Idaho's Funding Allocations and English Language Learner Achievement

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Abstract

The number of English language learners (ELLs) in US public schools continues to rise, placing a demand on districts and states to support these students in both their English and academic achievement. As the decades-long achievement gap continues to grow, research has focused on methods to better support ELLs. An understudied area is the impact on funding allocations on ELL achievement. It cannot be assumed that additional funding alone is a solution. The quantitative study evaluated Idaho's funding allocations and the impact on ELL achievement across grade levels by utilizing a one-way MANOVA statistical design. No overall significance was found between the levels of federal and state funding and student achievement in English language arts and math. The implications of these findings are discussed in respect to policymakers, teacher preparation programs, and teachers.

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Dedication

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Table of Contents

List of Tables

List of Figures

Glossary

Term	Definition
Achievement gap	"When one group of students outperforms another group and the difference in average scores for the two groups is statistically significant" (NAEP, 2021)
English learner (EL) Allocation	per student funding allocation provided to districts for each identified ELL (Puga, 2021-b)
EL Enhancement Grant	competitive grant that awards additional funds to Idaho school districts for the purpose of supporting ELLs in English and academic attainment (Puga, 2021-a)
English language learner (ELL)	"a national-origin-minority student who is limited-English-proficient" (US Department of Education, 2020)
Education Production Function (EPF)	"All the combinations of inputs that produce any given set of school outputs (e.g., test scores)" (Harris, 2010, para. 1).
English as a Second Language (ESL)	"Class format programming consisting of techniques, methodology, and special curriculum designed to teach [ELLs] explicitly about the English language, including the academic vocabulary needed to access content instruction, and to develop their English proficiency in all four language domains" (Puga, 2021-a)
Second language acquisition theory (SLA)	"The study of the process of learning a language other than one's own native language" (Lalleman, 1996, p. 3).
Title III	federal funding that helps ensure ELLs attain English proficiency and meet state academic standards (Puga, 2021-a)

Chapter 1: Introduction

Introduction

There are over 21,000 unique students in Idaho public schools with unrealized academic potential. These students come from vibrant, diverse backgrounds and speak more than 105 different world languages (Migration Policy Institute, 2019). They navigate two worlds each day: the first of their home language and culture and the second of English and American culture (Au, 1998). In addition to acquiring English, a process that requires consistent support for many years (Hakuta et al., 2000), these students simultaneously attempt to learn content in grade level subject areas—a task proving nearly impossible for English language learners (ELLs) in Idaho, as they continue to fall behind (Dearien, 2018-c).

Legislation outlined in the Civil Rights Act, No Child Left Behind, and Every Student Succeeds Act seeks to ensure equitable access to education for all learners, regardless of barriers. However, Idaho struggles to provide adequate access and to meet the needs of its ELL students. As the number of ELLs has increased throughout the nation and Idaho, so has the achievement gap between ELLs and their native-speaking peers (Abedi & Gándara, 2007; Dearien, 2018-c; López et al., 2013; Murphey, 2014). What does this achievement gap truly represent? It symbolizes a much larger, life-long issue for these learners: an opportunity gap. Of further concern is that many teachers see ELLs as deficient in their knowledge and abilities (Leider et al., 2021). ELL students should not be seen as a burden, but rather an untapped source of potential. If given the opportunity to thrive, ELLs will be able to contribute much more to Idaho's communities—in economic benefit, but more importantly, in cultural and linguistic enrichment.

Background and Context

An ELL is defined as, "a national-origin-minority student who is limited-English-proficient" (US Department of Education, 2020, para. 6). The number of immigrant students attending public schools has risen significantly in recent years (Duff, 2005). From 1989 to 2005, the number of ELLs attending US public schools more than doubled (García et al., 2008). In 2019, there were more than five million ELLs in US public schools (NCES, n.d.). It is predicted that ELLs will represent 40% of US public school students by 2030 (Jones et al., 2014). In 2019, 6.9% of the student body, or 21,200 students, attending public schools in

Idaho were identified as ELLs (Migration Policy Institute, 2019). This equates to one in twenty students (Hanson & Yoon, 2018). Even with federal and state policies that help ensure equitable access to education for all learners, the significant increase in ELLs has presented a challenge for public schools to meet the academic and linguistic needs of these diverse learners. Furthermore, due to a lack of licensed English as a Second Language (ESL) teachers in districts, focus on standardized tests, and a shift in legislation, ELLs are primarily being taught by content-area teachers in mainstream classrooms (Brown, 2020). Unfortunately, content-area teachers are often not adequately trained to support the linguistic, pedagogical, multicultural, or social needs of these diverse learners (Gándara et al., 2005; Grant & Wong, 2003; Jiménez-Silva et al., 2012; Murphy & Torff, 2019; Olson & Jiménez-Silva, 2008). As such, a significant achievement gap exists and continues to widen between ELLs and non-ELLs (Abedi & Gándara, 2007; López et al., 2013; Murphey, 2014; Polat et al., 2016). To help minimize this gap, federal and state funding are allocated to improve ELL programs in public schools across the United States.

Theoretical Frameworks

This study takes a pragmatic philosophical approach to educational research. Conclusions about funding effectiveness are drawn on the results of the statistical analysis. However, a pragmatic approach also entails the value that these results will have on society. Therefore, a connection between the findings and the humanistic value of the research are made. To achieve the link between the pragmatic approach and the research results, the study is grounded by two theoretical frameworks: second language acquisition (SLA) theory and education production function theory (EPF). SLA theory underpins ELL program development, resources, and funding allocations. Furthermore, EPF provides a clear framework of inputs and outputs that can be applied to the variables: funding and achievement. This allows for the clear interpretation and generalization of findings. A discussion of each theoretical framework is provided.

Second Language Acquisition Theories

Second Language Acquisition (SLA) is defined as, “the study of the process of learning a language other than one’s own native language” (Lalleman, 1996, p. 3). The author explained that this takes place when living in a country in which the new language is spoken, and a person would find themselves immersed in the language and needing to learn

it. This is different from foreign language acquisition (FLA), in which a person would learn a new language by taking classes in a country where the new language is not the dominant language (Lalleman, 1996). These are both distinctly different from bilingualism, the process of learning two first languages simultaneously which happens during childhood and adolescent language development (Lalleman, 1996). Learning a new language comes with unique challenges the older a person becomes, as their innate cognitive ability to acquire language begins to wane (Vanhove, 2013; Minor, 2014). Therefore, teaching secondary ELLs comes with additional specialization, as these learners require specific instruction and support. Within SLA theory, there are three major approaches that will be examined: Universal Grammar, Krashen's theory of SLA, and sociocultural theory.

Universal Grammar. Until the 1950s, SLA was taught through rote memorization and repetition, with limited research on language learning processes (Minor, 2014). Noam Chomsky first linked linguistics to cognitive psychology, revolutionizing the way linguistics, and particularly language learning, was viewed (Minor, 2014). Chomsky asserted that all humans had an innate ability to acquire, process, and produce language, regardless of ethnicity or culture. He compared this to other innate abilities humans are born with, such as breathing. This became known as Universal Grammar (UG), a fundamental theory in moving the field of SLA forward. For the first time, researchers began examining similarities among languages, instead of conducting contrastive analyses (Minor, 2014). Two main features of UG are: Language Acquisition Device (LAD) and Critical Period Hypothesis (CPH). Chomsky claimed that every human is born with an LAD which is activated or triggered through exposure to surrounding language use. However, the LAD isn't as effective as a person grows older. Thus, according to the CPH, once a person reaches puberty, they begin to lose their ability to acquire a language with ease. Chomsky's theory helps explain the difficulty adult learners have in acquiring a new language and the importance of acquiring languages at a young age (Vanhove, 2013; Minor, 2014).

Krashen. According to Minor (2014), Chomsky's link of linguistics to psychology piqued the interest of many researchers, and the study of SLA processes gained momentum during the 1950s and 1960s. Since then, there has been important progress in the field. Minor (2014) indicated that the most notable is the work of Steven Krashen which built on the concepts of cognitive linguistics suggested by Chomsky. However, Krashen's theories took

into consideration the importance of social interactions and environments in the language acquisition process, and this became known as sociolinguistics (Minor, 2014). Krashen distinguished between language acquisition and language learning. Language acquisition was the subconscious, natural method of language development with required authentic, meaningful communicative opportunities. Language learning, on the other hand, was a conscious process in which speakers learned about the language through explicit instruction (Minor, 2014). Krashen argued that language learning did not effectively lead to producing or comprehending a language, nor did it lead to understanding the content in which the learner was being instructed. This was because learners were consistently editing or monitoring their language production, later known as the Monitor Hypothesis (Krashen & Terrell, 1983).

Two of Krashen's hypotheses that are essential to language teaching are the Input Hypothesis and the Affective Filter Hypothesis. According to Krashen (1991), the Input Hypothesis specifies that learners can only acquire language forms if the language input is comprehensible, meaning that learners can understand much of the message being communicated and allows them to infer or deduce new language forms in context. In relation to language instruction, teachers must provide ELLs with comprehensible input. Krashen's Input Hypothesis correlates to Vygotsky's zone of proximal development (ZPD), when learners have not yet acquired new knowledge, but they are ready to with support from an expert (Krashen, 1991). Krashen (1991) termed this $i + 1$. Furthermore, Krashen's Affective Filter Hypothesis connects language learning to emotional considerations. When emotional or mental factors prevent a learner from outputting or inputting language, language acquisition cannot take place (VanPatten & Williams, 2014). Krashen (1991) asserted that to acquire language, learners must have both comprehensible input and a low affective filter. Krashen also suggested the importance of corrective feedback from "experts" in the target language. Swain added that communication breakdown or failure leads to "noticing gaps" in output, serving as a catalyst for acquisition of new language forms (Gass & Mackey, 2014). The combination of input, interaction, and output came to be known as the interaction approach or interaction theory (Gass & Mackey, 2014). Krashen and Swain's work in determining the interactive nature of language acquisition was essential in moving the study of SLA into sociocultural theory.

Sociocultural Theory. Current SLA research is grounded in a sociocultural theory. The importance of cognitive theory cannot be denied, and in fact, plays a large role in language acquisition. However, it has been widely accepted that language is a mostly social, cultural, and interactive activity (Ellis, 1991; Gass & Mackey, 2014; VanPatten & Williams, 2014). In fact, Ellis (1991) revealed that interaction is the largest source of data for second language (L2) learners and in classroom-based language learning, it is a fundamental fact of pedagogy. Thus, Ellis (1991) introduced the Interaction Hypothesis. The hypothesis includes two main claims: comprehensible input is essential and "modifications to the interactional structure of conversation which takes place in the process of negotiating a communication problem help to make input comprehensible to an L2 learner" (Ellis, 1991, p. 4).

Education Production Function

Harris (2010) indicated that EPF "underlies all quantitative research on the effects of school resources. EPF is rooted in the economic theory of production and is defined as all the combinations of inputs that produce any given set of school outputs (e.g., test scores)" (para. 1). Collier (1994) argued that the goal of EPF is to "determine the best combination of known inputs in order to optimize the outputs of education" (p. 39). Therefore, if the state improves resources, this should, in theory, improve student performance. The production function model was originally grounded in economic and business models. The first major work to examine the relationship between funding and student achievement in US schools was the Coleman Report (Hanushek, 1979). The purpose of the study was to reveal the lack of equal opportunity for minority students in the public school system (Thorson & Gearhart, 2019). Although the report indicated a weak relationship between funding, resources, and student achievement, it ultimately revealed that the most significant indicator of low achievement was a student's socioeconomic status (Thorson & Gearhart, 2019). The Coleman Report inspired researchers to continue investigating the effect of resources on student achievement and paved the way for an input and output analysis of school resources and student achievement (Hanushek, 1979). Hanushek (1979) was then the first to officially apply product function theory to education, recognizing that the public-school system functions under the product function model.

Inputs. Inputs are narrowed down to measurable and defined constructs. Hanushek (2008) described inputs as those that are controlled by policymakers, such as teachers and

curriculum, and those that are not controlled, such as socioeconomic status. Of particular interest to many researchers are the inputs that are controlled, as these can be modified by policies to increase student achievement. According to Tresnak (2019), controlled inputs can include funding, teacher salary, class size, class resources, professional development, student to teacher ratio, and quality of facilities. It is important to note that funding dictates the quality and quantity of the other inputs listed, making it the most important input in EPF theory.

Outputs. Collier (1994) explained that the output in education was first determined in the 1960s with the Coleman Report. The authors of the report described student achievement as a measurable, identifiable, and quantifiable output. They indicated that student achievement should be measured using norm-referenced assessments of students' mastery of curricular knowledge (Collier, 1994). Thus, state standardized tests, such as the Idaho Standards Achievement Test (ISAT), naturally lend themselves as measures of student achievement. However, Hanushek (1979) discussed that there are limitations in utilizing assessment scores as a measure of student achievement. He argued that these assessments lack external validity in that they discriminate among individuals, and they may not yield the same results if taken during different times or in different formats. The tests also cannot measure student success or outcomes after leaving high school, which are ultimately the main goals of the public school system (Hanushek, 1979). Although student achievement is one of the most widely investigated outputs, other outputs that do measure student success include graduation rates, earning potential, and number of students who go to higher educational institutes (Hanushek, 1979; Tresnak, 2019).

Importance of Theories

SLA stresses that learners must have comprehensible input, meaningful communicative opportunities, ongoing interaction, and receive corrective feedback on their language forms (Ellis, 1991; Krashen, 1991; Krashen & Terrell, 1983; Minor, 2014). Of these, interaction was found to be the most important aspect of language acquisition (Ellis, 1991). For teachers, this requires special attention to ELLs in the classroom to ensure that students are adequately supported and provided opportunities to acquire language. Most ELLs in US public schools learn the skills within content areas while also acquiring language. However, to successfully acquire a new language, immersion alone is not enough.

SLA research revealed that although immersion in a target language can facilitate language learning, learners do not spontaneously acquire a language through exposure alone (Krashen, 1991). The need for teachers to be experts in SLA and pedagogical best practices is evident, as SLA research reveals that ELLs require specialized support and learning opportunities. SLA grounds nearly all research on language acquisition and instructional methods for ELLs. SLA theory's role in the research at hand is clear, as it underpins the language learning practices in the classroom, and therefore, should inform policy decisions.

In respect to EPF, funding and student achievement are seen as important products and outputs of the US public school system. After the Civil Rights Act, federal funding was implemented such as, Title I, Title III, and Title VII, to provide equity of resources and lessen educational disparities between various student populations (Sandoval, 2011; Thorson & Gearhart, 2019; Tresnak, 2019). Moreover, EPF applies particularly after No Child Left Behind (NCLB), as additional stress has been put on student achievement outcomes (outputs) for federal funding (inputs) (Tresnak, 2019). After the implementation of NCLB, districts were assessed on student performance. A district's performance could now influence levels of federal funding (Tresnak, 2019).

Problem Statement

The purpose of this quantitative study is to examine the effect of Title III and EL Enhancement Grant funding on ELL students' math and reading achievement in Idaho public districts, as measured by ISAT assessment results. An examination of the impact of funding on achievement is important because of the growing number of ELLs (NCES, n.d.), the widening achievement gap between ELLs and non-ELLs (Abedi & Gándara, 2007; López et al., 2013; Murphey, 2014; Polat et al., 2016), and policymakers' decisions to increase funding as a solution (Thorson & Gearhart, 2019). However, it cannot be assumed that more money alone yields higher student achievement.

There are limited studies investigating the relationship between federal and state funding allocations and ELL achievement (Baca-DeGenna, 2015; Davis, 2022; Jiménez-Castellanos et al., 2019; López & McEneaney, 2012). As no literature could be found on the impact of funding and ELL student achievement specific to Idaho, this study will be an important step in filling the existing research gap.

Purpose of the Study

The pragmatic purpose of this quantitative study is to examine the relationship between funding allocations for Idaho public school districts and the respective district's ELL achievement on the Idaho State Achievement Test (ISAT). This study will provide new insight into the effectiveness or ineffectiveness of current funding for ELL programs across Idaho. If funding positively impacts student achievement, policymakers should consider increasing funding allocations to districts to help close the achievement gap. The study may also reveal that one type of funding impacts student achievement more than the other type. If that is the case, further research would be needed to investigate why one type of funding is more effective and how to maximize its benefits, perhaps through increased, targeted funding amounts with clearer objectives and accountability. An increase in funding would allow districts and schools to employ more certified ESL teachers and to provide ongoing professional development for their staff. However, if funding does not impact student achievement, other possible solutions need to be investigated, and evidence-based decisions made by policymakers. Thus, this study will act as advocacy work for ELLs in Idaho classrooms. It is the hope of the researcher that the study will encourage others to further investigate this topic. If multilingual learners are to be given a chance to achieve at the same level as their native English-speaking peers, research is needed to inform policy decisions that are proven to impact achievement.

