every 500 ELL students at a cost of \$690,295. It was further projected that district level needs

²⁶ Rice et. al (2008) estimated that \$ 14,000 per ELL pre-student would be a reasonable cost for quality full-day ELL preschool programs.

would grow so that districts with between 3,000 and 5,000 ELL students would need central office staffing of an ELL director, a curriculum director, and an assessment coordinator, Coaches at a 500:1 ratio, a SIFE program director, family and community director, and clerical support at a cost of \$1,286,771.

Training, Support, and Professional Development. Asked to describe the primary strategy or interventions at the school that contributes to the school's high results, the principal pointed to three factors: class size reduction, the *Reading Recovery* program and professional development. The latter includes professional development on how to help ELLs to access the curriculum. The costs associated with providing staff with training, support, and professional development for an Elementary school with 150 ELLs include²⁷:

- Stipends for 30 hours for each bilingual and ESL teacher, 10 hours for each mainstream teacher, 30 hours for each paraprofessional, and 10 hours for administrators
- Substitute Teacher Time for training: 50 days
- Conferences: \$1,200
- Materials for Professional Development: \$2,100 per teacher

It was further projected that district level needs would grow and cost \$1,286,771. Rice et. al (2008) concluded that districts with between 3,000 and 5,000 ELL students would need central office staffing of:

- an ELL director,²⁸
- a curriculum director, and
- an assessment coordinator,
- Coaches at a 500:1 ratio,
- a SIFE program director,²⁹
- family and community director, and
- clerical support.

Literature Beyond Cost Studies

In the development of this report, we focused on cost studies because the majority of literature that discusses ELLs is embedded in the cost study literature. However, in this section, we will conduct a review of the literature outside of the cost studies. It is of utmost importance to expand our view of the literature in order to fully understand the best funding practices for ELLs

²⁷ The approximated costs vary by school type and number of ELLs.

²⁸ Personnel costs for ELL directors and supervisors are based on the New York Department of Labor statistics which list salaries for instructional coordinators.

²⁹ SIFE= Students with Interrupted Formal Education

and make the most useful and relevant recommendations for the students of Oregon. The biggest caveat once again is that the literature that exists outside of the cost studies is awfully limited when it comes to generating the best funding practices for ELLs. We will summarize the findings of those studies that discuss ELL finance to some extent below.

Increasing Base Level Funding.

Jimenez-Castellanos and Garcia (2017) studied the extent to which Texas's secondary schools with the highest ELLs academic achievement expend different amounts per pupil than schools with the lowest ELL academic achievement. Their analytical focus is on ELL achievement, not overall school achievement. The authors reiterate that, despite the long-standing debates in school finance, there is little research that focuses solely on the ELL student group in secondary schools or more specific questions such as funding allocations based on the proportional representation of this group within a district. They also found that when the use of categorical funds (weighted funds) is examined specifically, the preponderance of the research evidence indicates that student weights have done little to curb the achievement challenges that exist within marginalized populations, and even when more funding is applied for students in need, this funding is often funneled away from students to other areas.³⁰

When addressing their research question about to what extent do Texas's top — and bottom — performing schools differ with respect to per-pupil school expenditure, Jimenez-Castellanos & Garcia (2017) found that the largest difference between the highest- and lowest-ELL-performing schools of approximately \$1,000 per pupil was found in regular program expenditures per pupil, which comprises funds dedicated to all students without disabilities and are not targeted to ELL students in particular.³¹ ELL achievement was higher in cases where additional funds were dedicated to general education outcomes. This study suggests that a higher level of investment in students' regular base programs is associated with better academic outcomes for ELLs. Therefore, states should consider increasing the base level funding to provide ELLs a high-quality regular program that includes access to appropriately rigorous coursework while being held to high expectations to meet academic benchmarks. The exact amount of a base funding increase should be driven by need and effective research-based programs for all students, including ELLs, not due to political and budgetary convenience (Jimenez-Castellanos & Garcia, 2017).

