Research Applications During the 2023-2024 School Year

Exploring the role of qualitative methods in the implementation of evidence-based practices in public schools

Investigator: Tyler Christopulos Granite administrator or teacher: No

IRB: University of Utah

Proposal ID: 2023-001-Christopulos

Status: Approved

Anticipated Start Date: 10/01/2023 Anticipated Completion Date: 11/30/2023

Research Classification: IDEA [Speech-Language Impairment]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? Developmental Language Disorder (DLD) is a prevalent neurodevelopmental disorder affecting around 1 in 11 kindergartenaged children, with significant impacts on academic, behavioral, psychiatric, emotional, and social development. However, the identification and treatment rates for DLD remain low, highlighting the need for improved approaches. One contributing factor to the low identification rates is the reliance on referral-based systems in schools, leading to missed cases. Universal or targeted screening is being emphasized as a proactive approach, using brief and reliable measures to identify children with difficulties in specific areas, such as language. Limited awareness and understanding of language disorders in classroom settings also hinder accurate identification. Additionally, the limited uptake of evidence-based speech-language pathology services in schools poses a challenge.

Implementation science, a field focused on integrating research into practice, offers methods to address these challenges. Qualitative methodology (QM) plays a crucial role in understanding complex phenomena and contributes to theory development. Although historically controversial, QM has gained acceptance in various fields, including Communication Sciences and Disorders (CSD) research. However, the generalizability of QM studies in CSD remains unknown.

To bridge this gap, this study aims to assess the agreement levels with barriers and facilitators identified in a recent study on universal screening for language disorders in public schools, conducted by Christopulos and Redmond (2023). A survey will be administered to speech-language pathologists and kindergarten teachers from multiple school districts in Utah. Results from the survey will be used to measure the levels of agreement to inform policy decisions and enhance understanding of the intersection between QM and quantitative approaches in CSD research specifically with regard to the implementation of universal screening for language impairment in Utah public schools.

Study Aims

The following aims will be addressed:

AIM 1: To what extent do speech-language pathologists and general education kindergarten teachers from Utah school districts concur with the barriers and facilitators identified in Christopulos and Redmond's (2023) study on universal screening for language impairment in public schools, based on their responses to survey statements?

AIM 2: How do speech-language pathologists and general education kindergarten teachers in Utah school districts differ in their levels of agreement regarding the barriers and facilitators identified in Christopulos and Redmond's (2023) study on universal screening for language impairment in public schools, as indicated by their responses to survey statements?

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. This study utilizes a quantitative descriptive survey research design to achieve the study's two main aims.

Firstly, it assesses the agreement levels of speech-language pathologists and general education kindergarten teachers in Utah school districts regarding the barriers and facilitators identified in Christopulos and Redmond's (2023) study on universal screening for language impairment in public schools. This assessment is based on their responses to survey statements related to the topic.

Secondly, the study compares the differences in agreement levels between speech-language pathologists and general education kindergarten teachers in Utah school districts concerning the barriers and facilitators identified in the same study by Christopulos and Redmond (2023). The responses to survey statements related to universal screening for language impairment in public schools are used for this comparison. The study aims to gain insights into their perspectives and improve language screening practices and support in educational settings.

Describe your research method(s)

Data collected through survey methods have been widely used in behavioral and social sciences. The use of surveys in quantitative studies is beneficial because they typically have quick administration time and can target a large number of participants. In addition, numerous items (e.g., questions, statements, etc.) can be included in a survey that allow for increased flexibility in the evaluation of a particular topic of interest. The twenty Likert-type survey items (i.e., statements) used in Christopulos and Redmond (2023) will be used to assess the extent to which speech-language pathologists and general education kindergarten teachers from Utah school districts concur with the barriers and facilitators identified in Christopulos and Redmond (2023) study on universal screening for language impairment and levels of agreement across the two groups of professionals.

The first portion of the survey will obtain consent from each participant. The second portion of the survey will collect personal demographic information including professional position, years of experience, level of education, caseload size