Summary of Research Design

The research question that guides the study is: are there significant differences between districts who receive additional ELL funding allocations or not and ELL student achievement in ELA and math? The population of interest is Idaho public school districts, as federal and state funding are allocated at the district level. The study consists of one independent variable, funding, and two composite dependent variables, ELA and math achievement. Therefore, a one-way MANOVA is used. MANOVA was chosen because it examines the "mean differences between levels of one or more independent variables on two or more dependent variables" (Abu-Bader, 2016, p. 258). The instrument is the ISAT assessment, developed and implemented by the ISDE. Secondary data sets were collected through public records requests.

Summary and Organization of Remainder of Study

As the number of ELLs continues to grow in US public schools, so does the achievement gap between them and their native speaking peers across all subjects and grade levels (Abedi & Gándara, 2007; López et al., 2013; Murphey, 2014; Polat et al., 2016). Idaho is not exempt from this trend. ELLs in Idaho districts continue to fall behind their peers (Dearien, 2018-c). There are limited studies that investigate the relationship between funding and ELL student achievement, and no studies can be located on this topic specific to Idaho. The goal of the study is pragmatic in nature: to investigate this issue to take steps in better supporting each ELL in an Idaho classroom. SLA and EPF theories will frame the methodologies and guide the conclusions of the study. The quantitative study examines if there is a significant difference in student achievement in math and ELA based on types of federal and state funding allocations. The following sections of the study include the review of literature and methodology.

Chapter 2: Review of Literature

Review of Key Policies

Over the last six decades, several major policies have influenced the required support for ELLs. The first federal policy focusing on equitable education for language learners was the Bilingual Education Act of 1968. This act provided funding for resources and teacher training to improve language acquisition. Although this was an important first step, participation was optional (López & McEneaney, 2012). In 1974, the Supreme Court decision in *Lau v. Nichols* concluded that ELLs did not have equitable access to education or appropriate language accommodations and violated the Civil Rights Act of 1964 (López & McEneaney, 2012; Sugarman & Widess, 1974; Villegas et al., 2018). The next federal policy to modify ELL program requirements came forty years later with the No Child Left Behind Act (NCLB) of 2002. This required all states to identify ELLs, monitor their progress, and ensure teachers were highly qualified to support ELLs (Colombo et al., 2013). However, no definition of highly qualified was provided (Colombo et al., 2013; Leider et al., 2021).

The passing of NCLB sought to provide tighter policies to hold states accountable for improving the quality of education and led to the widely adopted Common Core State Standards (CCSS) (Sandoval, 2011). Currently, forty-one states, the District of Columbia, four US territories, and the Department of Defense have adopted these standards (Core Standards, n.d.). Core Standards (n.d.) indicated that:

> The Common Core is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live. (para. 2)

The implementation of CCSS had positive intentions for all students. However, under NCLB, Chang (2020) indicated that the English Language Acquisition, Language Enhancement, and Academic Achievement acts emphasized English-only instruction. This led to schools reducing bilingual-focused programs for ELLs and focusing on English-only acquisition (Menken & Solorza, 2014). Chang (2020) confirmed, “Moving away from a focus on language instruction programs and methods, NCLB pushed school districts to prioritize the

fulfillment of federally-sanctioned academic standards" (p. 15). According to Goldenberg (2013), these standards placed significant focus on academic language and literacy skills, putting additional cognitive weight on ELLs. In sum, the increase in complexity across content areas, in addition to the focus on academic standards, posed a significant challenge for both ELLs and their teachers.

In 2015, Every Student Succeeds Act (ESSA) was implemented and replaced NCLB. ESSA gave the power back to states to determine appropriate language programs and to assess language growth (Chang, 2020). Under ESSA legislation, the focus for most states remains ELL student performance on standardized content area tests, not language proficiency growth (Chang, 2020). Legislative changes and increasing numbers of ELLs promoted a push to have ELL students in mainstream classrooms, making all teachers become content area and language teachers (Brown, 2020; Mantero & McVicker, 2006).

Review of Idaho ELL Key Policies

Idaho followed national trends by adopting the CCSS in 2011 (Luna, 2011). The Idaho State Board of Education (ISBE) approved Idaho's ESSA plan in 2018, after making considerable amendments for school improvements in respect to ELL programs and addressing support for disadvantaged students (ISBE, 2022). The plan specified that schools must adhere to the following policies: identify ELLs through a home language survey, use World-Class Instructional Design and Assessment (WIDA) to measure language proficiency and growth annually, and use this data to inform realistic ELL student goals for linguistic and academic achievement (ISBE, 2022).

Achievement Gap

The most notable organization that examines nationwide achievement gaps is the National Assessment of Educational Progress (NAEP). NAEP is the only assessment to provide state-to-state comparison, making it a hallmark resource for state and federal examination (Ybarra, 2021). Achievement gap was defined by NAEP (2021) as, "when one group of students (e.g., students grouped by race/ethnicity, gender) outperforms another group and the difference in average scores for the two groups is statistically significant" (para. 1). The term is most often used when referring to the difference in achievement between minority groups and their white counterparts (Howard, 2019). Achievement is measured by student performance on statewide mandated exams that are taken either

annually or bi-annually to measure student growth. With the implementation of NCLB, ELLs were required to take these same assessments (Brown, 2020). Therefore, state assessment scores signify ELL achievement as well. However, the assessments present linguistic complexity and cultural bias, an often-overlooked obstacle of ELLs achieving proficient scores (Felix-Crescencio, 2021; Marsh, 2018). Assessment results revealed a significant achievement gap between ELLs and their non-ELL counterparts both on state assessments (Abedi & Gándara, 2007; Leider et al., 2021; López et al., 2013; Murphey, 2014; Polat et al., 2016) and on NAEP's assessments of achievement (Marsh, 2018). The NAEP assesses samples of students from each state once every four years in the areas of math and reading. This enables reliable comparisons among states regarding student achievement. Their data indicated that an achievement gap between ELLs and non-ELLs has been present for at least the last 15 years (Marsh, 2018), averaging a 40% difference between ELLs and non-ELLs in reading and math (Murphey, 2014).

The achievement gap has additional consequences. According to Marsh (2018), the graduation rate is significantly lower for ELLs. ELLs graduate high school at a rate of 69.9%, compared to non-ELLs whose graduation rate is 84% (Marsh, 2018). Additionally, ELLs are overrepresented in special education services, as they are often misidentified as special needs (Leider et al., 2021; Marsh, 2018), with 50% of ELLs identified as having a learning disability, a number which is 11% higher than their native-speaking peers (Marsh, 2018). ELLs are also underrepresented in gifted and talented programs (Leider et al., 2021). These issues are a result of a lack of adequate support in content-area classes, watered-down content, linguistic and cultural assessment bias, and an overall lack of understanding and training in ELL student needs (Leider et al., 2021). Therefore, ELL achievement is widely defined as performance on standardized state, national, and NAEP assessments, but what this means for ELLs is an opportunity gap in their futures, both in higher education and in the work force.

Idaho Student Achievement

Before discussing Idaho's ELL achievement gap, it is first important to evaluate Idaho student achievement in general. According to the Idaho State Department of Education (ISDE), student achievement in Idaho is measured using the Idaho Standards Achievement Test (ISAT), a summative exam given at the end of each year to grades 3-8 and given once at

the end of grade 10 in high school (ISDE, n.d.). The objectives of the assessment are to indicate student achievement and growth to evaluate schools, to provide fair measures of student progress towards college and career readiness, and to utilize computer-adaptive systems for valid and quick results (ISDE, n.d.). Once scores are calculated, students are given both a numerical composite score and a general categorical score of "below basic," "basic," "proficient," or "advanced." According to Your Idaho Education Report Card (YIERC), in recent years math scores have declined, and English Language Arts (ELA) scores have stayed the same. In respect to the declining math scores, in 2018, 44.5% of students were proficient; in 2019, 45.1% were proficient; and in 2021, 39.6% were proficient. This means that over half, or 103,000, of Idaho's students were performing below proficient in math (YIERC, n.d.). These declining scores could be a result of students shifting to remote learning during the COVID 19 pandemic. Idaho's ELA achievement showed a bit more promise but was still of concern. In 2018, 54.4% of students were proficient; in 2019, 55.6% of students were proficient; and in 2021, 54.1% of students were proficient (YIERC, n.d.). These results showed that nearly half, or 80,000, of Idaho's students were underperforming in ELA.

Low student performance and lack of public-school funding have placed Idaho near the bottom in overall performance nationwide. According to Ybarra (2021), in 2018, Idaho was ranked 45th in the nation overall. In 2020, Idaho moved up two places to 43rd. In 2021, Idaho ranked 40th in the nation (Ybarra, 2021). Idaho's ESSA amended plan included goals to improve student performance further in both English and math:

> Idaho's long-term goal for English/Language Art and Mathematics is to reduce the percentage of non-proficient students by 33% over six years. "Proficient" means that a student has met or exceeded grade level standards in a specific subject as determined by performance on the associated assessment...The goals result in closing achievement gaps, especially for student groups that currently show the lowest achievement. (ISBE, 2022, p. 12)

Idaho's ELL and non-ELL Achievement Gap

Idaho's ELL student performance mirrors the national achievement gap. Data collected by Dearien (2018-c) at the University of Idaho's McClure Center for Public Policy and Research indicated that ELLs performed below proficient on the Idaho Standards

Achievement Test (ISAT) at a much higher rate than their non-ELL peers in all subjects. The data revealed that 90% of ELL students perform below proficient in science as opposed to 37% of non-ELLs; 93% of ELL students performed below proficient in English Language arts as opposed to 55% of non-ELLs; 93% of ELL students performed below proficient in math as opposed to 57% of non-ELLs. Dearien (2018-c) indicated that these scores included Idaho state approved accommodations provided to ELL students during testing. Furthermore, Idaho only provides ISAT tests in the languages of English and Spanish (ISBE, 2022). This contradicts recommendations by experts who claim that for assessment of content knowledge to be valid, students should be given comparable test items in both English and their first language (Pena & Halle, 2011). Therefore, many of Idaho's ELLs whose first language is not Spanish have an even greater disadvantage when taking the state assessment.

Teacher Preparation

Leider et al. (2021) asserted, "teachers are an important resource in providing educational opportunities to ELs, and that establishing specific requirements for teacher credentialing falls squarely on [states]" (p.4). Thus, an examination of teacher training is important in understanding the role teachers play in student achievement. Since the implementation of ESSA, the federal government has decentralized interpretation of "highly qualified teacher" and teacher preparedness to the states, leaving each state responsible for training teachers and meeting teacher credential expectations (Leider et al., 2021). However, these qualifications vary greatly among states, leading to inconsistencies (Colombo et al., 2013; Leider et al., 2021). Agreement in current literature is that mainstream teachers are not adequately prepared to support ELLs in their classrooms (Jiménez-Silva et al., 2012; Leider et al., 2021; Murphy & Torff, 2018).

Jiménez-Silva et al. (2012) revealed important data regarding the lack of teacher training in supporting ELLs. Their study showed that nearly 88% of US teachers had little or no ESL training, and only 12% had received more than eight hours of ESL training (Jiménez-Silva et al., 2012). Murphy and Torff (2018) found that mainstream teachers did not have articulated ELL lessons, and they were unprepared in multicultural pedagogy, second language acquisition, and ELL best practices. The researchers also found that teachers provided less rigorous content to students, as teachers believed ELLs were less capable of accessing grade-level content (Leider et al., 2021; Murphy & Torff, 2018). As Leider et al.

(2021) stated, “ELs are often in classrooms where teachers water down content or lower expectations, are tracked into less rigorous academic coursework, and over- and under-represented in special education services” (p. 3). Overall, a lack of teacher preparedness and knowledge were found to be factors in the achievement gap between ELLs and non-ELLs (Jiménez-Silva, et al., 2012; Murphy & Torff, 2018).

Research suggested that providing training to pre-service and in-service teachers improved student performance (Colombo et al., 2013; Grant & Wong, 2003; Jiménez-Silva et al., 2012; López et al., 2013; Olson & Jiménez-Silva, 2008). López et al. (2013) revealed that specialist certifications, such as ESL or Bilingual teaching licenses, had a significant impact on ELL student reading achievement. However, mainstream teachers who only received supplement classes during their pre-service training did not improve student literacy. Furthermore, Darling-Hammond (2000) found that to adequately support ELLs, mainstream teachers must have quality, on-going professional development that allows them to reflect on their practice.

Teacher Preparedness in Idaho

There is a dearth of scholarship dedicated to examining Idaho’s teacher preparedness in respect to supporting ELLs, with only one being found. Batt (2008) examined teachers’ perceived challenges of supporting ELLs in Idaho public schools through a mixed-methods design. The research questions that guided the study were: “What are the greatest challenges impeding effective education for the state’s ELLs? What areas of professional development are needed to overcome these challenges?” (Batt, 2008, para. 9). A focus group consisting of the Idaho Association for Bilingual Education (IABE) board members and ESL teachers developed survey questions which were then distributed at the IABE conference. The survey consisted of both closed-ended and open-ended questions. Her participants were 165 educators in attendance at the IABE conference and were chosen based on their roles working closely with a large percentage of ELL students and their willingness to provide quality input. The survey was later sent to ELL educators across the state for additional responses. The survey questions were analyzed using SPSS, and the open-ended responses were transcribed, coded, and analyzed. The findings revealed a lack of qualifications to work with ELLs, understaffing of ESL specialists, and extra duties placed on ESL teachers. Solutions suggested by the participants included increased professional development,

restructured ELL educators' roles, and increased ELL teaching staff. She encouraged specialized ELL training for both pre-service and in-service teachers (Batt, 2008). As it has been over 14 years since this study was conducted, the need for additional research in improving ELL student performance in Idaho schools is greatly needed.

Teacher Shortages

Not only are mainstream teachers underprepared to support ELLs in their classrooms, but there is also a lack of teachers in general (Darling-Hammond & Podolsky, 2019; Oyen & Schweinle, 2021; Sutcher et al., 2019). The teacher shortage is important to note, as it provides further context to the challenges of ELL support. The lack of training compounded with the lack of both mainstream and ELL teachers has put ELLs at a further disadvantage. Because teachers are one of the most important resources for student success and achievement (Leider et al., 2021), the teacher shortage cannot be excluded from the discussion on funding and achievement.

Sutcher et al. (2019) investigated the teacher shortage crisis in the US and sought to identify causes. The authors defined *teacher shortage* as:

> An insufficient production of new teachers, given the size of student enrollments and teacher retirements. In this narrow definition, a teacher shortage is measured only by teacher production in relation to these factors associated with teacher demand. However, a large body of research indicates that teacher staffing problems are driven by a myriad of factors, including not only production of new teachers in various fields, but also teacher turnover, changes in educational programs and pupil-teacher ratios, and the attractiveness of teaching generally and in specific locations. (p. 4)

The authors conducted a comprehensive analysis of the teacher shortage crisis and found that the annual attrition rate of teachers would continue at 8%. They also noted that between 2009 and 2014, 35% less students enrolled in teacher education programs nationwide. Furthermore, the graduation rates from these programs decreased by 23% in those same years. By the 2017-18 school year, there was a shortage of 112,000 teachers nationwide. Their model predicted that of those 112,000 vacancies, 109,000 were filled by uncertified teachers (Sutcher et al., 2019). The most notable areas of teacher shortages were English as a Second Language (ESL) and bilingual teachers, math, science, and special education (Carver-Thomas, 2022; Sutcher et al., 2019). Sutcher et al. (2019) noted that 39 states

reported a shortage in ESL and bilingual certified teachers. Furthermore, between 2016 and 2018, teacher shortages were reported in all 50 states. The teacher shortage is of greater concern in rural districts, as recruitment of teachers in these areas is particularly difficult (Carver-Thomas, et al., 2021; Oyen & Schweinle, 2021). Furthermore, teaching shortages disproportionally impact schools serving high numbers of students of color or low-income students—leaving already struggling students further disadvantaged (Carver-Thomas, 2022; Carver-Thomas, et al., 2021; Rosenberg et al., 2021).

The teacher shortage is believed to stem from teacher turnover, low salaries, lack of appreciation, and job dissatisfaction (Darling-Hammond & Podolsky, 2019; Hanson & Yoon, 2018; Oyen & Schweinle, 2021; Sutcher et al., 2019). Darling-Hammond and Podolsky (2019) stressed the poor teaching conditions in the US in respect to other developed nations who pay teachers a comparable salary to other college graduates. In the US, teachers are paid on average 30% less than other college graduates. In 30 states, the average teacher who was the head of a family of four qualified for state assistance, including food stamps (Darling-Hammond & Podolsky, 2019). In addition to low salaries, teachers in the US have unfavorable working conditions compared to other developed nations. Darling-Hammond and Podolsky (2019) revealed that US teachers teach the highest hours with the lowest hours of planning, have larger class sizes, and teach more low-income, disadvantaged students than teachers in other developed nations.