Systems of Accountability.

Efforts toward a more equitable finance system for linguistic minorities have been made in states like California. Governor Jerry Brown signed the Local Control Funding Formula (LCFF) into law in 2013. By doing so, California envisioned a more equitable school finance

³⁰ See Baker, 2003; Jiménez-Castellanos & Okhremchouck, 2013; Miles & Roza, 2006. Cited in Jimenez-Castellanos and Garcia (2017).

³¹ Figure 2 in Jimenez-Castellanos & Garcia (2017) details the per-pupil expenditures by funding categories including cost of student instructions, cost per student: regular programs, and cost per student: other expenditures.

system, particularly for the targeted student populations of English Learners, low-income students, and foster/homeless youth, along with more local control over the use of school funding.³² Along with the implementation of this new finance system in California, the state also developed a Local Control and Accountability Plan (LCAP). Districts submit a Local Control and Accountability Plan (LCAP) annually to set goals, report on progress, and designate how these funds will be used to improve services and programs for all students, with special attention to targeted high-need groups. As the title suggests, districts are held accountable to their plans by defining how they will address the eight priorities the state funding law identifies, to set goals, and then revise each year based on progress toward achieving the stated goal.

Lavadenz et. al (2019) present data from a multiyear collaborative project between researchers and advocates focused on understanding the way district-level actors develop their respective LCAPs. The authors provide case studies of nine districts, which include an analysis of districts' Local Control and Accountability Plans and data generated through interviews with education leaders and advocates to understand how equity for emergent bilingual students is being advanced locally. Findings reveal LCFF as having little to no departure from the status quo, including a disregard for students or communities' assets and funds of knowledge as potential outlets for increasing student achievement. Furthermore, analysis of data shows limited mention of how supplemental and concentration funds are being used for emergent bilingual students. Rather, evidence reveals district supports being centered on all students, rather than specific services and aid for emergent bilingual youth. Also, districts lack systematic coherence or approaches that articulate any local practices for improving the achievement of emergent bilingual students, which educational actors in part attribute to inadequate and disparate funding (Jimenez-Castellanos et al., 2019).

Investment in Curriculum and Personnel.

Gonzalez Ojeda et. al (2019) reveal instances of positive curricular approaches through dual language and native language courses, as well as instances of status quo practices, such as those that focus on test preparation. Collectively, their findings highlight the strategic ways in which districts are committing to goals and actions in allocating LCFF funding to impact their English Learner populations in meaningful ways.³³ In numerous instances, the authors reveal that districts appear to be merely counting existing processes as opposed to seeking out specific and/or innovative supports for emergent bilingual, low-income, and foster youth. The authors argue that the emphasis on "whole-school" aggregate supports, devoid of a focus on special populations, can lead to ignoring underperforming subgroups, further perpetuating the achievement gap (Jimenez-Castellanos et al. 2019). Gonzalez Ojetda et. al (2019) revealed an

³² Magaly Lavadenz, Elvira G. Armas, Marco A. Murillo & Sylvia Jáuregui Hodge (2019) Equity for English Learners: Evidence from Four Years of California's Local Control Funding Formula, *Peabody Journal of Education*, 94:2, 176-192

³³ Alejandro González Ojeda, Nancy Frey, Douglas Fisher & Diane Lapp (2019) Where Does the Money Go? Trends in Supporting California English Learners in District Local Control Accountability Plans, *Peabody Journal of Education*.