Schools requested	All elementary schools in GSD (i.e., kindergarten teachers and SLPs)
How will parental permission be obtained?	Not Applicable. Survey will only be available administered to kindergarten teachers and speech-language pathologists (SPLs)
Benefit to Granite School District. Describe how your research will benefit Granite School District.	General education teachers are currently faced with the prodigious task of identifying children with language impairment for referral to special education services. Children who go unidentified exhibit negative behaviors that often manifest directly in the classroom setting such as increased behavioral and attention difficulties, reduced academic abilities (specifically with reading and core subjects), are at in increased risk for bullying, and increased risk for anxiety and depression. If these children can be identified at a better rate than the current referral-based system has to offer, general education teacher stand to tremendously benefit by being able to redirect much of their time, attention, and energy that is currently spent on these class-room issues, to their primary task of teaching. By doing so, this helps the student progress in the general curriculum and helps set them on a path to succeed in future life endeavors.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	This study uses a descriptive research design instead of an experimental design. As a result, our main objective is to describe the survey results rather than formulating any specific hypotheses about the outcomes. Results: [insert here]
	(SLPs only), gender, and age. The final portion of the survey will present the 20 survey statements seeking Likert-type responses (i.e., strongly agree, agree, neutral, disagree, strongly disagree). Each question/statement requires a response in order to progress and complete the survey. The University of Utah's RedCap system will be used for survey creation and distribution. At no point during the survey will participants be required to enter any identifying information (e.g., name) therefore maintaining participant anonymity and confidentiality across the survey platform and among the researchers. It is anticipated that the survey will take no longer than 10 minutes to complete.

Research Applications During the 2023-2024 School Year

Effects of collaboration assessments on student perceptions of math.

Investigator: Michele Jones

Granite administrator or teacher: Yes

IRB: Granite School District Proposal ID: 2023-002-Jones

Status: Approved

Anticipated Start Date: 08/28/2023 Anticipated Completion Date: 06/01/2024

Research Classification: Teaching Strategies [Teaching/instructional strategies: Collaborative learning]

Requested researc	irresuits on.
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	I am investigating how to effectively implement collaborative assessments in the 9th grade classroom and the effect of collaborative assessments on student self-efficacy, attitudes, and perceptions of mathematics.
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	I will be enfolding collaborative elements throughout my lesson design and incorporate a collaborative component to quizzes and unit tests. I will use the MAPS survey to collect pre-post data of students attitudes and perceptions, collect student qualitative self-reflection data, and quantitative data (test scores). Describe your research method(s) I will send a parent permission slip home explaining the project and only include students who's guardians give permission. All students will participate in the self-reflection and collaborative exams.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	I hypothesize that collaborative structures will enhance student self-efficacy and proficiency in mathematics. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	This research will further student proficiency in mathematics and our understanding of how to facilitate effective pedagogical practice in math classes to support all students.
How will parental permission be obtained?	Parent Consent Form
Schools requested	Cyprus High School

Research Applications During the 2023-2024 School Year

Assessing elementary math instructional practices: Aligning math skills with real-world problems for enhanced student learning

Investigator: Siu Ha Lee

Granite administrator or teacher: Yes IRB: Western Governors University

Proposal ID: 2023-003-Lee

Status: Approved

Anticipated Start Date: 08/18/2023 Anticipated Completion Date: 08/24/2023

Research Classification: Teaching Strategies [Teaching/instructional strategies: Direct instruction]

Requested researc	n results on:
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	This is an applied project that evaluates math instructional practices aligned with real-life problems.
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	I will create a 10-question online survey using Google Forms and invite approximately ten teachers from the school to participate. The goal is to evaluate whether their instructional practices align with real-life problems. The online survey consists of ten questions. Nine are multiple-choice questions that can collect quantitative data to find the mean of teachers who do not align with real-life scenarios in math lessons and the challenges they are facing to employ instructional strategies that align with realistic settings. The open-ended question will offer qualitative data for insights into support or potential improvements teachers need so that they can be better prepared to employ teaching strategies that align with practical situations in math lessons. Describe your research method(s) I will email the participants, inviting them to participate in the online survey. The email will include the consent form that they need to sign as an acknowledgement of their agreement to participate voluntarily. My colleagues may finish the survey within 3 days. I will need 3 more days to analyze the data and present the results in a report, including tables and graphs. It may take 6 days to complete the entire process and the report.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	The research will bring to light a problem that teachers may have overlooked the positive impacts of allowing students to apply math knowledge and skills to real-world situations. This research may reveal insights into what could be done in the future. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	My research on evaluating math instructional practices aligned with real-life problems will benefit Granite School District by enhancing students' relevance and engagement, improving their problem-solving skills, supporting teacher professional development, and ultimately improving students' achievement in mathematics education.
How will parental permission be obtained?	Not applicable
Schools requested	Copper Hills Elementary