The teacher shortage crisis has only intensified since the COVID-19 pandemic (Pressley, 2021; Rosenberg et al., 2021; Zamarro et al., 2022). Since the March 2019 lockdown, public attitude towards teachers has declined, and is compounded with additional teaching and preparation responsibilities placed on teachers' shoulders (Pressley, 2021). The already heavy workload for teachers prior to COVID-19 was exasperated by new and highly stressful responsibilities. These included virtual teaching and higher levels of communication with parents who were learning online platforms, leading to new stressors and triggers for anxiety (Pressley, 2021; Zamarro et al., 2022). Furthermore, there has been a significant decline in substitute teachers during COVID-19, causing teachers to cover those classes. This has added a heavier workload to teachers' already overfull plates (Carver-Thomas et al., 2021). Research indicated that higher levels of teacher burnout during and after the COVID-

19 pandemic had a direct correlation with lower levels of student achievement (Sutcher et al., 2019; Zamarro et al., 2022).

The burnout and job dissatisfaction during and after the COVID-19 pandemic increased the likelihood of teacher attrition. A study conducted by Diliberti et al. (2021) found that over 50% of teachers who left the profession in between March and December of 2020 indicated it was because of the added stress to teaching during the pandemic. Moreover, a survey by the American Teacher Panel concluded that one in four teachers were likely to leave their jobs after the 2020-21 school year. This would add a seven percent increase to teacher turnover, in addition to the average pre-pandemic turnover rate of 16% (Diliberti et al., 2021).

Idaho Teacher Shortage

Idaho is not excluded from the teacher shortage crisis, as there has been an upward trend in shortages over the past 20 years (McVey & Trinidad, 2019). Between 1998 and 2018, Idaho reported teaching shortages across 13 subject areas, 75% of the time (McVey & Trinidad, 2019). Hanson and Yoon (2018) asserted that the state struggled to retain experienced, qualified teachers. In fact, one in five Idaho teachers did not return to their jobs in 2018. This especially true in rural, low performing and high poverty school districts where "on average, 22 percent of novice teachers, 19 percent of early-career teachers, and 18 percent of teachers with four or more years of experience did not return to their schools the following year between 2011/12 and 2016/17" (Hanson & Yoon, 2018, p. 7).

To cope with teacher shortages and the 6% increase in students since 2011, districts have been filling vacancies with new or unlicensed teachers (Hanson & Yoon, 2018; Learning Policy Institute, n.d.). According to the Learning Policy Institute (n.d.), a survey given during the 2015-16 school year revealed that 920 teachers in Idaho public schools were either unlicensed or teaching under alternative route certifications. It is likely that these numbers were significantly higher, as the response rate to the survey was only 78%. Furthermore, the data indicated that many districts sought other methods to fill these vacancies, including increased class sizes, cancelled class options and programs, and utilization of substitute teachers (Learning Policy Institute, n.d.). In 2018, unlicensed or newly qualified teachers with no teaching experience composed of over 30% of the state's teaching workforce (Hanson & Yoon, 2018). To combat the shortage, the state developed

incentives to recruit teachers. These included: four-day work weeks, state healthcare benefits, a defined salary ladder, and state grants scholarships for teacher education programs (Dibb, 2021; Hanson & Yoon, 2018).

Idaho ELL Teacher Shortage

Following national trends, Idaho also has a shortage of certified ELL and bilingual education teachers. Dearien (2018-a) noted that 40% of all Idaho schools that had one ELL student had no ELL teacher. In addition, 23% of schools with at least 20 ELLs had no ELL teacher (Dearien, 2018-a). Districts that did have an ELL teacher were seeing an increase in ELL teachers' caseloads due to the growing ELL student population. In high-poverty school districts, the ELL teacher to student ratio in 2018 was 38:1. This is compared to low-poverty schools that had an average ELL teacher to student ratio of 9:1 (Hanson & Yoon, 2018). Overall, the teaching shortage, lack of specialized ELL teacher preparation, inexperienced teachers, and the growing number of ELLs within Idaho have all contributed to the achievement gap between ELLs and non-ELLs.

Methods of ELL Support

As mentioned in the previous section on theoretical framework, adequately supporting ELLs requires a specific knowledge base and understanding of both SLA and culturally responsive pedagogy (de Jong & Harper, 2005; Ellis, 1991; Goldenberg, 2013; Krashen, 1982; Krashen, 1991; Krashen & Terrell, 1983; Minor, 2014; Vygotsky, 1978). Therefore, states have begun revising policies and requirements for ELL programs with the hopes of improving ELL language acquisition and content achievement. Methods of support are important to understand, as federal and state funding allocations should be dedicated to these policies and programs (Dearien, 2018-b; Puga, 2021-b). The following sections will discuss state ESL certifications, general teaching methods, immersion, sheltered instruction, bilingual programs, and content-area literacy initiatives.

ELL Teacher Certifications Nationwide

A primary method of support for ELLs is through ESL certified staff in schools and districts. The need for ESL teachers is at its height with the growing number of ELLs. However, as mentioned previously, there is a shortage of ESL teachers both nationwide and statewide (Carver-Thomas, 2022; Hanson & Yoon, 2018; Sutcher et al., 2019). Compounded with this is the issue of underprepared content area teachers, leading to a growing

achievement gap between ELLs and non-ELLs (Gándara et al., 2005; Jiménez-Silva et al., 2012; Leider et al., 2021; Murphy & Torff, 2018). Because ESSA gives the power to states to decide certification requirements, training provided to pre-service and in-service teachers to become ESL certified varies greatly among states (Colombo et al., 2013; Leider et al., 2021).

Routes to Certification

There are two ways in which an educator can become ESL certified: completing the certification in their education program as a pre-service teacher or adding the endorsement later as an in-service teacher (Gras & Kitson, 2021). Gras and Kitson (2021) conducted a comprehensive study of state ESL certifications. They found that only 29 of the 51 states offered initial ESL certifications through pre-service educational pathways. This meant that the ESL license was their main area of certification in their teacher education program. An initial ESL certification offers in-depth training and preparation for teachers to support ELLs. Interestingly, the researchers noted that a few states that offered the initial certification did not actually produce any ESL teachers in this pathway. In contrast, Gras and Kitson (2021) found that the add-on certification was offered by all states except for Massachusetts and Tennessee. In most cases, an ESL certification is usually an "add-on" endorsement, meaning it is a license in addition to a primary certification area. For example, a pre-service teacher may be working towards his or her primary teaching certification in English Language Arts grades 6-12 but "adds on" an ESL endorsement. As Gras and Kitson (2021) discussed, this endorsement is generally less intensive and requires significantly less coursework than other certification areas. In addition, many states allow teachers to obtain an ESL endorsement without student teaching or completion of a practicum with ELLs. This lack in rigor to obtain an ESL endorsement seen across states is of concern (Gras & Kitson, 2021). Add-on certifications can also be obtained in 19 states by "testing out," allowing in-service teachers to become certified in this area solely by passing the certification exam that measures content-knowledge. This exam does not assess areas of intercultural communication, competency in culturally responsive pedagogy, or diverse teaching methods (Gras & Kitson, 2021).

In addition to lack of coursework and rigor when obtaining an ESL teacher certification, the content taught in the certification programs is also lacking. It generally does not include evidence-based best practices in linguistic and culturally responsive pedagogy

required to adequately support ELLs (Darling-Hammond, 2000; Gras & Kitson, 2021). With SLA theory and processes underpinning language learning, it is important that ESL teachers are knowledgeable in this area of study. Unfortunately, this is rarely the case. In fact, Gras and Kitson (2021) found that only 13 of the 51 states followed the TESOL teacher preparation standards. These standards:

> Outline the content, pedagogical knowledge, and skills recommended for Pre-K-12 ESL teacher education policy and programs. They describe what TESOL candidates should know and be able to do upon completing their teacher education programs. The standards also set evidence-based guidelines for assessing candidates and measuring their preparedness for working with language learners. (Gras & Kitson, 2021, p. 2)

Croninger et al. (2007) claimed that these issues were a result of policymakers being ill-informed to best-practices in research. Researchers asserted that ELLs "have been historically marginalized by macro-policies" (Gras & Kitson, 2021, p. 2). The issues related to ESL teacher certification have implications for ELL learners in k-12 classrooms.

ELL Certification in Idaho

Like most of the nation, Idaho does not offer an initial ESL certification. Instead, Idaho offers both the "add on" and "test out" options. The number of credits in coursework required for the "add on" option is 20 credits (Gras & Kitson, 2021), or six to seven classes. According to the ISDE (2022), there are two certifications in Idaho for teaching ELLs. These include ESL (K-12) and Bilingual Education (K-12). To become certified in these areas, the document indicated that there are ten standards for ESL and Bilingual pre-service teachers to meet and show evidence of in their teaching. These standards cover multicultural pedagogy, linguistics, SLA theory, assessment, and instructional practices (ISDE, 2022).

Immersion Programs

Immersion is when a second language is learned because it is a medium in which the subject-area curriculum is taught (Genesee, 1985). This mimics natural language acquisition processes, as students are utilizing the language forms for meaningful and authentic communication. Genesee (1985) stated:

> Thus, for the students in immersion, second language learning is incidental to learning about their school subjects, their community, the world, and one another.

> This approach contrasts sharply with more conventional second language methods which put an emphasis on the conscious learning of grammatical rules or communicative protocols… immersion also differs from other methods of second language instruction insofar as teaching and learning are not as much grammar driven as they are proficiency-driven, that is, they proceed according to the learners' real communication needs in the classroom… Students "pick up" the language skills they need to perform the tasks that compose school life. (p. 2)

Immersion programs became prevalent in the 1980s for two reasons: second language acquisition research shows that immersion into a language facilitates language acquisition in a natural way (Markos & Himmel, 2016), and they provided a cushion to the overwhelming number of ELLs in schools (Villegas et al., 2018). Although immersion program settings are useful in acquiring a second language, a very common misconception is that students acquire language forms spontaneously in their content area classrooms. A study by Thomas and Collier (2002) that examined the relationship between national achievement scores and ELL program types found that ELLs in immersion settings had the lowest achievement when compared to ELLs in other language learning settings. The researchers asserted that ELLs should not be placed in true immersion programs, as the achievement gap between themselves and their peers will widen throughout their education (Thomas & Collier, 2002). Genesee (1985) warned that when students are in immersion settings, they should not be treated as native English speakers. He indicated that although immersion mirrors a natural language learning context, ELLs must still be supported. Markos and Himmel (2016) discussed that as time went on, teachers noticed there was a lack focus on language learning in content classes, and students were falling behind. They began to strategically implement language learning support in content classes to ensure acquisition of both language and content (Markos & Himmel, 2016). As reviewed previously, content must be comprehensible, and language learners require ongoing feedback on their language output. Thus, immersion in addition to these supports can lead to effective language acquisition (Lightbown, 2000; Swain & Lapkin, 2013). This is known as sheltered instruction.

Sheltered Instruction Programs

Markos and Himmel (2016) described *sheltered instruction* as:

> Language-rich, grade-level content area instruction in English in a manner that is comprehensible to the learners. When partnered with English language development and, when possible, native language instruction, sheltered instruction allows English learners to progress academically while developing proficiency in English. (p. 1)

Sheltered instruction focuses on facilitating the learning of grade level academic content, while providing ELLs with an abundance of scaffolds (Goldenberg, 2013). Teachers do this by providing visual aids, physical activities, and the environment to teach required language across content areas. To be successful, teachers must receive specialized training (US Department of Education, 2020), and they must be experts in the content and experts in supporting ELLs (Markos & Himmel, 2016). This knowledge includes SLA theory and students' cultures, languages, and communities (Markos & Himmel, 2016). Therefore, most teachers who work within a sheltered instruction approach require certification or professional development under a particular model. The common models include: Cognitive Academic Language Learning Approach (CALLA), Specially Designed Academic Instruction in English (SDAIE), Sheltered Instruction Observational Protocol (SIOP), and Guided Language Acquisition and Design (GLAD) (Markos & Himmel, 2016). Although different in name, these models share many of the same features, as seen below in Figure 1.

Figure 1

Common Features of Sheltered Instruction Models

Focus on language and content
Making input comprehensible: • Activating prior knowledge • Explicit teaching of academic language • Providing context embedded scaffolds, such as graphic organizers • Cooperative learning
Using alternate assessments to show proficiency of content standards

Note. Information taken from Markos and Himmel (2016)

English Language Proficiency Standards

To implement a sheltered instruction model successfully, teachers must develop both content and language objectives—focusing on both elements for each lesson (Markos & Himmel, 2016). This is done through examining both CCSS and English language

proficiency standards (ELPs), such as those developed by WIDA. Adopted by 41 states, including Idaho (WIDA, n.d.-a), WIDA is a framework for teaching, monitoring, and assessing multilingual students in k-12 settings (WIDA, n.d.-b). According to WIDA (n.d.-b), the standards provide a bridge between content and language and are composed of both social and academic language. The social standards indicate the ways in which students can interact and establish relationships at varying language proficiency levels. The academic standards guide teachers in each of the major content areas: ELA, math, science, and social studies. WIDA standards outline ways in which "multilingual learners can communicate information, ideas, and concepts for academic success" (WIDA, n.d.-b, para. 4).

SIOP

SIOP is the most well-known sheltered instruction approach both domestically and internationally (Daniel & Conlin, 2015). The development of the SIOP model was based on a seven-year study funded by the US Department of Education (Short et al., 2011). The model consists of eight components: "lesson preparation, building background, comprehensible input, strategies, interaction, practice and application, lesson delivery, and review and assessment" (Short et al., 2011, p. 3). It was initially a model for researchers to examine the effectiveness of each of the eight sheltered instruction protocols, but it was later shared with teachers as an instructional model (Daniel & Conlin, 2015). The model has shown success in students' ability to acquire both content and language (Daniel & Conlin, 2015; Short et al., 2011)

Short et al. (2011) reviewed studies on the effectiveness of the SIOP model in respect to reliability and validity, writing, literacy, professional development, achievement, and teacher implementation. They found that the SIOP model was highly reliable, valid, and offered promising results for increasing academic literacy and writing skills. Furthermore, teachers who received SIOP training were 54% more likely to implement features of sheltered instruction. Student achievement in both content and language was significantly higher for ELLs who received SIOP instruction. The authors indicated that although these findings were significant, the key was teacher commitment. Short et al. (2011) asserted that the SIOP model allows for flexibility in teaching styles and approaches and can be adapted across content areas and contexts. However, they noted that the original SIOP studies were conducted before NCLB was implemented. The new educational policies have changed the

educational landscape and teacher autonomy, as they focus on state-mandated standards and assessments (Short et al., 2011; Short et al., 2012).

Short et al. (2012) suggested the SIOP model as a possible solution in the classroom to help close the achievement gap between ELLs and their native speaking peers, as the SIOP model could have a significant impact (Short et al., 2012). This was confirmed by their findings which showed that students who received SIOP instruction significantly outperformed students who did not in writing, oral language, and total English proficiency (Short et al., 2012). It is important to note that the students in this study received sheltered instruction in math, science, and social studies. This study provided strong evidence of the effectiveness of the SIOP model, as English acquisition took place outside of an English class (Short et al., 2012). These findings support the notion that all teachers are now English teachers, and that the SIOP model offers a possible solution to the achievement gap seen in ELL student populations.

Bilingual Programs

Another language acquisition model seen in US public schools is bilingual programs. A bilingual program is defined as, "An educational approach that uses two languages to promote academic success, bilingualism, biliteracy, and multiculturalism" (ISDE, 2022, p. 41). The goal of these programs is to increase language proficiency and literacy in both the student's first language (L1) and second language (L2). This model is less common, as policies such as The English Language Acquisition, Language Enhancement, and Academic Achievement Act emphasized English-only instruction (Chang, 2020), leading to schools reducing bilingual-focused programs for ELLs (Menken & Solorza, 2014) or limiting the ELLs' inclusion in the bilingual program, as the goal for many US bilingual programs is to transition students into English-only classes as soon as possible (Genesee & Gándara, 1999).

Although less common, the bilingual education model is still used in schools and districts that have the available resources. Vogel and García (2017) discussed that bilingual education can be seen as either "additive" or "subtractive." As mentioned, a common practice in ESL is an "English only" policy. "English only" devalues students' L1 and culture, making the students feel as though their L1 is less important than English (Vogel & García, 2017). English-only falls into subtractive bilingualism, as it seeks to replace the L1 with a dominant L2. Bilingual programs are additive. This approach is important, as it

considers the student's L1 to be an asset and reduces negativity around the student's L1 and culture (Vogel & García, 2017). Genesee and Gándara (1999) confirmed this, as they reviewed studies that indicated bilingual programs reduce prejudice against minority students and reduce prejudice of minority students towards the majority student culture.