emphasis that districts are making on committing to goals and actions that are specific to English Learners, thereby advancing a vertical equity approach. They believe this emphasis to be a promising trend for districts to continue concentrated efforts for supporting this population. The trends that they identified as having a higher recurrence were around curriculum³⁴ and personnel³⁵. One personnel approach that was found in 32% of the Local Control and Accountability Plans analyzed, targeted specific parent engagement efforts for English Learners and their families. These efforts were represented through a diverse array of staffing and community engagement opportunities, including front desk staff and staff at community centers. Bilingual parent liaisons, counselors, parent trainers, and parent advisory and training committees were among the roles and support systems offered across the sampled districts. Two districts offered childcare services to parents, so that they could attend English classes. Tutoring and counseling services were also referenced as support for parents. Overall, the parent engagement personnel actions were specific to the district's community needs and reinforced a vertical equity stance (Gonzalez Ojeda et. al 2019). Investment in the professional learning of educators is essential to broaden and deepen the skills of every adult who has contact with English Learners. Also, districts need to audit long-held policies and practices that inhibit student growth. Meaningful support of English Learners requires far more than knowing a handful of instructional strategies. It requires channeling funds in order to foster true innovation.

Need for more evaluative studies.

It should be evident by now that education finance scholarship with a particular focus on English Language Learners (ELLs) is understudied. Jimenez-Castellanos (2017)³⁶ outlines four scholarly papers that specifically address ELLs using a variety of empirical study approaches from within elementary, secondary and/or higher education levels, including multi-state studies, state analysis, intra-district, and institutional analysis. One of the articles authored by Heilig and colleagues analyzes the reformed funding mechanism of California (the new LCFF) and their unique accountability system (the LCAP) that were discussed previously. This exploratory study's findings show that few, if any, districts had yet to engage with the local community to facilitate significant changes to accountability or reallocation of funding to support educational equity for ELLs. Regardless of these initial findings, these types of evaluative studies are needed to see if progress is made as it relates to ELLs, and secondly what possible innovations do occur that show promise in this new funding mechanism that can help inform the field.

³⁴ A common focus found in curriculum goals and actions was in providing dual language immersion and native language courses. More and more, districts seem to value these two curricular approaches as promising ways to support their English Learners. See Gonzalez Ojeda et. al (2019).

³⁵ To have proper alignment in implementing curriculum and instruction, personnel need to provide direct instruction, support, or coordination of initiatives. In terms of innovative efforts in hiring, we found that new roles were being defined to assist in district efforts focusing specifically on English Learners. For example, one district developed a new position titled equity coordinator. This is a promising allocation of LCFF funds. See Gonzalez Ojeda et. al (2019).

³⁶ Jiménez-Castellanos, O. (2017). English Language Learner education finance scholarship: An introduction to the special issue. *Education Policy Analysis Archives*, 25(14)

Distribution of funds

When it comes to generating the best funding practices for ELLs, the issue is not just about the amount of funds but *how* you use those funds. Consequently, categorical funds, in particular Title I and ELL funds, are more often used to compensate for perceived student deficiencies, such as selecting curriculums that focus on low rigor and remedial education. This perception institutionalizes a low quality instructional program for low income and English learner students (Espinosa, 1985). The intent of categorical funds, however, should be to supplement the educational opportunity of low-income and ELL students. In particular, to eliminate not maintain the achievement gap. Moreover, the traditional accountability related to these funds is that they be used to provide services to this population, not necessarily to improve student outcomes. However, findings suggest that categorical funds are highly negatively correlated to student achievement, and in fact predict low achievement.³⁷ Jimenez- Castellanos (2010) would argue, by contrast, that categorical funds should promote high quality instruction and challenging curriculum with high expectations so that students can rise up the challenge and benefit from this schooling experience. When it comes to promoting high-quality instruction, teacher experience was the teacher characteristic most positively related to school achievement. However, teacher experience alone does not always translate into “high quality” teaching. It seems clear that there is a need for “prime teachers” in low-income urban schools.³⁸ Such teachers have 5–15 years of experience. These teachers are typically the pioneers and trailblazers of a school community; fully engaged in high quality teaching, but experienced enough to help shape the school culture, and young enough to have the energy.³⁹ Thus it would appear that one of the most important decisions a principal needs to make is whom to hire onto his/her teaching staff. In addition, the school culture is important to allow for creativity and inspiration that would allow for recruitment and retainment of high quality and prime teachers.