Research Applications During the 2023-2024 School Year

Peer mentoring to increase resilience in refugee and newcomer students

Investigator: Chloe Cooksey

Granite administrator or teacher: No

IRB: Brigham Young University Proposal ID: 2023-004-Cooksey

Status: Approved

Anticipated Start Date: 09/04/2023 Anticipated Completion Date: 03/15/2024

Research Classification: Classroom [Classroom influences: Mentoring]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? Children and adolescents who are forcibly displaced represent almost half of the world's internally displaced and refugee populations (Fazel et al, 2012). Worldwide, refugees show poorer mental and physical health than the populations among which they resettle (Lamkaddem et al., 2015). A leading cause of these outcomes is psychological trauma, which is defined as a reaction to experiences that overwhelm an individual's capacity to cope (Dehnel et al., 2021; Record-Lemon and Buchman, 2017). These experiences may include threats to physical or emotional safety, such as abuse and neglect, natural disaster, terrorism, violence, substance use, war experiences, life-threatening illness, serious accident, parental loss, and deployment of family members (("About Child Trauma," 2022; Record-Lemon and Buchman, 2017; Trauma and Violence; 2022). Among refugees who have resettled, many experienced varying degrees of trauma while in their country of origin. Trauma can have degenerative effects, causing significant impact on developing bodies, brains, and minds (Cleary et al., 2019). The trauma these children experience often results in the development of PTSD, depression, and anxiety (Dehnel et al., 2021).

Among refugee children, the effects are often seen through high rates of suicidal ideation and depressive symptomology (Yeh et al., 2007). Exposure to traumatic events and their subsequent impact on physical and mental health can affect the child's ability to successfully transition into their host country. If children are not able to successfully integrate into the new culture, they may face greater social, emotional, occupational, and health challenges later in life (Rotich, 2011).

Providing better support to refugee students must begin with their transition and adjustment to school. It is crucial to gain a better understanding of the needs of refugee children as they integrate in their host countries and establish programs to help meet those needs. One promising idea for refugee programming is peer mentorship, which has proven to be successful in helping children experience a smoother transition into new cultures. Previous studies have shown that peer mentorship can contribute to higher peer attachment and self-efficacy among participants (Yeh et al., 2007). Other studies have shown that mentoring programs can help students develop stronger connections with their host culture and give them more hope as they look forward to the future (Pryce et al., 2019). Schools can use mentorship to aide these children in having a better experience as they begin to adjust to a new country and culture.

The purpose of this study is to examine resilience among refugee students through a peer mentorship program. The program will help students foster connections at their new school which gives them the opportunity to better integrate and have increased belongingness in their new environment. The students will be required to meet at least once a week throughout an 8 week period. Both before and after the 8 weeks starts, students will take a 12 question survey which will measure resilience. The two surveys will be compared to see if participation in the program results in an increase in resilience for both the mentor and mentee.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. For both mentors and mentees, the students surveys before and after the program will be compared before and after. We are looking for resilience in both mentors and mentees but primarily concerned with mentee resilience. The students will take a short survey at the beginning of the study and the same one at the end of the study. Pre- post- tests to determine the effect of the peer mentoring program.

The Child and Youth Resilience Measure - Revised (CYRM-R) is a 12 question resilience survey which will yield quantitative results to assess the changes in resilience before and after the program. The quasi-experimental design is appropriate for this study due to the assigned groups of mentor or mentee given to the participants. Scores on the CYRM-R will be analyzed across groups over time using a repeated measures analysis of covariance (ANCOVA), with age, gender, self-rated English ability, and self-rated access to resources outside school as the covariates. This analysis will help to establish the effects of the mentoring program on mentee resilience after accounting for possible confounding variables.

Describe your research method(s)

Students will be recruited to be a mentor through the designated individual at the school – this is often the school social worker or Alt team lead – there are parameters for participation in the program. The student needs to have been in the country for at least a year. They will talk with students who are both asylum seekers and refugees. Any student is welcome to participate in the program, but for research purposes, those two categories of individuals will be asked to participate. Mentees will be recruited through the Tumaini program. This will happen when they enroll in the program, they will be given the opportunity to participate. Once students are introduced to their mentor/mentee they will be required to meet once a week and the mentor will document this through a google form. There is a flier that can be distributed to students, parents,