Furthermore, research has shown that bilingual programs are the most effective in supporting true language and content learning in the classroom. Thomas and Collier (2002) conducted a national study that examined the effectiveness of various ELL programs. They found bilingual programs were:

> The only programs [they] have found to date that assist students to fully reach the 50th percentile in both L1 and L2 in all subjects and to maintain that level of high achievement, [*sic*] or reach even higher levels through the end of schooling. The fewest dropouts come from these programs (Thomas & Collier, 2002, p. 7).

Therefore, their study indicated that bilingual programs were the most effective in increasing ELL student achievement (Thomas & Collier, 2002). The authors argued the importance of placing students in long-term bilingual programs, emphasizing that remedial, short-term, or English-only programs only widen the achievement gap in later years. In addition, they noted formal education in a student's L1 is the most significant indicator of academic success in the L2 (Thomas & Collier, 2002). Thus, it is important when considering the relationship between funding and student achievement to consider the benefits of funding bilingual programs.

Content Area Literacy Initiatives

Another method of supporting ELLs in mainstream classrooms is through focused literacy instruction. Since the implementation of CCSS, greater literacy demands have been placed on students, as the CCSS present higher interdisciplinary text complexity (Goldenberg, 2013; Hakuta et al., 2013; Wendt, 2013). The CCSS themselves are seen in a literacy initiative, as one of the goals was to increase literacy for all students across content areas (Perfetto, 2019; Wendt, 2013).

The language demands as identified by the CCSS have set unprecedented literacy expectations for all students (Goldenberg, 2013; Hakuta et al., 2013). Literacy has come to mean more than just the ability to read. It is the ability to understand, analyze, and produce complex texts across disciplines (Wendt, 2013). In addition, students must illustrate their

understanding of content area standards in all four modalities: reading, writing, speaking, and listening. The highest linguistic demand is within the content area of English Language Arts (ELA). According to Hakuta et al. (2013), ELA requires the following linguistic features: to read and comprehend fiction and non-fiction texts with increasing complexity to build knowledge; to use evidence from reading to inform, analyze, and argue for varied audiences and presented in varied modalities; to work collaboratively to share ideas and perspectives; and to use linguistic resources and conventions for accuracy, purpose, and rhetorical effect. These features are common across other subject areas, including social studies, science, and technical classes. In math, the CCSS have shifted away from traditional practice of math skills to a collaborative approach. This approach requires students to "pose and solve problems, explain concepts and make connections, understand multiple representations of mathematical concepts and models, communicate their thought processes through procedures, justify reasoning, and make arguments" (Hakuta et al., 2013, p. 2). In science, the implementation of Next Generation Science Standards (NGSS) also required additional linguistic knowledge and use. NGSS seeks to do the following: "[immerse] students in science content through observation, investigation, and discourse; [use] models and visual representations of information as a bridge to content; [call] attention to the language demands in science texts and discourses as a way of supporting science learning and language development for all students" (Hakuta et al., 2013, p. 4).

Even with a focus on literacy, secondary content teachers receive very little training in pre-service programs on literacy methods (Perfetto, 2019; Wendt, 2013), and there are very few studies in dedication to analyzing literacy training to pre-service teachers (de Jong & Harper, 2005), especially for secondary teachers (Wendt, 2013). Furthermore, studies showed that k-12 students in general performed far below expectations in respect to literacy when compared to previous generations of US students and students internationally (Collin, 2014; Shanahan & Shanahan, 2008). Collin (2014) argued that this is a result of the CCSS dictating what to teach but not how to teach it. He explained that CCSS were not meant as a curriculum, only goals for what students should be able to do. Thus, it left a lot to be interpreted by teachers (Collin, 2014). Between a lack of clarity on how to teach CCSS standards and the literacy demands embedded in these, in addition to the lack of teacher

training in content-area literacy, low literacy rates among all students were seen (Collin, 2014; Perfetto, 2019).

Shanahan and Shanahan (2008) reviewed federal initiatives that were in response to gaps in literacy in US schools. These included the Reading Excellence Act, Early Reading First, and Reading First. Publishers of curriculum also upgraded their materials and assessments to support the reading interventions. Although somewhat successful, Shanahan and Shanahan (2008) recognized that these programs solely focused on early literacy. The reading initiatives were not implemented and sustained through students' schooling, and thus, the gains in literacy were not seen in later grades (Shanahan & Shanahan, 2008). Furthermore, the authors argued that with the increased literacy demands of the CCSS, literacy initiatives should not be implemented only as interventions to low achievers, but rather to all learners across all content areas and in secondary classrooms (Shanahan & Shanahan, 2008; Wendt, 2013).

Literacy demands can be categorized into the following: basic literacy, intermediate literacy, and disciplinary literacy (Shanahan & Shanahan, 2008). Basic literacy refers to the foundational knowledge of phonemes, high frequency words, and decoding skills that are the foundation to all reading. Intermediate literacy encompasses comprehension strategies, fluency, and decoding word meaning. Disciplinary literacy is vocabulary seen in subject-specific texts (Shanahan & Shanahan, 2008). Wendt (2013) argued that a major issue seen in secondary classrooms is this gap between basic literacy and disciplinary literacy. Many learners struggle with the high literacy demands in secondary content area classrooms because they do not have the intermediate literacy skills needed to understand, comprehend, and unpack discipline specific texts (Wendt, 2013). Thus, the author claimed that a shift must take place wherein secondary teachers continue to implement basic and intermediate literacy learning in their classrooms (Wendt, 2013). Researchers stressed the importance of increasing training for both pre-service and in-service secondary teachers in literacy methods (Shanahan & Shanahan, 2008; Wendt, 2013).

Basic literacy interventions and best practices exist for increasing literacy across content areas. Meltzer (2002) claimed that students cannot learn effective and transferrable literacy when practicing skills in isolation; therefore, teachers must explicitly teach, model, and practice skills for students. This must be done consistently by teachers across content

areas. Meltzer (2002) also claimed that increasing literacy is more than just providing students time to read and write. There are proven strategies to increase literacy at a quicker rate. These include:

> Paired reading; quick writes; peer conferencing; creation of Reader's Theatre scripts; use of Jigsaw groups to discuss short readings on the same topic; rereading assignments for a different purpose; rewriting text from other points of view; and connecting text with other media using a critical literacy perspective. (Meltzer, 2002, p. 43-44)

The author noted that silent, sustained reading was also an important method to increase literacy, in addition to writing. However, teaching writing must include feedback, revision, and editing (Meltzer, 2002). Meltzer (2002) further asserted the importance of pushing students to become independent readers and writers over time with explicit instruction of metacognition, annotation, elaborating, and organizing texts.

ESL Content Area Literacy Initiatives

Another method of supporting ELL achievement in the classroom is through literacy development. The CCSS placed additional cognitive load on all students, especially ELLs, in both content and language (Goldenberg, 2013). Attention is being drawn to the role literacy plays in addressing the achievement gap in all subjects between ELLs and non-ELLs (Ariazza de Allen, 2010). Recent literature has begun reviewing methods to increase ELL literacy, both in elementary and secondary aged students (Arriaza de Allen, 2010; Duff, 2005; Perfetto, 2019; Thomas and Collier, 2002). Much like the findings for content area teachers, it was found that ESL teachers were also given very little literacy training in their pre-service programs (Rickenbrode et al., 2018). Thus, many content area and ESL teachers attempt to promote L2 literacy by implementing common L1 literacy strategies (Ariazza de Allen, 2010).

Although L1 literacy strategies can be used to help develop L2 literacy, there are specific strategies and best practices that ESL teachers should implement for more effective L2 literacy development (Arriaza de Allen, 2010; Perfetto, 2019). Arriaza de Allen (2010) suggested explicit and systematic instruction, sufficient opportunities to practice, small group instruction, scaffolds, visual cues, clarification of passages, collaborative opportunities, and adjusted speech rates. The author also asserted that L2 literacy development and best

practices should be implemented as early as possible, as most ELLs enter schooling with an existing literacy gap (Arriaza de Allen, 2010). The researcher indicated that a common mistake was waiting to support L2 literacy until L2 oral fluency developed. All L2 modalities should be supported as soon as a child enters formal education (Arriaza de Allen, 2010).

Furthermore, an agreement among findings is that the best predictor of L2 literacy is L1 literacy (Arriaza de Allen, 2010; Perfetto, 2019; Thomas and Collier, 2002). Thus, the promotion of L1 literacy facilitates the development of literacy in an L2. A bilingual model would support this best practice and help students increase literacy in both languages. Arriaza de Allen (2010) also noted that providing L2 reading instruction in the L1 increases literacy development.

ESL Literacy in Secondary Settings. There is a dearth of literature that investigated ESL literacy in secondary settings (Arriaza de Allen, 2010; Duff, 2005; Perfetto, 2019). Research found that focusing on increasing bilingual literacy is most important in elementary aged students, as literacy gaps among secondary aged students are likely to be permanent (Perfetto, 2019). However, there are still methods available to help secondary ELLs acquire content, language, and literacy skills in mainstream secondary classrooms. DelliCarpini (2008) suggested that the input must relate to their lives and be meaningful. Explicit teaching of transferring skills to other content areas or areas of their lives is important, as students might otherwise acquire skills or literacy in isolation. Classrooms must also be collaborative in nature, giving ELLs the opportunity to discuss, negotiate, and create meaning (DelliCarpini, 2008). These findings were consistent with previous literature of SLA theory regarding the comprehensible input and interaction hypotheses. Furthermore, Goldenberg (2013) suggested translanguaging, the intentional use of the L1 in the classroom to support L2 learning. Maintaining an additive bilingual mindset in L2 acquisition is important in literacy development.

Summary of Content Area Literacy Initiatives

With the added literacy demands of CCSS on all students including ELLs, teachers should receive additional training on how to teach and increase literacy in their content area classrooms. With the growing achievement gap between ELLs and their native-speaking peers, it is imperative that more focus is placed on increasing L2 literacy so that ELLs can reach higher achievement levels in both content and language. Approaches used for L1

literacy development are shown to be effective for L2 literacy (Arriaza de Allen, 2010). More rapid and sustained literacy development for ELLs could be achieved by utilizing additional supports and scaffolds, most importantly, bilingual literacy development (Arriaza de Allen, 2010; Perfetto, 2019; Thomas and Collier, 2002). Furthermore, it was found that a bilingual approach to literacy development is most effective. Funding and research should be dedicated to teacher training in literacy development, L2 literacy, and bilingual programs.

ELL Programs and Methods of Support in Idaho

Unfortunately, no literature or data indicating the types of ELL programs and methods of support in Idaho public schools could be located. ISDE (2021-b) showed that both ELL and Bilingual teaching certificates were offered, but there was no information regarding schools offering sheltered instruction or bilingual programs. As Idaho has a teaching shortage both with content area and ESL certified staff (Batt, 2008; Dearien, 2018-a; Hanson & Yoon, 2018), it is very likely that most ELLs are learning under an immersion model, with little additional support in the classroom.

Overview of US Public School Funding

Federal Funding

ELL programs and methods of support are only possible if adequate resources are provided. Funding is the key to providing resources. Funding for public schools includes federal, state, and local sources. Although most funding comes from the state and local levels, the federal government offers supplemental funding for districts to better support specific student populations (Baker, 2017; Baker et al., 2018; Tresnak, 2019). The US Department of Education (USDE) stated that federal contributions to elementary and secondary public school only accounted for eight percent, with the other 92% coming from non-federal sources (USDE, 2021).

Key policies discussed earlier in the review will be elaborated on in this section, in respect to their impact on funding. According to the US Department of Education, supplemental federal funding was a result of the Civil Rights Act of 1964, which placed focus on equitable access to education (USDE, 2021). In 1965, the Elementary and Secondary Education Act (ESEA) was passed and included the Title I program (Thorson & Gearhart, 2019; Tresnak, 2019). Title I delivered federal funding to school districts that served low-income student populations to improve academic achievement in math and

reading (Thorson & Gearhart, 2019; Tresnak, 2019). Title I offered funding on a per-pupil-basis, meaning the more students who qualified, the more funding the school district received (Tresnak, 2019). In 1968, Title VII was passed and was known as the Bilingual Education Act and was meant to provide support to ELLs from low-income families (Sandoval, 2011). Also included in the ESEA was Title III, later amended by the ESSA in 2015 (Dearien, 2018-b; National Clearinghouse for English Language Acquisition, n.d.). This required all states to provide equitable and fair learning opportunities to ELLs by implementing statewide identification, support, and assessment for these students (Dearien, 2018-a). Title III funding helped ensure that ELLs met both English language proficiency standards and state academic standards. Title III funding cannot be used for core services or programs for ELLs, but rather, it must be used for additional teacher training and community involvement (Dearien, 2018-b). These funds are allocated through State Grant Formulas (National Clearinghouse for English Language Acquisition, n.d.). To qualify for Title III funding in Idaho, schools must have 101 or more identified ELLs (Puga, 2021-b).

State Funding

School funding is considered the states' responsibility, as per the 10th Amendment of the US Constitution (Goff, 2018). States consider several factors when allocating funding (Goff, 2018; Thorson & Gearhart, 2019), including student, resource, and program-level needs (Thorson & Gearhart, 2019). Therefore, each state differs significantly in its funding allocations. Most state funding is generated at the local level from property taxes (Carr-Chellman et al., 2020; Goff, 2018; Huntley, 2005; Lafortune et al., 2016). This leads to inequity, as districts were receiving significantly more funding in high-income areas compared to low-income areas (Carr-Chellman et al., 2020; Lafortune et al., 2016). Because of this, many states have changed to a funding formula to help alleviate inequity (Lafortune et al., 2016; Thorson & Gearhart, 2019).

The disparity between each state's spending on education is vast (Baker et al., 2018; Lafortune et al., 2016). Baker et al. (2018) compared each state's fairness of spending using four measures of fairness: funding level, funding distribution, fiscal effort, and coverage. They found that the funding levels between the highest and lowest funded states continued to grow wider, a difference of $12,400 in per-pupil spending. In addition, the analysis found that the number of states with progressive funding distributions for low-income districts

decreased from 2008 to 2015. In respect to fiscal effort, states varied in their spending on economic productivity and aggregate income up to 120%. States with higher income levels tend to have less coverage (percentage of school-aged students attending public schools) because families can afford to put their children in private schools. Baker et al. (2018) found that coverage ranged from 78% to 93%. Based on their findings, the authors argued that most states continued to have unfair funding (Baker et al., 2018).

Funding Accountability and Outcomes

Funding from federal sources has accountability requirements. If districts do not meet these requirements, they face losing funding. These accountability measures were put in place as part of the NCLB legislation; schools, districts, and states must show outcomes of Adequate Yearly Progress (AYP) and Academic Performance Index (API) (Baca-DeGenna, 2015). Outcomes for Title I funding require that all students meet proficiency standards in reading and math. Title III funding follows a similar accountability system, requiring schools and districts to show AYP for ELLs. AYP for ELLs includes progress in both English proficiency and in meeting state academic standards. Schools, districts, and states must have a system to assess and monitor ELL achievement to continue receiving this federal money (Baca-DeGenna, 2015). In 2016, the USDE published an ESSA Title III guidance document that outlined policies, laws, and requirements for states and districts, regarding utilizing Title III funding. The purpose of the document was to provide the public transparency in how federal tax dollars were being spent and for the public to know their rights under Title III (USDE, 2016). Even with systems of accountability and outcomes in place, it is unclear that how effective federal funding allocations are, as many low-income students under Title I funding and ELLs under Title III funding continue to achieve lower than their peers and fall short of the expected outcomes (Sirin, 2005; Thorson & Gearhart, 2019).

Idaho's Public-School Funding

Idaho public school funding derives from a variety of local sources, not just property taxes (Carr-Chellman et al., 2020). In 1932, Idaho began using income tax as a source of funding. However, by the 1950s, it was argued again that the state was not meeting school districts' needs. In 1965, the Idaho Sales and Use Tax was implemented to help further fund public education. Therefore, Idaho's funding sources include property, income, and sales taxes (Carr-Chellman et al., 2020).

The variety of funding sources, however, did not meet the needs of all Idaho districts. Carr-Chellman et al. (2020) found that Idaho's rural districts were left painfully underfunded, as these areas composed of low-income families. Of particular concern was the impact this had on Idaho's tribal school districts. Tribal areas are not subject to the same property taxes, and thus, lack the funding sources for school districts that others have. Federal funding called "Impact Aid" was meant to help supplement this; however, this funding is inconsistent, leaving tribal nations' schools severely underfunded and understaffed (Carr-Chellman et al., 2020). Finally, Carr-Chellman et al. (2020) found that per-pupil spending ranged from $6,801 in a low-income district to $25,543 in a high-income district.

A highly controversial element to Idaho's school funding is the state's lack of support for facility construction. Huntley (2005) indicated that 100% of funding for new facilities must come in the form of local levies and bonds, repaid by property taxes. Therefore, for districts in low-income areas, repairing, maintaining, and building new facilities is nearly impossible. Huntley (2005) cited, "Idaho is the toughest state in the nation in which to build a new school" (p. 249).