In a 2003-2011 longitudinal equity and efficacy analysis, authors Alexander and Jang found that distribution of expenditures are increasingly uneven in the nine-year period examined, and this inequality was largely driven by low-spending districts falling farther behind the median. Moreover, despite specific guidelines in its school finance formula that awarded additional resources for EL populations, districts with higher portions of English learners have lower total and instructional expenditures per pupil, not higher. These findings are alarming since it suggests that the instructional and pedagogical policies and practices are not aligned to meet the needs of ELL students. In other words, increasing allocations without improving policies and practices can undermine the effectiveness to serve ELLs (Jimenez- Castellanos, 2017).

³⁷ Jimenez-Castellanos, O. (2010). Relationship between educational resources and school achievement: A mixed method intra-district analysis. *The Urban Review*, 42(4), 351-371.

³⁸ While there is some mention of ELLs in this article, the focus is on urban/suburban districts.

³⁹ There is a growing body of literature regarding the need to both recruit and retain high quality teachers, especially in high poverty, urban schools (Darling-Hammond 2004; Gandara et al. 2003; Gonzales and Rodriguez 2007)

Conclusions

Those who are involved with determining the best funding practices for ELLs know that many factors have an impact on how much services cost, including variations in staff salaries, student characteristics, personnel costs, and types of services provided at the school and district levels. As with any significant increase in a student population, where there is an influx of new migrant-background families, schools may incur large under budgeted increases in costs for serving them. If a school cannot hire new, high-quality EL teachers quickly, those already in place will need to increase group size or decrease the amount of time they spend with each student in order to meet the increased demand.⁴⁰

In terms of necessary resources, ELLs are not a monolithic group, rather the intensity of needs will vary based on the aspects such as grade level at which students entered the U.S., the amount of prior education they had, and whether or not they are in poverty. In order to better understand the specific needs of EL subgroups, states should systemize the collection of data about ELs. With better student data reporting, it will be easier to distinguish population differences across districts and schools, so that funds can be targeted more precisely based on student need.

Our research team developed six areas to focus funding on that are evidence-based and proven to improve ELL outcomes. These areas are parental engagement, bilingualism/challenging curriculum, class size, professional development, attracting and retaining high-quality teachers, and student assessments.

1. *Parental Engagement*

Engaging ELL parents in order for them to be more involved in school activities and their children's education is of utmost importance. Illustrative examples of parent involvement included "parent touchpoint specialists" charged with making home and community visits, and school counselors who work with families of EL students to promote engagement. Expanded technology support services were also used to communicate with families in digital spaces using commercial language apps. This component includes incremental costs associated with the administration of ELL programs, such as communicating with parents, processing waivers, providing interpreters, and evaluating programs. Costs may include salaries, benefits, purchased services, supplies, and travel.

2. *Bilingualism/Challenging Curriculum.*

As discussed in the previous section of this report, a long-term goal should include creating a school culture that is focused on making a move toward bilingualism. Bilingual education programs commonly employ classroom aides to assist LEP students. Equally important is the ability to provide extensive staff training and professional development for aides and teachers

⁴⁰Sugarman, J. (2016). Funding an equitable education for English learners in the United States. *Washington DC: Migration Policy Institute*, 1-50.

instructing LEP students. Other incremental costs relate to two-language textbooks purchased for the Dual Language and Language Support programs, language assessments, preschool and intersession programs (attended primarily by LEP students), and a few other elements.

3. Reduce Class-size

Smaller class sizes are related to performance gains. To fulfill this recommendation, more certified teachers need to be hired. It is recommended that a classroom of 15 is the maximum number for effective ELL instruction. Research on class size shows that small classes of 15 in kindergarten through grade 3 have significant, positive impacts on student achievement in mathematics and reading. The impact is larger for students from low income and minority backgrounds. Case studies of exemplary schools suggest that lower class sizes for ELL students are also conducive to success among middle school ELL students. The costs associated with reducing class size include the portion of ELL teacher salaries and benefits that can be attributed to ELL reduced class size. In addition, costs will include the portion of ELL classroom aide salaries and benefits that can be attributed to ELL reduced class size initiatives as compared to the average non-ELL class size.

4. Professional Development

Emphasizing high expectations for both teachers and students is the key to success for ELLs. Research suggests that a significant number of hours in professional development should be provided annually for each teacher. Some argue that teachers need some time during the regular school day for collaborative planning in addition to ongoing curricular and professional development and review. One way to provide for this is to allow the use of a significant portion of planning and preparation time within the normal school day. This component should include incremental costs associated with recruiting ELL staff and providing professional development services for ELL staff. Costs may include salaries, benefits, purchased services, supplies and travel (i.e., hotel, transportation, and per diem expenses). It is recommended to also include costs for reimbursing tuition and books to staff for taking ELL courses.

5. Attracting and retaining High-quality teachers.

There are two issues specific to EL education that make salary an important factor in educational budgets. There may be a premium to pay for EL teachers with specialized skills and certifications. Additionally, some localities have a scarcity of qualified teachers and must therefore pay a premium to recruit and retain them. ELL teacher salaries and benefits that can be attributed to ELL reduced class size as compared to the district's average non-ELL class size. Prioritizing teachers when budgeting ELL monies can have long-lasting effects on ELL success.

6. Assessments

Ongoing assessments are particularly important for English language learners (ELLs). Standardized tests in English do not usually reflect ELLs' true content knowledge or abilities.

Yet informal assessments can provide a more well-rounded picture of their skills, abilities, and ongoing progress. For teachers, the ability to accurately assess these ELL students becomes increasingly important. Tests are necessary to measure ability, and accurate results are required to teach most effectively. As well as having appropriate curricula and well-prepared teachers, ELL students also must be assessed fairly and accurately. This component should include incremental costs associated with salaries, benefits, purchased services, supplies (including testing materials), and related travel expenses.