Recent Changes in Idaho Funding

Over the years, Idaho has maintained a notoriously low ranking in education funding. Research showed that 2020, Idaho was ranked last nationwide in per-pupil spending (Webber, 2020) and last nationwide for overall state funding for education (Baker et al., 2018). Recently, Idaho tried to mitigate this by increasing funding by $500 million between the years of 2015 and 2020. The state's budget for public school education increased by 6.3% between 2018 and 2020, for a total of $1.887 billion. This has provided additional funding in the areas of new teacher salaries, developing an education task force, providing a master's teaching premium, and developing an elementary reading initiative (Webber, 2020). Although no formula change occurred during the 2019-2020 school year, the state did pass HB 293, a bill that defined disadvantaged student subgroups, including ELLs. It is assumed that this bill will be used in a future funding formula revision to better support resources for these student populations (Webber, 2020).

Idaho State ELL Funding and Support Programs

According to Dearien (2018-b), in the 2016-2017 school year, Title III federal funding in the amount of $1,768,485 was allocated to Idaho schools. Schools that receive this

funding consist of 93% of Idaho's identified ELLs. In addition to Title III funding, Idaho school districts can receive additional funding and support to help support ELL student achievement. These include Title III Consortium, English Learner (EL) Enhancement Grant, and the ELL state allocation.

Title III Consortium

The Title III Consortium was implemented in 2014 to support school districts that did not have enough ELLs to qualify for Title III funding on their own. Although it is not direct funding, the consortium provides additional resources to districts, such as access to an ESL coach and potential professional development. This program groups schools and districts together to provide additional teacher training to meet the needs of ELLs. It offers both in-person and virtual support. Participation is voluntary, and all districts who do not qualify for Title III federal funding are eligible to participate. Most ELLs in districts participating in Title III Consortium were in rural areas. Therefore, this program offers additional sources to serve ELLs in districts with otherwise limited resources. In 2016 and 2017, $142,587 went to fund the Title III Consortium (Dearien, 2018-b).

EL Enhancement Grant

Districts can apply for a competitive, three-year EL Enhancement Grant that helps fund ELL support. According to Puga (n.d.), Idaho's ELL Programs Coordinator, there are three grant options that districts can choose to apply for. These include co-teaching for English language acquisition, program enhancements, or a regional ELL specialist coach. Districts can apply for more than one option, and therefore, receive more than one grant. To continue to receive EL Enhancement Grant funding, districts must provide evidence that they have met the grant specifications and goals (Puga, n.d.). In the 2016-2017 school year, Idaho awarded $450,000 in EL Enhancement grants to districts (Dearien, 2018-b).

EL State Allocation

According to Puga (2021-b), Idaho provides districts with approved ELL plans, a set per-pupil funding allocation. A district receives EL state allocations if it has at least one identified ELL student. Furthermore, all districts are required to develop a language instruction program, even if they do not have an ELL student, so that they can apply for EL allocation funding if an ELL student registers at their district (Puga, 2021-b). In the 2016-

2017 school year, Idaho provided $3,360,256 to districts in the form of the state ELL allocation (Dearien, 2018-b). This equates to $207.72 per ELL student.

Previous Findings on Funding and Student Achievement

The Coleman Report, a component of the Civil Rights Act of 1964, was the first study to investigate factors that contributed to the achievement gap between majority and minority student populations (Baker, 2017; Thorson & Gearhart, 2019). The findings suggested that the largest predictor of achievement was socioeconomic background. Later studies confirmed this conclusion and revealed that family income had a strong correlation to student achievement (Alexander et al., 2007; Sirin, 2005). Therefore, federal and state solutions to provide additional funding to close achievement gaps have been criticized, as this has shown little effect (Baker, 2017; Thorson & Gearhart, 2019).

However, there is disagreement among findings on the impact funding has on student achievement. Many researchers argued that although funding alone did not impact student achievement, targeted funding with clear outcomes and accountability did (Baker, 2017; Grubb, 2009; Lafortune et al., 2016; Thorson & Gearhart, 2019). Ultimately, how schools utilize funding to inform resources can lead to improved student achievement (Grubb, 2009). Thorson and Gearhart (2019) stated that there was a clear connection between staffing qualities and quantities and student achievements. Researchers also found that increased funding did much more than improve student achievement while in school, it also had life-long effects such as increased likelihood of graduating from high school, attending higher education, receiving a college degree, and lifetime earnings (Baker, 2017; Thorson & Gearhart, 2019).

Funding and ELL Achievement

Very few studies exist that investigate the relationship between funding and ELL achievement, and no studies were found that investigate this topic in Idaho schools. In the studies that do exist, there is disagreement. Davis (2022) compared ELL reading and writing scores in Title I and non-Title I school districts in Texas and found that there was no significant difference in scores. Davis (2022) argued that this showed that Title I funding was, in fact, effective in closing ELL and non-ELL achievement gaps. This result contradicted previous findings by Cronin (2017) that revealed little to no impact of Title I funding on student achievement for low-income students in South Dakota school districts.

Furthermore, López & McEneaney (2012) found that Title III funding increased ELL student achievement when used to develop bilingual programs. However, a review of literature by Jiménez-Castellanos et al. (2019) found that even with targeted funding, districts fell short in their implementation and follow through of these policies, with little to no change in day-to-day support for ELLs. This supports the claim of Grubb (2009), indicating how districts utilize and implement funding is key in affecting student achievement. Clearly, the conflicting research indicates the need for more studies on the relationship between funding and ELL achievement. The proposed study, investigating differences in ELL student achievement in Idaho public schools, in regard to level of funding, will serve as one small step in filling that gap.

Conclusion

Although there is disagreement among findings, the widening achievement gap between ELLs and non-ELLs suggests that the current funding allocations alone are not an effective solution to solve this issue. Existing policies and outcomes may not be specific enough to hold districts and states accountable for their use of funding allocations. As there are no studies in dedication to this topic in Idaho, research is needed to investigate the relationship of Idaho's funding allocations on ELL student achievement to ensure tax dollars are being spent effectively and that Idaho's ELLs are being adequately supported.

Chapter 3: Methodology

Research Purpose

The aim of the study is to uncover the difference in student achievement of Idaho's ELLs based on the type of funding allocations. To accomplish this, it is important to examine mean differences of state assessment scores in districts that receive additional state and federal funding and districts that do not. Therefore, the statistical test chosen to examine the research question is one-way multivariate analysis of variance (MANOVA). The researcher is interested in examining the mean differences between types of funding and student achievement. A MANOVA test was chosen because it examines the "mean differences between levels of one or more independent variables on two or more dependent variables" (Abu-Bader, 2016, p. 258). Because this study consists of one independent variable at the categorical level of measurement with three levels (No additional funding, Title III funding, and Title III with EL Enhancement Grant funding) and two dependent variables, math and ELA, each with two levels of student achievement (below basic and basic), a one-way MANOVA is the appropriate statistical test.

The following research question guides the study:

- RQ: Are there significant differences between districts who receive additional ELL funding allocations or not and ELL student achievement in ELA and math?

Setting and Sample

The population of interest is Idaho k-12 public school districts and charter schools that receive ELL specific funding. The population size N was determined by first reviewing the number of total school districts and independent charter schools for the 2018-2019 school year listed in the data provided by ISDE. The public records request indicated that there were 162 districts and charter schools. The population was narrowed down by determining how many of those districts and charter schools received ELL funding. Therefore, it was determined that the population size was 98 ($N = 98$) The sample frame n can be determined by calculating a 95% confidence interval ($z = .95$) of the population size $N = 98$ and found that $n = 79$. However, due to missing cases from redacted data at the state level, a sample size of $n = 53$ is utilized. There is a minimum recommendation of 30 or more subjects in a sample size for bivariate parametric tests (Abu-Bader, 2016). In addition, Foster et al. (2006) noted that the number of cases per cell must be larger than the number of dependent variables. The

sample size exceeds both the minimum recommend of 30 and the number of dependent variables. Moreover, a larger sample size decreases the standard error of the mean, and according to the central limit theorem, it also ensures that the distribution of means approximates a normal distribution (Abu-Bader, 2016).

Measurement and Instrumentation

Constructs

Two constructs were utilized in the study: achievement and funding. Each construct has two or more levels. The following are operational definitions of each.

Achievement. Achievement is a measure of student performance on the ISAT assessment in math and English language arts. Schools, districts, and the state utilize these test scores to determine student attainment and proficiency of state standards. Furthermore, it allows a direct comparison between Idaho school districts' student performance. The four levels of achievement include below basic, basic, proficient, and advanced. However, for the study at hand, only below basic and basic are examined. This is a result of the limited data on proficient and advanced ELL scores provided in the public records request. Idaho state policies require data redaction of potentially identifiable student information. Only small numbers of ELLs performed at or above proficient, causing the state to redact those scores for many districts.

Funding. Funding was a measure of US dollars provided to Idaho public school districts to support ELL student populations. As funding was an independent variable, it was categorical and coded based on the following levels of funding: no additional funding, Title III funding, and Title III with EL Enhancement Grant. These levels consisted of both federal and state-level funding. No funding was examined at the local level, as local funding is not explicitly sourced and allocated to support ELLs.

Measurement Instrument

The measurement instrument used was the ISAT assessment. This is a summative exam given to grades three to eight and given once at the end of grade ten in high school (ISDE, n.d.-b). The assessment measures student achievement and growth in math, ELA, and science. ISAT testing ensures that schools are adequately preparing students for college and career readiness. The state assessment utilizes a computer-adaptive system for valid and quick results. Once scores are calculated, students are given both a numerical composite

score and a general categorical score of “below basic,” “basic,” “proficient,” or “advanced” (ISDE, n.d.-b).

For this study, averaged overall district scores for both ELA and math were investigated. Although science is assessed by the ISAT exam, it is given in different grade level increments. Furthermore, current literature in the field utilizes math and English achievement scores for ELLs when examining the achievement gap (Marsh, 2018; Murphey, 2015, NAEP, 2021). The scores utilized for the study include an average of assessment results for grades 3 to 8 and grade 10. Assessment scores for the school year 2018-19 were analyzed. In respect to ELA, the ISAT assesses what students know in the areas of reading, writing, listening, and research. According to ISDE (n.d.-c), “These are the four reporting categories known as Claims, each of which requires evidence to determine proficiency toward mastery of the Idaho Content Standards” (para. 1). The math ISAT measures what students know in direct alignment with the state standards. ISDE (n.d.-d) states, “The items require a student to know mathematics and be able to perform mathematical problems at varying degrees of difficulty as they correlate to the standards. Claim 1 assesses the content standards. Claims 2, 3, and 4 assess the Mathematical Practice Standards, which describe how students go about doing math” (para. 1).

ISAT testing accommodations can be provided to identified ELLs. ISDE (2021-a) recommended that multiple stakeholders collaborate to decide on the appropriate accommodations for each learner. The following elements should be evaluated when deciding accommodations: literacy skill in native language, literacy skill in English, oral skill in English, language of instruction, and accommodations that are provided during regular class instruction. Furthermore, ELLs should be aware and knowledgeable of how to use all accommodations provided prior to taking the test. ISDE (2021-a) indicated that the following linguistic supports can be provided for ISAT testing: printed bilingual dictionaries, stacked translations in Spanish only, Spanish read aloud, and translated glossaries. These accommodations are meant to provide ELLs with more equitable access to the ISAT assessment (ISDE, 2021-a). The final ISAT scores utilized in the study included those in which ELLs were provided testing accommodations.

Data Collection

The data for this study included secondary data sets; therefore, no human subjects were directly utilized in this study. Achievement data consisted of ISAT test results for Idaho public school districts retrieved by an ISDE public records request. ISDE collects and synthesizes results for each district and differentiates results for various student populations. Although ISAT records are accessible to the public, a public records request was made to retrieve data presented in a consistent manner among districts. Scores were provided for each district in the form of percentage of students who tested into each category of level of proficiency during the 2018-2019 school year. These were then filtered down to results for ELLs. To obtain data on funding allocations to Idaho school districts, a public records request for the years 2018-2021 was sent to ISDE. The data returned included three funding types (Title III, EL state allocation, and EL Enhancement Grant) and allocation amounts to each qualifying school district.

The data that the ISDE provided was greatly redacted to abide by policies regarding student anonymity. The ISDE indicated that they could not provide any additional data to the researcher. However, there was more complete data available for the achievement levels of below basic and basic, as most students were in these categories and very few students scored proficient or advanced. Thus, the proficient and advanced scores were redacted in most cases. Therefore, instead of investigating scores across all four levels (below basic, basic, proficient, and advanced), data was utilized for only the achievement bands of below basic and basic. As the goal of the state is to have students score at least proficient, it was intuitive to examine the relationship between funding and percentage of students not performing at proficient in math and ELA.

Statistical Analysis

Hypotheses

The following hypotheses address the respective research questions. A discussion of the results for each content area will be provided.

H_o: There are no statistically significant differences between additional funding (Title III or Title III with Enhancement Grant) or not with regard to overall student achievement (below basic and basic).

$\mu_F = \mu_{NF}$

H_a: There are statistically significant differences between additional funding (Title III or Title III with Enhancement Grant) or not with regard to overall student achievement (below basic and basic).

$\mu_F \neq \mu_{NF}$

Cleansing Data

Data cleansing must take place before testing assumptions. To do this, missing cases and outliers were addressed.

Assumptions

MANOVA requires a total of eight assumptions to be met. These include the following: sample representativeness, levels of measurement, sample size, normal distribution, homogeneity of variances, linear relationship, homogeneity of covariance-variance matrices, and multicollinearity (Abu-Bader, 2016). Thus, assumptions were examined and met before and during the one-way MANOVA test.

Reporting Results

To report the results of MANOVA, the assumptions are addressed first. Next, the results of the test are presented including Wilks' lambda, *F* ratio, degrees of freedom (*df)*, *p* value, and partial *eta* squared for main and interaction effects. The results of the between-subjects effects for each effect on each dependent variable are reported, including their *F*, *df*, and *p* values. Post hoc test results for pairwise comparisons are reported. Next, estimated means and standard errors for each group on each dependent variable are reported, in addition to means plots. Finally, summary tables are presented.

Limitations of MANOVA Design

There are few limitations to using MANOVA. Because MANOVA examines multiple variables, it can create ambiguities in the results and interpretation of results. According to Abu-Bader (2016) another disadvantage of MANOVA is that:

> When significant results are detected by Wilks' lambda or any other multivariate test, neither MANOVA nor MANCOVA pinpoints which dependent variable(s) are responsible for the group differences. In addition...neither MANOVA nor MANCOVA pinpoints which pair(s) of groups are significantly different on the composite variable. (p. 264)

Therefore, MANOVA itself does not differentiate between the variables that result in group differences and requires post hoc testing. As part of a MANOVA analysis, the output included Bonferroni post hoc testing for each pair of groups on the dependent variable (Abu-Bader, 2016).

Benefits of MANOVA Design

The most beneficial aspect of MANOVA is that it examines group effects and their interactions on multiple measures simultaneously. MANOVA also protects against inflation of type I error. A MANOVA design allowed for the examination of group differences on a combined construct, such as overall student achievement. According to Abu-Bader (2016), this "maximizes the differences on each dependent variable but also group differences on the combined construct" (p. 259). Therefore, MANOVA can identify group differences otherwise easily missed when conducting separate ANOVA tests (Abu-Bader, 2016). Thus, this analysis indicated the relationship between various types of funding and their impact on student achievement in both math and ELA.

Assumptions, Delimitations, Limitations of Study

Assumptions include the validity and reliability of the ISAT assessment results, in addition to the reliability of the funding data collected from the ISDE. As the data for this study was collected through secondary sources, the researcher had no role in the validity of the data, other than the accurate maintenance, cleansing, and aggregation of the data sets. Furthermore, it is assumed that ELL students performed to the best of their abilities during the exam, had appropriate testing conditions, and were given their approved language accommodations.

Limitations of the study include utilizing data from the 2018-2019 school year, as the two most recent academic years, 2019-2020 and 2020-2021, were likely impacted due to COVID-19. Ideally, data from the most recent school years would be best. However, the COVID-19 pandemic influenced student learning in a manner which is not yet understood by researchers, making it difficult to control extraneous variables during those school years. COVID-19 relief funds were also dispersed to school districts in large amounts. Controlling for increased funding and its specific use by districts would be nearly impossible. In addition, the study only took into consideration the impact of funding on student achievement. Funding is an overarching resource that impacts school and district-level resources, resources

that are not specifically addressed, as they are outside the scope of the study. Finally, the study at hand did not control for socioeconomic status, a known indicator of student achievement.

Delimitations set by the researcher were the subjects examined. The subjects chosen to examine were math and English Language Arts (ELA). Although science is assessed by the ISAT exam, it is given in different grade level increments and not included in the literature examining achievement scores of ELLs (Marsh, 2018; Murphey, 2015, NAEP, 2021).