Recommendations

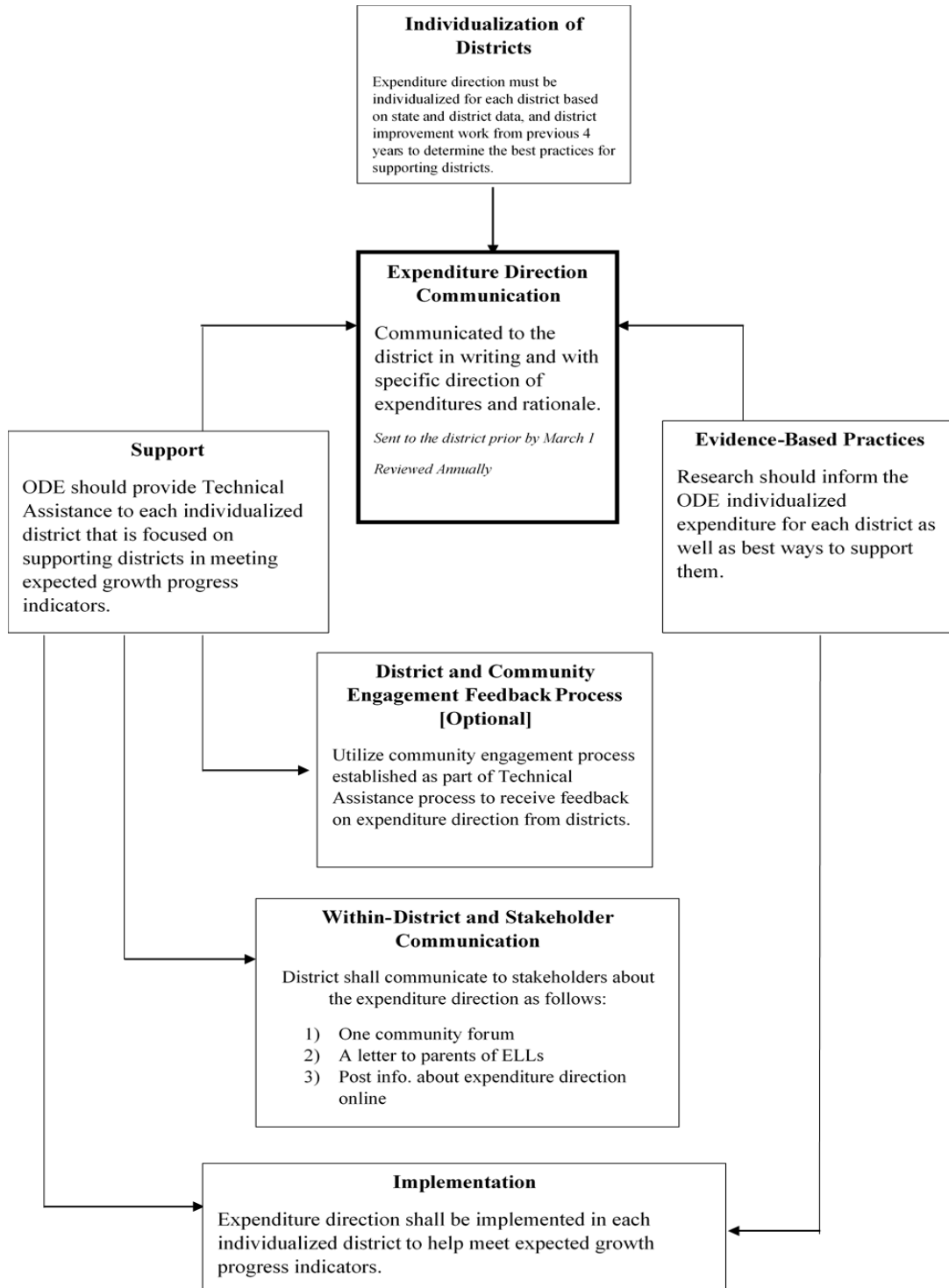
Expenditure Direction Guidelines

The reports final overarching funding recommendations to impact EL outcomes are the following:

1. Use funds comprehensively instead of in silos to maximize and leverage resources to systemically impact EL outcomes. This includes funds from the supplemental 0.5 weight, other general fund resources, Title III, HB 3499, Title I and other funding sources.
2. Ensure transparency and accountability to promote effective use of funds. Districts should publicly report school level expenditure data with enough detail to understand how monies are allocated.
3. Focus on high leverage evidence-based practices to better serve ELs (parent engagement, dual language programs/enriched curriculum, smaller class size, professional development, high quality teachers, EL assessment and testing)
4. EL benchmarks need to go beyond standardized test scores. It should include language proficiency (in two languages), student growth, cultural understanding, social emotional learning, etc...
5. The district approach should be contextualized to meet the unique needs and goals of the EL population including at each school site. This includes the scale, type and location of ELs as well as program type and outcomes.
6. The Oregon Department of Education should provide some minimum guidelines for all school districts to follow. Districts are all too often left without support and tend to revert to past practices and preferences instead of using evidence based and innovative practices.
7. The district's efforts should focus on language and culture. Too often the conversation surrounding ELs is focused only on language but there should be an emphasis on providing an inclusive environment that promotes cross-cultural understanding and a sense of belonging.
8. The expenditure direction should be focused on professional learning that is meaningful and engaging and not punitive measures.

Expenditure Direction for ELLs in Oregon

Goal: Provide the Oregon Department of Education (ODE) guidelines and processes on how to direct expected growth indicators¹ and will utilize the guidance below to direct funding to those districts funding under OAR (OAR 581-020-0621) which follows the requirements of ORS327.013.