Ethical Considerations

Data collection methods for the study do not require human interaction or direct contact with human participants. No identifiable information for individual student assessment scores was accessed or available to the researcher. Therefore, no consent was required. Furthermore, data utilized was available through public records, allowing composite scores and districts discussed in the study appropriate for publication. IRB was submitted to the University of Idaho and an exempt status was granted.

Role of Researcher

As the study implements secondary data sets, the researcher had no interaction with participants. Therefore, the study was not influenced by potential researcher bias. The researcher has worked as an ESL and ELA teacher both internationally and in Idaho public schools. The first-hand experience of the researcher led to the invested interest in the topic of ELL support in mainstream classrooms.

Chapter 4: Results and Findings

Introduction

The purpose of this quantitative study was to examine the research question:

- RQ: Are there significant differences between districts who receive additional ELL funding allocations or not and ELL student achievement (below basic and basic) in ELA and math?

An examination of the impact of funding on achievement is important because of the growing number of ELLs (NCES, n.d.), the widening achievement gap between ELLs and non-ELLs (Abedi & Gándara, 2007; López et al., 2013; Murphey, 2014; Polat et al., 2016), and policymakers' decisions to increase funding as a solution (Thorson & Gearhart, 2019). However, it cannot be assumed that more money yields higher student achievement. No literature could be located on the impact of funding and ELL student achievement specific to Idaho. Therefore, this study will be an important step in filling the existing research gap.

Cleansing Data

Missing Data

Before conducting the statistical analysis, the data was cleansed for both missing cases and outliers. A total of 98 school districts received ELL funding; however, the ISDE redacted ISAT percentages across achievement bands when scores could be traced back to small groups or individual students. As many of Idaho school districts, especially rural districts, have limited numbers of identified ELLs, the redaction greatly reduced the number of data points. Therefore, a total of 53 school districts had complete data for ELL achievement across "below basic" and "basic" achievement levels. The remaining 45 districts were considered missing cases, and they were removed from the data set. This was the appropriate action, as Abu-Bader (2016) indicated that for bivariate parametric tests, a total of 30 cases was acceptable to maintain statistical validity. Foster et al. (2006) noted that as long as the number of cases per cell exceeded the number of dependent variables, than the sample size is acceptable. In addition, MANOVA is a robust statistical test when using at least 30 cases.

Furthermore, of the 53 remaining school districts, five districts had redacted scores for ELA achievement, and one district had redacted scores for math achievement. Therefore, the missing data points were replaced with mean scores. This was appropriate, as the

sample's mean is considered "the best measure of central tendency to represent the population's mean" (Abu-Bader, 2016, p. 32). Kwak and Kim (2017) indicated that eliminating missing cases and only using valid cases in each observation is the most used method in SPSS analysis for handling missing cases. In addition, there were six districts that had missing data points for one content area or the other. Therefore, the values were replaced with the means for each level respectively, as imputation analysis, or replacement of missing cases, can be used to create a complete dataset (Kwak & Kim, 2017). The missing ELA data points for five school districts were replaced with the mean scores of: 28.9% for basic achievement and 45.30% for below basic achievement. The missing math data points for one district were replaced with the mean scores of: 28.8% for basic achievement and 52.0% for below basic achievement. Replacing the missing data points with mean values allowed for the inclusion of these six districts in the data analysis without compromising the validity and reliability of the results (Abu-Bader, 2016; Kwak & Kim, 2017).

Outliers

A Mahalanobis D^2 analysis was conducted to identify outliers. This method is used to identify extreme outliers in multivariate statistics by measuring how far a score is from the mean score of the centroid of variables. A multivariate outlier can be identified if its Mahalanobis D^2 value is less than the chi-square critical value of .001 (Abu-Bader, 2016). A new case was created arbitrarily, that acted as the dependent variable of the regression analysis. All other interval variables, including the covariate, were entered into the regression as independent variables. A new column of data was produced labeled MAH_1. Next, the *chi*-square probability for Mahalanobis D^2 was computed by utilizing the transform function on SPSS. This produced a new variable labeled Prob_Mah_1. An analysis of these results was conducted, examining if any of the probability scores were less than .001. One large district had a *chi*-square probability of less than .001 and was therefore excluded from the analysis (Kwak & Kim, 2017). Thus, the total sample size used for analysis was $n = 52$.

Assumptions

Sample Representativeness

This assumption was met, as the sample represented the population of interest: Idaho public school districts that had ELL students, and therefore, received ELL funding. In addition, each school district's score was independent from all other districts' scores.

Levels of Measurement

All dependent variables were measured in percentages of students who scored within specified achievement bands for ELA and math. The percentages were continuous data and measured at the interval level. ELL Allocation was initially included as a covariate. It was measured at the interval level as continuous data. The independent variable was categorical with two or more exhaustive and exclusive groups. The independent variable, Additional Funding, was recoded as: 0 = no additional funding, 1 = Title III funding, and 2 = Title III funding and ELL Enhancement Grant funding. Therefore, the assumption of levels of measurement was met.

Sample Size

MANOVA is sensitive to small sample sizes. However, in MANOVA the number of cases per cell is a better indication of appropriate sample size. The number of cases per cell must be greater than the number of dependent variables in the analysis (Abu-Bader, 2016, Foster et al., 2006). There are two dependent variables, in which each cell must have more than two cases, at least three. The lowest number of cases per cell in the data sample was 10, which is considered adequate for multivariate analysis (Abu-Bader, 2016). The sample met the assumption.

Normal Distribution

Normality for each dependent variable, or univariate normality, was examined by investigating the measurements of skewness and kurtosis, histograms, and normal probability plots. The measurement of skewness and kurtosis were calculated by dividing the skewness and kurtosis coefficient by the standard error respectively. Normality is met if the values of these calculations lie between – 1.96 and 1.96 (Abu-Bader, 2016). For the dependent variable, math below basic, the measurement of skewness was found to be $S = -0.42$ and the measurement of kurtosis was found to be $K = -0.99$. Therefore, math below basic meets the normality assumption. The measurement of skewness and kurtosis for math basic were found to be $S = -0.52$ and $K = -0.22$. Therefore, math basic meets the normality assumption. The measurement of skewness and kurtosis for ELA below basic were found to be $S = .25$ and $K = -0.52$. Therefore, ELA below basic meets the normality assumption. The measurement of skewness and kurtosis for ELA basic were found to be $S = -0.49$ and $K = -0.83$ Therefore, ELA basic meets the normality assumption. In addition to the calculations of skewness and

kurtosis, the histograms and normal probability plots were examined and appeared to follow normality.

As the method originally tested a potential covariate, EL state allocation, the covariate normality was examined in the same manner. The measurement of skewness and kurtosis for EL state allocation was found to be $S = 6.05$ and $K = 5.47$. Both values indicated extreme skewness, as they were greater than 1.96. Inspection of the histograms and scatter plots showed positive skewness. Therefore, the assumption for covariate normality was not met. To meet normality, a transformation must take place. As the data was positively skewed, the values did not need to be reflected before conducting the transformation (Abu-Bader, 2016). Based on the curve of histogram, a log_{10} transformation was the most appropriate. In addition, no values for the covariate were negative or nearing zero. Therefore, the log_{10} transformation could be utilized (Abu-Bader, 2016). Once the transformation was conducted, the measurements of skewness and kurtosis were found to be $S = 0.64$ and $K = -0.76$ and met normality. The histograms and normal probability plots were also examined and found to meet normality.

According to Abu-Bader (2016), there is no statistical test in standard software that evaluates multivariate normality. Multivariate normality can be assumed when univariate normality is met for each dependent and covariate variable. MANOVA is also robust to multivariate normality given a large sample size (Abu-Bader, 2016), which the study at hand satisfies.

Homogeneity of Variances

The Levene's test of equality of error variances indicated the following levels of significance of variance for the dependent variables: math below basic ($p = .264$), math basic ($p = .269$), ELA below basic ($p = .082$), and ELA basic ($p = .406$). As all significance values are greater than .001, variances are equal and the assumption of homogeneity of variances was met.

Linear Relationship

To determine if there is a linear relationship between the dependent variables, the Bartlett's test of sphericity was examined. The results of the test showed a significant correlation between the dependent variables (*chi*-square $_{(df = 9)} = 132.786$, $p < .05$). Therefore, the assumption was met.

Homogeneity of Variance-Covariance Matrices

To determine if the covariances of all dependent variables are equal, the Box's *M* test result was examined. The results of the test are not significant (F = 1.608, $p > .001$). Therefore, the assumption was satisfied.

Multicollinearity

To determine multicollinearity, the correlation coefficients between all pairs of dependent variables were inspected in the residual SSCP matrix table. The correlation coefficients for each pair were as follows: math below basic with math basic = – .591, math below basic with ELA below basic = .576, math below basic with ELA basic = – .117, math basic with ELA below basic = – .225, math basic with ELA basic = .464, and ELA below basic with ELA basic = – .403. As all correlation coefficient pairs' values were less than .80, the assumption was met.

Results

A one-way MANOVA was conducted to investigate the relationship between ELL-specific additional funding on math and ELA ISAT achievement among a sample of 52 Idaho public school districts. Therefore, additional funding was a composite variable that consisted of the following levels: no additional funding, Title III federal funding, and Title III with EL Enhancement Grant state funding.

Alpha was set at .05. Therefore, the null hypothesis was rejected if $p \leq .05$. The results of the one-way MANOVA showed an overall insignificant difference between no funding, Title III funding, and Title III with EL Enhancement Grant funding on student achievement (Wilks' lambda = .829, $F_{(df = 8, 92)} = 1.13$, $p > .05$). Additional funding accounted for only nine percent of the variance in overall achievement ($\eta^2 = .090$). Therefore, null hypothesis was accepted, and the alternate hypothesis was rejected.

The results of the post hoc between-subjects effects indicated that additional funding to districts was significant in respect to percentage of students whose achievement level was below basic in math ($F_{(df = 2, 49)} = 4.48$, $p < .05$, $\eta^2 = .154$). An examination of the Bonferroni post hoc test revealed that this significance was found between no additional funding and Title III funding ($p < .05$). The between-subjects effects showed no significant difference in levels of funding in respect to percentage of students whose achievement level was basic in

math ($F_{(df=2, 49)} = .990, p > .05, \eta^2 = .039$), below basic ELA ($F_{(df=2, 49)} = 2.72, p > .05, \eta^2 = .100$), and basic ELA ($F_{(df=2, 49)} = .025, p > .05, \eta^2 = .001$).

In this study, additional funding played a significantly larger role in percentage of students whose achievement was below basic in math: no additional funding (mean = 45.53, SE = 2.53), Title III funding (mean = 54.44, SE = 1.89), and Title III with EL Enhancement Grant funding (mean = 54.73, SE = 3.10), than it did in other achievement levels. Additional funding played a lesser role in percentage of students whose achievement was basic in math: no additional funding (mean = 30.26, SE = 1.17), Title III funding (mean = 28.43, SE = .87), and Title III funding with EL Enhancement Grant (mean = 28.05, SE = 1.44); below basic in ELA: no additional funding (mean = 41.08, SE = 2.10), Title III funding (mean = 46.74, SE = 1.56), and Title III funding with EL Enhancement Grant (mean = 47.21, SE = 2.57); and basic in ELA: no additional funding (mean = 29.09, SE = .93), Title III funding (mean = 28.84, SE = .69), and Title III funding with EL Enhancement Grant (mean = 29.01, SE = 1.13).

MANOVA Summary Tables

Table 1

Estimated Means of Additional Funding on ELL Student ELA and Math ISAT Achievement

Variables	Mean	SE	N
Math Below Basic			
No additional funding	45.53	2.53	15
Title III Funding	54.44	1.89	27
Title III and EL Enhancement Grant	54.73	3.10	10
Total	51.57	1.48	52
Math Basic			
No additional funding	30.26	1.17	15
Title III Funding	28.43	.87	27
Title III and EL Enhancement Grant	28.05	1.44	10
Total	28.91	.68	52
ELA Below Basic			
No additional funding	41.08	2.10	15
Title III Funding	46.74	1.56	27

Continuation of Table 1

Title III and EL Enhancement Grant	47.22	2.57	10
Total	45.01	1.22	52
ELA Basic			
No additional funding	29.09	.93	15
Title III Funding	28.84	.69	27
Title III and Enhancement Grant	29.01	1.13	10
Total	28.98	.54	52

Table 2

MANOVA Summary Table

Source	Dependent Variable	SS	*df*	MS	*F*	*p*	η^2
Additional Funding[a]	Math Below Basic	862.15	2	431.08	4.48	.016	.154
	Math Basic	40.78	2	20.39	.99	.379	.039
	ELA Below Basic	359.02	2	179.51	2.72	.076	.100
	ELA Basic	.650	2	.33	.03	.975	.001
Error	Math Below Basic	4718.51	49	96.30			
	Math Basic	1009.24	49	20.60			
	ELA Below Basic	3233.15	49	65.98			
	ELA Basic	630.13	49	12.86			
Corrected Total	Math Below Basic	5580.66	51				
	Math Basic	1050.01	51				
	ELA Below Basic	3592.18	51				
	ELA Basic	630.78	51				

[a]Wilks' lambda = .83, $F_{(df = 8, 92)} = 1.134$, $p > .05$, $\eta^2 = .090$

Chapter 5: Discussion

This chapter includes a summary of results, a discussion of the findings in conjunction with other literature on this topic, and the implications of these findings for stakeholders and students. To conclude, the chapter provides limitations of the research and suggestions for future directions.

Summary of Findings

The purpose of this non-experimental comparative study was to examine the effect of Title III and EL Enhancement Grant funding on ELL students' math and ELA achievement in Idaho school districts, as measured by the ISAT assessment results. The findings help to inform the effectiveness of current funding and provide direction for future research. Results of this study indicated no overall significant difference in achievement based on levels of additional ELL funding. Idaho's per-pupil EL state allocation was also included as a covariate in the initial analysis. It was found that the EL allocation had no relationship to the various levels of student achievement in math or ELA. Therefore, EL allocation did not need to be included or controlled for in the analysis. This indicated that the state EL allocation also did not impact student achievement. However, an interesting and unexpected result was found during the examination of the between-subjects tests. The level of funding was significant in one area of student performance. Regarding the percentage of students whose achievement was below basic in math, the percentage of students performing below basic increased with the addition of levels of funding. In other words, in districts that received more funding, ELL students performed worse overall in math. Levels of funding were found to be insignificant in all other levels of performance in math and ELA. Therefore, the null hypothesis was accepted, and the alternative hypothesis rejected. The answers to the research questions were found to be that neither Title III funding nor Title III with Enhancement Grant funding significantly impacted student achievement.

Connection of Findings to Literature

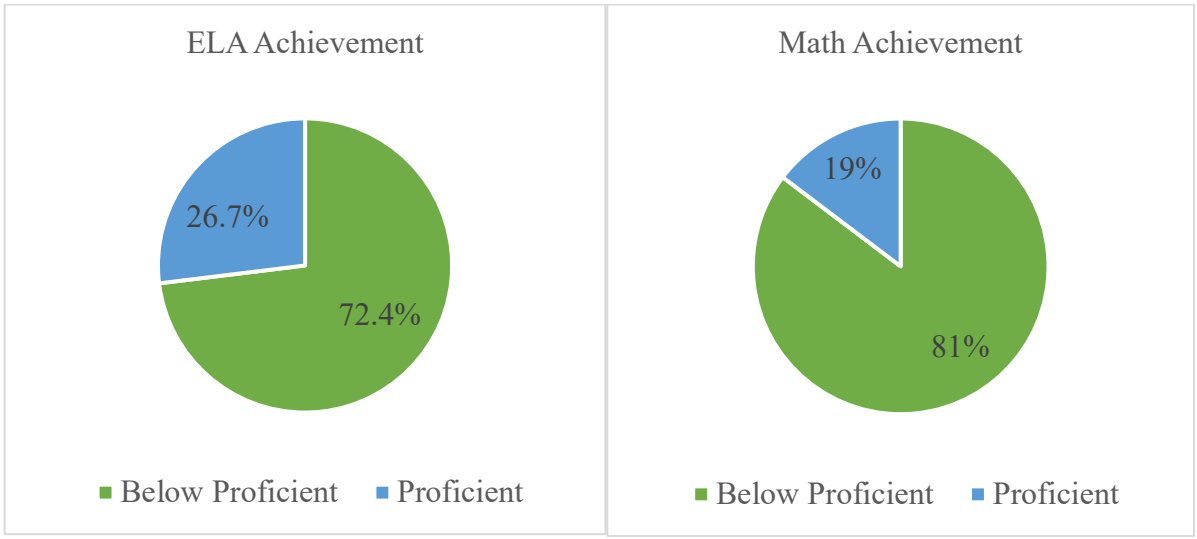
Low ELL Achievement

The low achievement of ELLs continues to be a problem across the nation in general and within Idaho specifically (Abedi & Gándara, 2007; Batt, 2008; Dearien, 2018-c; López et al., 2013; Murphey, 2014). The data provided by the ISDE for the study at hand illustrated low levels of ELL achievement across all grades and subject areas. For the 2018-2019 school

year, ELL students, according to the ISDE public records request provided excel sheet, performed as follows:

Figure 2

2018-2019 State ELL Achievement based on ISDE Public Records Request



These proficiency results are from the state's provided "composite" scores for ELA and math. Therefore, an examination of ELL achievement in the study confirmed that most Idaho ELLs are performing below proficient across subject areas (Batt, 2008; Dearien, 2018-c). Although this finding was not novel, it was important to confirm and highlight these alarming figures, as ELLs compose of nearly 7% of the Idaho's student body (Migration Policy Institute, 2019). The need for appropriate resources to support this large population of Idaho students became clearer during the process of data collection and analysis of the study. If ELLs are to be given their deserved access to equitable learning, Idaho must adjust its funding and resources dedicated to these learners.

Funding and Achievement

The fuel for additional resources, such as specialized teacher training and increased ESL certified staff, stems from funding. These resources are especially important for student populations who continue to show low achievement, such as ELLs. With additional resources, ELLs could gain the tools needed to succeed. It is this thinking that informs policymakers to provide targeted funding for low achieving student populations (Abedi & Gándara, 2007; Baker, 2017; Baker et al., 2018; López et al., 2013; Murphey, 2014; Polat et al., 2016, Tresnak, 2019). However, there has been criticism of funding as the solution to

increase student achievement (Baker, 2017; Cronin, 2017; Grubb, 2009; Jiménez-Castellanos et al., 2019; Thorson & Gearhart, 2019), and the results of this study also confirm that the amount of funding alone is not the solution.

Even with targeted federal and state funding, this study indicated that Idaho's ELL achievement remains unimpacted. This aligns with the findings of other authors (Cronin, 2017; Grubb, 2009; Jiménez-Castellanos et al., 2019), showing little to no impact of funding allocations on disadvantaged student achievement. For example, Jiménez-Castellanos et al.'s, (2019) review of literature found that even with a recent increase of ELL targeted funding, California districts did not make changes in their day-to-day support of ELLs, and the state did not provide clear accountability measures for schools and districts to follow. Therefore, the increased funding did not impact ELL student achievement. For the study at hand, it was impossible to determine how the funding was used by each Idaho district. As no impact of funding on student achievement was found, it brings into question if districts utilize the funding in such a way that yields day-to-day classroom support changes for ELLs.

The findings also raise doubt about Idaho's funding accountability system. Idaho does have accountability measures provided to districts, requiring them to track ELL student test scores and indicate how they are utilizing the funding (Puga, 2021-a). For example, schools must identify, assess, and monitor ELL achievement on both ISAT assessments and the English language development assessment ACCESS (Puga, 2021-a). Given the results of this study, it is unclear how Idaho districts are held accountable to student progress and if there is follow through on these measures.

Other studies showed that funding does in fact influence student achievement, if utilized effectively (Baker, 2017; Davis, 2022; Lafortune et al., 2016; López & McEneaney, 2012; Thorson & Gearhart, 2019). For example, López and McEneaney (2012) found that when Title III funding was utilized to implement bilingual programs, ELL achievement did improve significantly. Although Davis (2022) found that funding allocations did impact student achievement, the author still recommended a reallocation of funds by district level programs that would have a greater influence on student achievement. Therefore, these studies argued that how funding is utilized at the district level is vital to improving student achievement. Given the findings of the current study, it appears that funding is not being used effectively by districts, such as for the implementation of evidence-based programming.

If it were, the state would see a significant difference in student achievement scores in districts that receive additional funding as opposed to districts that do not. Therefore, when providing additional funding to districts, it is important that federal and Idaho state accountability measures are enforced, and that districts are supported at the state level on how funds should be utilized. This is especially important for districts receiving Title III funding, as the federal government requires states to show AYP of ELLs in academic content areas, as measured by standardized test scores (Baca-DeGenna, 2015).

Knowing that *how* funds are being used can impact effectiveness, the findings of the study at hand bring into question the way in which Idaho school districts are choosing to use the funding given to them. The findings are important to initiate new research and changes in the utilization of funding by Idaho school districts and how districts are being held accountable by the state. As the study investigated below proficient achievement levels, future studies should investigate districts with higher numbers of ELL proficiency to reveal effective district utilization of funding. However, this would be challenging, if not impossible, given that most districts have redacted data for their proficiency and advanced ELL achievement because of Idaho redaction policies. For Idaho ELL achievement to be researched further, the state would need to provide researchers with more complete data sets. As it stands, the research that can be conducted on this Idaho student population is extremely limited. In fact, the scope of the study at hand was cut down considerably through the research process due to the restricted and inconsistent data available. Thus, the study revealed not only an ineffective allocation and use of funding to impact ELL achievement, but it also revealed a secondary issue: a lack of ISAT data maintenance and useability. As ISAT results are used to inform policy, funding, and program changes, ISAT data must be properly handled. Given these findings, Idaho is failing to provide fair measures both in funding *and* assessment to ensure ELLs' equitable access to education and opportunity.

Summary of Findings in Relation to Theoretical Frameworks

When interpreting findings, it is important to do so through the theoretical framework that guides the study. The first framework guiding the study is SLA theory. SLA underpins current research and implementation of best practices in language learning settings. SLA, from a sociocultural perspective, calls for interactive and communicative classroom environments (Ellis, 1991; Gass & Mackey, 2014; VanPatten & Williams, 2014). The

findings of the study showed very little ELL student achievement across all grade levels in math and ELA. It is likely that ELLs are not given intentional opportunities to engage in meaningful communicative opportunities in their classes. Furthermore, ELLs in Idaho classrooms may not be getting the feedback on their language output needed by both teachers and peers to notice errors and uptake new language forms (Gass & Mackey, 2014). Therefore, an SLA perspective could conclude from the findings that funding allocations to districts are likely not being used to inform classroom practices that encourage interaction and feedback, the essential elements needed for language acquisition.

The application of the EPF business model to Idaho's spending on ELL education provides a clear model for cost-benefit decision-making. The goal of EPF theory is to "determine the best combination of known inputs and outputs in order to optimize the outputs of education" (Collier, 1994, p. 39). In the study at hand, the inputs and outputs examined were funding and ELL student achievement, respectively. The results of the study suggest that the current controlled input of funding is not leading to the desired output of an increase in ELL student achievement. From an EPF theoretical perspective, the current implementation of Idaho's inputs and outputs is unsuccessful and inefficient. The findings call for an adjustment of funding utilization for Idaho to spend its taxpayers' money wisely and to adequately support its ELL students.

Implications

The findings of the study have implications for all Idahoans. From state-level policymakers to individual students and families, the ineffective use of taxpayer funds on ELL achievement impacts everyone in the state. If Idaho's ELLs are to thrive and to contribute fully, both economically and socially, changes must be made. As literature and the findings of the study indicate that the utilization of funding is key to improve student achievement, the implications for how funding could be invested for a variety of stakeholders are provided.

Implications for Policymakers

Policymakers should make decisions based on evidence from data and research. This study revealed that the accuracy of Idaho ELL student achievement data is in question. Because of this, policymakers must ensure that the ISDE maintains accurate and usable ISAT data. The data utilized for this study through a public records request differed from

spreadsheet-to-spreadsheet regarding which districts have redacted data, the percentage of ELL students placing in specified achievement levels per district, and the overall state ELL achievement scores. It was assumed that secondary data sets from the ISDE website and through public records requests would be reliable and valid. However, that was not the case. The lack of usable state data as a finding was unintentional, but significant. Not only does the mismanagement of data create hurdles for researchers, but it indicates a mismanagement of resources that contribute to ISAT testing. Millions of taxpayer dollars are spent on the ISAT test each year, in addition to countless hours spent by students on testing instead of classroom learning. Furthermore, this data is what advises policymakers in their decision-making. Policymakers need to act and place stricter accountability measures for state assessment data management, as this data is vital for research and evidence-informed policies.

Once policymakers have valid data, they can begin reexamining funding accountability measures of school districts. Previous research indicates that district utilization of funds and accountability played a large role in the effectiveness of funding on student achievement (Baker, 2017; Davis, 2022; Lafortune et al., 2016; López & McEneaney, 2012; Thorson & Gearhart, 2019). Currently, Idaho districts are required to create and submit plans that indicate how additional federal and state funding will be utilized (Puga, 2021-a). Districts are also required to monitor and report ELL language and content achievement scores from assessments (Puga, 2021-a). Besides the reporting of assessment scores, it is unclear what other accountability measures are placed on Idaho school districts. It is also unclear if the state provides any type of follow-up in districts that do not show growth in student achievement. If the assessment scores do not meet the AYP requirements, does the state provide feedback to the district? Is there guidance in place by the state to help improve efficacy of funding? Based on the findings of the study, Idaho policymakers must consider looking critically at its accountability measures. As the study showed that the additional funding did not impact student achievement, it is likely that the funds are not being utilized effectively. What true accountability is in the place to combat this issue? Given the findings of the study, a major concern is that what occurs in schools and classrooms differs greatly from what is reported in well-intended accountability plans submitted to the state by districts.

Once policymakers can confidently use state data and trust that districts are properly managing additional funding, they can begin considering ways to spend state funding more

effectively. Based on both the literature and the findings of the study, one way to do this would be to further invest in Idaho's teachers. The most valuable resource to improve student learning is the quality and quantity of teachers (Thorson & Gearhart, 2019). Idaho is currently struggling to attract and retain teachers. As it stands, Idaho does not have a competitive teaching salary, especially with its Washington neighbor. For example, the starting teacher compensation in Coeur d'Alene, Idaho is $40,742 (Coeur d'Alene Public Schools, 2022), whereas a Spokane, Washington teacher, working just 33 miles away at the same level has a starting compensation of $54,223 (Spokane Public Schools, 2022). Another major difference between Idaho and Washington teacher salaries is the increase in pay with experience and additional education. A teacher in Coeur d'Alene, Idaho with a bachelor's degree, an additional 40 credits, and five years' experience makes $47,237 per year (Coeur d'Alene Public Schools, 2022). However, a Spokane, Washington teacher with the same credentials makes $68,421 (Spokane Public Schools, 2022). It is easy to see why many Idaho teachers may choose to begin working in Washington, and this may be one of the reasons Idaho is losing its teachers (Carr-Chellman et al., 2020). In 2018, one in five teachers did not return to their job, and 25% of Idaho's teaching workforce was composed of novice teachers and 6.5% of uncertified teachers (Hanson & Yoon, 2018). Therefore, a large percentage of mainstream classroom teachers across Idaho do not have experience teaching the general student population, let alone ELLs. The results of the study indicate that ELLs are not receiving the specialized support needed to access content area learning, as very few students are reaching proficiency in math and ELA. This could be partly due to Idaho's growing inexperienced teaching workforce. It stands to reason that if Idaho would increase teachers' salaries, it may be able to better attract and retain high quality teachers. This could ultimately impact learning for all Idaho students, not just ELLs.

In addition to allocating funds to improve the quality of teachers, policymakers need to consider further allocations to districts to increase the quantity of teachers, especially in roles with identified teacher shortages. Idaho currently has a shortage of ELL licensed teachers (Dearien, 2018-a; Hanson & Yoon, 2018), particularly in rural districts and low-income districts (Hanson & Yoon, 2018). Unfortunately, 40% of Idaho schools with at least one ELL had no ELL teacher, and nearly a quarter of Idaho's districts with 20 or more ELLs had no ELL teacher (Dearien, 2018-c). During the synthesis of the funding data for the study

at hand, it became clear how and why districts struggle to hire ELL teachers. Idaho's per-pupil EL allocation is meant to provide districts with the funding for ELL teacher salaries (Dearien, 2018-b). However, the data revealed a major disconnect between the intent of the funding and the reality. The state EL allocation equates to a little over 200 dollars per student. It was found that the state funding would not be enough to hire an ELL teacher, let alone the additional expenses of supporting ELL students. In fact, in districts with 10 or less students, the state's per-pupil allocation would not even be sufficient to afford a stipend to a teacher to provide ELL support, in addition to their full-time teaching commitments. Therefore, the funding provided by the state EL allocation only offers the money for districts to identify, assess, and monitor ELLs—the absolute bare minimum requirements set by federal law. In addition, only districts with at least 101 or more ELLs can qualify for the federal Title III funding. Therefore, districts that have 100 or less ELLs solely rely on the EL state allocation funding to support the hiring of ELL staff and initial ELL program development. The allocation is not enough to hire ELL teachers, and certainly not enough to develop an ELL program. In those districts that receive federal Title III funding, the supplemental money can be spent to hire additional staff, but those staff members cannot provide ELL services that are considered "core services," as federal funding cannot be spent to pay for state responsibilities (Puga, 2021-a). Thus, *additional* support staff can be hired, but not an essential ELL program teacher who performs duties such as identifying ELLs, screening and monitoring students, and exiting students from ELL programs.

The EL Enhancement Grant provided by the state has similar limitations, as funding cannot be used for core services that are outlined by the district's ELL program plan (Puga, 2021-a). Therefore, to develop and implement core ELL programing and instruction, especially in respect to hiring an initial ELL specialist, districts must utilize the state EL allocation. However, the state funding is indisputably not enough and is evidenced by the many Idaho schools with no ELL teacher. This also speaks to the findings, as there was a lack of linear relationship between the state's per-pupil EL allocation and student achievement when testing the covariate. It is likely that there is not sufficient per-pupil funding being provided to districts to implement quality programs and hire specialists, therefore it is not impacting student achievement. It is not a matter of whether policymakers

should increase the basic EL allocation, policy makers must reallocate spending to increase this funding if they want to see real improvement in student performance.

If state policymakers were to increase general funding to improve teacher salaries, it is possible that the state would be able to retain and attract highly qualified teachers. If policymakers were to increase the ELL allocation funding, districts could have the capacity to hire urgently needed specialized ELL teachers to ease the shortage. ELLs cannot solely rely on either content teachers or ELL teachers; they need the expertise of both to succeed. A reallocation and investment in teacher salaries would maximize Idaho's spending outcomes to begin improving student achievement. As the ineffective funding represents a social justice issue, an increase in students' access to the number of quality teachers could help to ensure that ELLs are being granted their civil right to equitable education.

Implications for Teacher Preparation

In addition to changing funding allocations to retain and attract quality teachers, an effective use of funding would be a revision of teacher preparation requirements for both pre-service and in-service educators in Idaho. After NCLB, and even more so after ESSA, policies surrounding ELL student support and teacher training have been decentralized to each state (Chang, 2020; Colombo et al., 2013; Leider et al., 2021; TESOL, Inc., 2011), putting immense responsibility on the shoulders of Idaho's policymakers to ensure teachers are "highly qualified". Studies have indicated that many teachers do not feel adequately prepared to support ELLs in their classrooms (Bibelhauser, 2016; Biscoe, 2011), including Idaho's teachers (Batt, 2008). Considering the literature, coupled with the findings of the study, it is clear that ELLs are not being adequately supported in their classrooms, and Idaho can do more to prepare its teachers.

Studies highly recommend that pre-service teachers take classes specific to ELLs (de Jong & Harper, 2005; Grant & Wong, 2003; Gras & Kitson, 2021; Jiménez-Silva et al., 2012; Olson & Jiménez-Silva, 2008), as educators must have basic knowledge of ESL methods, culturally responsive pedagogy, and statewide ESL standards and learning outcomes (de Jong & Harper, 2005; Goldenberg, 2013). The findings of this study encouraged further investigation into pre-service teacher requirements. From the information available on the respective institutional websites, only two of Idaho's seven traditional teacher education programs offer a class specific to either methods in teaching ELLs or language acquisition

for core major requirements (Boise State University, n.d.; University of Idaho, n.d.-b). However, these classes are not a requirement, but rather an elective option. The exception is for candidates who are seeking an ELL or English as a new language (ENL) endorsement. However, the University of Idaho's secondary and elementary education degrees and Boise State University's elementary education degree teacher education programs do require a course on culturally diverse learners (Boise State University, n.d.; University of Idaho, n.d.-a; University of Idaho, n.d.-b). This simply is not enough, as evidenced by the low achievement of ELLs in Idaho and the lack of impact additional funding has on ELL achievement. With the growing number of ELLs in Idaho and the findings of the study, it is essential that the curriculum in teacher education programs reflects the state's student population. Although new teachers will need experience and ongoing training to support these learners, additional pre-service course requirements are needed to provide the fundamental knowledge vital to understand the complexities of ELLs. Therefore, Idaho needs to consider adding ELL-specific course requirements to teacher preparation programs as a proactive measure to ensure higher quality teaching and learning.