ODE Expenditure Direction Process: Professional Learning Opportunity

1. ODE will identify the districts that did and did not meet benchmarks.
2. ODE will provide written communication to each targeted and transformational district about their benchmark status and if they will require expenditure direction.
3. ODE will meet with each district that will require directed funding to review benchmark results and to reflect upon the past four year to identify areas of strength and areas of growth.
4. ODE will use state and district data and evidence based practices to create an expenditure direction for each individual district.
5. ODE will share and review the expenditure direction with each district and receive feedback from the district leadership.
6. ODE will revise expenditure direction based on previous conversation with the district leadership
7. ODE will consult with the EL advisory board before finalizing expenditure directions for each district.
8. ODE will provide final expenditure direction to each individual district.
9. Each district will communicate to stakeholders about the expenditure direction though a community forum.
10. Each district will distribute a letter to parents informing them of the expenditure direction.
11. Each district will add expenditure direction information on their website.
12. Each district will implement as outlined in the expenditure direction.
13. Each district will submit quarterly reflective reports to ODE that indicate growth and challenges and next steps.
14. ODE will provide ongoing technical assistance to support the implementation of the expenditure direction (e.g., individual zoom meetings, CoP clusters, district thought partner).
15. Each district will submit a final report to ODE. This report should indicate major actions conducted during the year and the results of those actions.
16. This process will be repeated annually for up to three years unless the district meets progress benchmarks.

Expenditure Direction Elements

The recommendation is that the expenditure direction template contain the following elements:

Needs Assessment

1. Context:

District size and location

Socio-economic Status

ELs concentration: how many ELs are being served, in what schools, in what grades,

EL Types: Current ELs, Former ELs, Recent arrivals, Long-term ELs

EL outcomes & growth: Overall, by school, by type of EL,

Other Demographics:

Describe current EL practices in the following areas:

- Parental engagement
- Professional development
- Bilingual programs/curriculum
- Class size
- High quality teachers
- Student assessment and testing

2. Resources:

Title III: Amount available; Where was it allocated? How much spent?

HB 3499: Amount available, Where was it allocated? How much spent?

General funds including EL supplemental: Amount available; How much was spent on ELs? Where was it allocated?

Title I: Amount available, how much was spent on ELs? Where was it allocated?

Other existing or potential funds/resources?

3. Describe Strengths and Challenges in serving ELs

What are you currently doing well to serve ELs? Why?

What are you currently struggling with to serve ELs? Why?

What are your assets that you can build from and utilize? How?

Planning & Implementation

4. Reallocation of funds & Evidence based practices

The reallocation of funds will be focused on high leverage evidence based practices such as:

- Parental engagement
- Professional development
- Bilingual programs/ enriched curriculum
- Class size

- Attracting and retaining high quality teachers
- Student assessment and testing

5. Goals

SMART Goals

Specific
 Measurable
 Achievable
 Relevant
 Time-Bound

These goals will be developed by the district and approved by ODE.

ODE Criteria reference goals (what got you in should get you out)

These goals would be developed by ODE based on initial criteria for selection.

6. Implementation Plan

The district will develop a plan to implement high leverage evidence based practices. The implementation plan should include a process and activities based on the district's SMART goals. This implementation plan will need ODE approval.

7. Technical Assistance plan

The ODE will develop a technical assistance plan to support each individual district. The technical assistance plan will include but not be limited to:

- Initial planning
- Conduct monthly meetings
- Provide resources and respond to inquiries as needed
- Assign and Coordinate Communities of Practice clusters to provide professional learning
- Assign and coordinate a clone district for each district to be a thought partner and provide support

Deliverables

8. Outputs & Benchmarks

The District along with the ODE will assess and reflect on the output and benchmark deliverables based on SMART goals and ODE criterion goals on a quarterly basis.

9. Outcomes

The ODE along with the District will assess year end outcomes and will determine if the district met or did not meet expected goals. The District will develop a final report to the ODE.

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