The findings of the study suggest that teacher preparation programs should also include additional classes in literacy and language support for math educators, as student achievement was worse in districts that received additional ELL funding. Math teachers may have less interest in academic language and literacy, as it may not seem readily apparent to its relationship with the content. However, the growing number of ELLs and the implementation of CCSS require math teachers to become experts in content area literacy. Even though math is heavily numeric, ELLs still need support to access the content, as the content delivery, directions, and classroom interactions are in these students' second language. Furthermore, numbers are not a universal language, as some learners' first languages may have a different numeric script, such as Arabic or Mandarin. Thus, learners may also be acquiring language forms associated with numbers and basic arithmetic. Based on the findings of the study, adding literacy and language acquisition requirements to pre-service math teacher coursework could be a further proactive measure to help improve ELL student achievement.

In addition to further pre-service course requirements, intentional teacher preparation for in-service teachers is needed. The additional ELL-specific funding examined in the study

should be partly used by districts for professional development (Puga, 2021-a). It is unclear if and how districts are utilizing the funding for professional development. The study indicated that the additional funding is ineffective in improving student achievement and could indicate ineffective ELL-related professional development for teachers. Batt's (2008) findings support this conclusion, as she found that Idaho's teachers recognized the need for additional training, as they felt underprepared to support ELLs. Therefore, clear guidelines should be provided to districts on which evidence-based training opportunities should be delivered. The literature suggests that sheltered instruction is an effective model (Short et al., 2012) and should be considered for Idaho teachers. If Idaho could attract and retain bilingual educators, bilingual programs should also be considered, as they are shown to be the most effective program type to improve ELL achievement (Thomas & Collier, 2002).

Overall, with additional teacher preparation, it is likely that ELLs will gain better access to both content and language learning. The specialized support needed to teach these learners must be reflected in the preparation required of teachers. This in turn would affect ELLs' day-to-day learning across content areas. Therefore, if Idaho were to utilize funds to provide additional, intentional support to pre-service and in-service teachers, it could greatly influence the impact funding has on student achievement.

Implications for Teachers

Utilizing funding to increase teacher preparation will not only improve teachers' knowledge about SLA and ELL classroom support methods, but it will also improve teachers' sense of confidence, self-efficacy, and perceptions of multilingual learners. Studies have shown the benefits of more robust requirements in teacher training programs and professional development regarding teacher confidence and efficacy in teaching ELLs. (Gándara et al., 2005; Jimenez-Silva, Olson, and Hernandez, 2012; Olson & Jimenez-Silva, 2008; Grant and Wong, 2003). In fact, many researchers have argued that teachers' confidence in teaching linguistically and culturally diverse students is the first-most step in improving ELL student achievement (Gándara et al., 2005; Jimenez-Silva et al., 2012). Based on the findings of the study, it is likely that Idaho teachers do not have confidence in teaching ELLs and do not feel that they are effective in their ability to support these learners in their classrooms. Additional specialized classes and ongoing professional development among

Idaho educators could be transformative in improving teacher confidence, a critical element in improving student achievement.

In addition to teachers' self-confidence, further teacher training could help to shift teachers' perceptions of ELLs. One issue contributing to low ELL achievement is teachers' beliefs that ELLs are less capable. Therefore, teachers often provide learners with less rigorous content, leading to a "rigor gap" (Murphey & Torff, 2019). Batt (2008) uncovered this issue among Idaho school districts. Respondents indicated that "the problem in our school is that the mainstream teachers and administrators don't understand [ELL] needs and how to teach them…I have people in my building that refer to my kids [ELL students] as 'them'" (para. 22). Teachers' perceptions of ELLs could play a role in students' low achievement. It could also be a factor contributing to the lack of funding effectiveness on ELL achievement. If funding is not being utilized for quality teacher training, it is likely that Idaho's perception of these learners is not changing for the better. This is especially true of pre-service preparation, as many of Idaho's teacher candidates receive little to no training in ELL support. If teachers were to have a better understanding of these learners through training, they would recognize that ELLs are in fact capable, but they just need specialized support to access and show understanding of grade-level content.

To conclude, the findings of the study could help to persuade both policymakers and districts to reallocate funding to ensure higher quality teacher training. By doing this, teachers will not only have the essential knowledge needed to better support ELLs, but they will also have a higher sense of confidence and a higher perception of ELL capabilities. Teachers are not the only answer in improving ELL achievement; however, teachers play a critical and central role in their frontline support of students. Therefore, implications for teachers are essential to consider if ELLs are to receive equitable learning opportunities in Idaho's classrooms.

Limitations and Recommendations for Future Research

Limitations

Although the study provided insight into the impact of Idaho's funding allocations on ELL student achievement, it had important limitations both in the nature of the study and in the secondary data sets being utilized. Regarding the study itself, only one year of data was used. Ideally, a set of consecutive years would be investigated. However, the data available

on both funding and assessment was limited, making a multi-year investigation challenging. In addition, data from the 2018-2019 school year was utilized for the study. A study that included the most recent year would be more desirable, but due to the COVID-19 pandemic, it is likely that other factors influenced student achievement that would have been impossible to control for, including learning loss, the effect of distance learning (Vázquez Toness & Lurye, 2022), teacher burnout and anxiety (Pressley, 2021), and COVID-19 relief funding provided to states and districts (Jordan, 2022). Therefore, the decision was made to use pre-pandemic records. Lastly, the study was limited to the state of Idaho, making the findings less generalizable in another context. However, this is often the case of any investigation into a state's policies and educational programs, as states have decentralized autonomy over their systems.

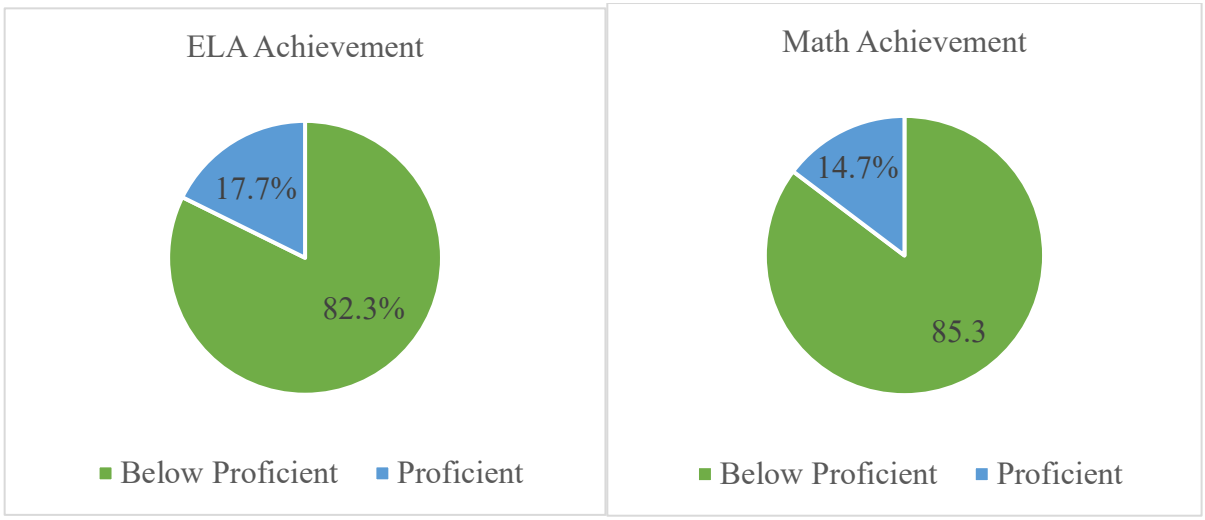
Major limitations of the study were a result of the secondary data sets received by the ISDE and available via public records request. The process of receiving useable data became cumbersome. Upon an initial public records request, the researcher was directed by the ISDE to instead, use posted public data sheets. Therefore, the researcher attempted to use public ISAT reports downloaded from ISDE. These data sheets were both blurred and redacted to comply with state laws for protection of identifiable information. However, when comparing the funding amounts and achievement scores for each district, inconsistencies in the redaction of ISAT scores were found. For instance, there were districts that received large sums of funding, and therefore large numbers of ELLs, that had redacted data. Other districts with only very small sums of funding, and therefore a few students, had achievement scores available. In addition, the way the data was presented differed greatly, both within an academic year and across academic years. Some districts had percentages rounded to whole numbers, others with percentages with decimal places to hundredth place, and others with greater than or less than figures. Furthermore, the researcher found that in districts with percentages, the totals across achievement levels did not equate to 100%. In many cases, the total percentages exceeded 100% considerably. Thus, the data for many school districts was useless.

Communication with ISDE revealed that it was uncertain why the inconsistencies existed. After ISDE held a meeting to determine solutions to this issue, the researcher was directed to attempt a public records request instead. After multiple requests and being sent

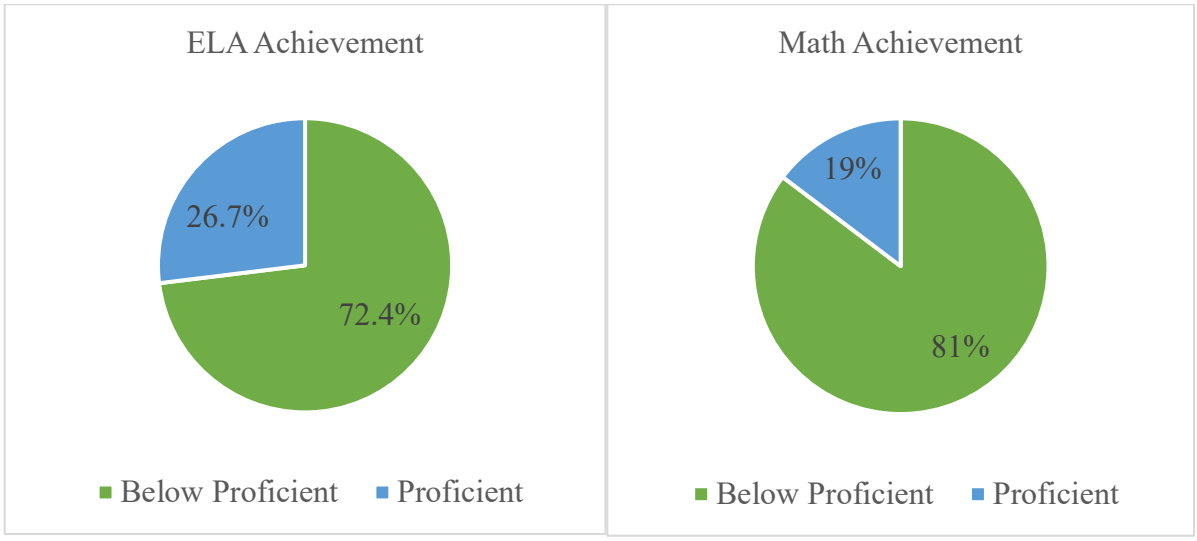
spreadsheets for the incorrect years, the researcher was provided with a more complete data sheet. However, the data between the ISDE website records and the public records request spreadsheet varied greatly, leading to different percentages of overall ELL student achievement for the same year (see Figure 3):

Figure 3

Comparison of 2018-2019 ELL Achievement between ISDE Website and Public Records Request



Note. ELL achievement based on ISDE Website



Note. ELL achievement based on ISDE Public Records Request

Furthermore, Dearien (2018-b) indicated that according to the Migrant Student Education system on the ISDE website, in the 2017-18 school year, the level of achievement

for ELLs was: 93% performing below proficient in both ELA and math. However, an examination of the ISAT test results provided on the ISDE website accessible to the public showed again, very different results. The results showed that for 2017-2018 school year, 87.42% performed below proficient in ELA and 89.19% performed below proficient in math. Thus, there is a lack of consistency in data provided to researchers, posted on the ISDE website, and provided through public records requests. This makes it challenging, and nearly impossible, to both utilize ISAT data results and interpret the results. In addition, the redaction policies themselves posed issues with examination of the data. Of the 98 school districts who received ELL funding, only 52 of the districts had mostly complete data for "below basic" and "basic" achievement levels that could be utilized for the statistical analysis.

Because of these limitations, great challenges arise for any researcher investigating student achievement in Idaho. The mismanagement of data only intensifies the concerns surrounding ELL support. However, despite these limitations, this study yields compelling results and uncovered secondary issues that cannot be ignored if we truly care about issues of equity for all students, including ELLs.

Recommendations for Future Research

Additional research is needed to investigate the impact of funding on ELL achievement, both nationwide and in Idaho. Studies that have investigated the impact of additional funding in different states are also seeing little to no improvement in ELL and disadvantaged achievement (Cronin, 2017; Grubb, 2009; Jiménez-Castellanos et al., 2019). Therefore, further investigation into how districts are utilizing funding is needed. It is important to understand if funding is being used for important resources such as teacher training, effective program implementation, hiring of ELL specialists, and community involvement. Researchers could consider a mixed methods approach so that administrator, teacher, and student voices are included to provide insight into the utilization of funds. Findings on this topic could also help inform better accountability outcomes for states and districts.

In respect to Idaho, Batt's (2008) study brought the issues of ELL support to the forefront. She revealed that teachers wanted additional training and support in ELL student education. As no similar literature could be located since the publication of Batt's (2008)

study, it is important that researchers consider investigating the current needs of Idaho's teachers so that they may better support diverse language learners in their classrooms.

In addition, more research should be conducted on the impact of Idaho's funding on student learning. This is true not just for Idaho's minority learners, but for all of Idaho's learners. Idaho's notoriously low public education funding requires attention. The study at hand is a first step in identifying if funding makes an impact; however, it is only a brief look at this issue. With clearer, more consistent state assessment data, researchers could examine the impact of funding on ELL achievement across years with the inclusion of more school districts. As the data stands, the ability to research ELL achievement in Idaho is limited. Therefore, it is recommended that the ISDE have more readily available, accurate data that could be examined and investigated so that research-based decisions can be made at the state-level. Findings for Idaho, although specific, could also help inform issues and changes in other rural states with growing ELL populations and low educational funding allocations.

Furthermore, additional research is needed to examine funding, achievement, and socioeconomic status (SES). It would be worthwhile to control for SES within a quantitative analysis, as SES has often been found to be the largest determiner of student achievement (Alexander et al., 2007; Baker, 2017; Sirin, 2005; Thorson & Gearhart, 2019). The inclusion of SES would be complex, as many ELLs are also from low-SES families and communities (Baker et al., 2016). However, a better understanding of the relationship between additional funding, SES, and ELL student achievement is important in improving both student learning and appropriate funding allocations. Logistical regression could be utilized in future studies to determine formulas for interpreting and predicting the impact of funding and achievement.

Lastly, future research could focus on examining a different output. This study examined the impact of funding on achievement, but researchers could investigate the impact of educational funding on post-secondary outcomes. As equitable access to education is meant to provide students with better future opportunities, examining these future opportunities in an EPF input and output model could provide important insight into long-term impacts of funding policies.

Conclusion

This study was novel in respect to Idaho, and the findings provided insight into the ineffectiveness of current funding and allowed for an examination of possible implications

for a variety of stakeholders. This study in no way claims that funding is or is not the key in closing the achievement gap for language minority students. Instead, it seeks to illustrate to stakeholders that for funding to make its anticipated difference in student learning, it must be used with care and intent. Idaho does not necessarily have to spend more money on education, but rather, rethink how it spends its money. Although a small step, the study was an important step in moving research towards informing more equitable learning methods for ELLs. A shared American value is that *all* citizens have equitable opportunities to pursue life, liberty, and happiness. Additional funding from state and federal sources have been allocated to help alleviate these inequities through improving resources and supports; however, funding is not shown to impact Idaho's ELL student achievement. As a result, actions must take place to ensure that ELLs receive an equitable education, a fundamental civil right.

As with any educational research, the heart of this study lies with the impact it may have on improving student learning. Even with additional funding, most of Idaho's 21,000 ELLs cannot read, write, or perform in math at grade-level. This finding reveals a much larger narrative than just poor test scores. The scores signify long-term, lasting consequences for students. Research shows that due to achievement gaps, students face limited job opportunities later in life, limited life-long earnings, and limited access to higher education (Thorson & Gearhart, 2019). Consider what this truly means for each individual student who is underserved in Idaho and across the nation: inequitable opportunities in life. However, something can be done. By increasing the quantity and quality of teachers and ensuring teachers are adequately prepared both in skill and perception of ELLs, these learners could begin gaining further access to content and language learning. This would allow teachers to create inclusive learning environments for ELLs, both linguistically and culturally, empowering students to become more active participants in their classrooms, in their future careers, and in their communities.

In sum, the number of ELLs will only rise within the state of Idaho and across the nation. This should not be seen as a burden, but rather, as an opportunity to enrich our society. ELLs bring with them a wealth of knowledge, skills, and creativity. Their multicultural backgrounds deepen their potential to contribute both economic and social benefits. Idaho has the chance to empower over 21,000 of its young people to reach their full

potentials. The responsibility of this task does not lie on the shoulders of a single group, but rather, the responsibility lies on the shoulders of us all. It will take a united, intentional effort to meet both the needs and fundamental civil rights of these vibrant, talented students.

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