Summarize your expectations and the results. Provide a brief description of your findings and	administrators etc. Potential mentors will be selected by the school staff involved in the program. The staff member will present the study plan (see below) to get their feedback and to gauge their interest. Expected time 15 minutes. The Intercultural Mentoring Tools to Support Migrant Integration at School (INTO) Earheir, 2022) program was developed in Europe and used in various countries. This program has toolkits for migrant integration, mentor training, and guides for professionals implementing the program. These existing programs will be helpful in creating relevant protocols for teachers and students, selected by the group. The project is not affiliated with INTO, this project is unjint on model to base our program on. The project is directly affiliated with the Educational Equity and will be directly affiliated with the project as well. All students participating protocol. This project is directly affiliated with the Educational Equity and will be directly affiliated with the project as well. All students participating will complete the pre-intervention measure (CYRM-R) prior to starting the program. During the program, students will have weekly check-ins (for 8 weeks) with administrators as well as a short google form to fill out each week. This will help students and administrators to actively fix any issues in the program. For the duration of the program, the mentor will meet with their mentee at least once a week. When they meet, they will discuss academic struggles, where the student may need help, or how they are adjusting. These conversations will be focused on their experiences within the school. For the first session, there will be specific questions for the mentor to ask so they can better understand what the mentee needs. Potential mentees will be identified as part of the Tumaini On-the-Go program in Granite School District, with a focus on secondary schools in the district. The program now consists of various Professional Support Teams (PST) who are responsible for a wide variety of things.
compare those to what you were anticipating.	Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	The project is intended to benefit mentees and mentors and to provide valuable information for administrators and educators to improve outcomes for refugee students in American schools. This program can also be added to the Tumaini program to increase resources for refugee and newcomer students.
How will parental permission be obtained?	Parental Permission for Minor form Child Assent form
Schools requested	Cottonwood High School, Olympus High School, Granite Park Junior High School, and Granger High School

Research Applications During the 2023-2024 School Year

Social skills and educational attainment

Investigator: Yuliya Lynch

Granite administrator or teacher: No

IRB: Monash University Proposal ID: 2023-005-Lynch

Status: Denied

Anticipated Start Date: 11/01/2022 Anticipated Completion Date: 04/01/2024

Research Classification: Student [Beliefs, attitudes, and dispositions-Self-efficacy]

Requested research results on: Not applicable

Requested researc	h results on: Not applicable
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	As I am preparing a publication on the effect of parental involvement on soft skills (grit, self-esteem, locus of control) and educational attainment (GPA), I would like to look into a broader range of competencies. I would love to utilize the data to be collected by the Granite School District via Panorama on Positive & Challenging Feelings, Self-Efficacy, Self-Management, Supportive Relationships, Sense of Belonging, and Teacher-Student Relationships. Additionally, I would like to access educational attainment (such as GPA or any other scale readily available) and attendance (if available).
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	I would like to investigate a correlation between competencies (obtained from the Granite School District via Panorama) and educational attainment and attendance. This will complement my findings on how soft kills improve educational attainment (from the field experiment). My current findings could be found here (in PhD Thesis): https://bridges.monash.edu/articles/thesis/ Describe your research method(s) Secondary data from the Granite School District will be used. I am asking to be provided with a anonymous data set.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	Based on the review of literature and field experiments conducted for my PhD, I expect a positive relationships between some competencies and educational attainment and attendance. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	I expect the have a publication in a peer-reviewed 'A' rated journal. During the process of publishing we will be provided with critical evaluation of scales and methods, which could help to improve future surveys. In addition, I will share my findings with the Granite School District on which indicators are most critical for educational attainment and attendance.
How will parental permission be obtained?	Not applicable
Schools requested	Not applicable

Research Applications During the 2023-2024 School Year

Using technology to improve foundational reading skills and reading comprehension

Investigator: Margaret Opatz

Granite administrator or teacher: No

IRB: Utah Valley University Proposal ID: 2023-006-Opatz

Status: Approved

Anticipated Start Date: 09/05/2023 Anticipated Completion Date: 04/30/2023

Research Classification: Technology, school, and out-of-school strategies [Implementations using technologies:

Technology in reading/literacy]
Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? Most students in the United States, as in years past, still struggle to become proficient readers. On the latest National Assessment of Educational Progress (NAEP), only 32% of fourth-graders and 29% of eighth-graders were proficient in reading (National Center for Education Statistics, 2022). Further, fully 37% of fourth-graders and 30% of eighth-graders remain below basic in reading, meaning that they have less than partial mastery of fundamental skills, such as locating relevant information in texts or making simple inferences (National Center for Education Statistics).

For years, the field of reading thought that being able to decode (sound out) words through phonics instruction would lead to reading success. Yet, while decoding is a necessary skill for reading success, it is not sufficient. More recently, the literacy field and the science of reading, determined that reading is comprised of foundational skills that contribute to successful reading comprehension. Foundational reading skills include word recognition skills such as phonological awareness, decoding, and sight recognition, and language comprehension skills such as background knowledge, vocabulary, language structures, verbal reasoning, and literacy knowledge (e.g., Scarborough, 2001).

To help readers become skilled, they require instruction that builds foundational reading skills. When a reader does not become skilled for one reason or another, it is imperative to determine why. Specifically, intervention research suggests the best course of action is to determine the cause of reading difficulties and then create supplemental intervention plans that build reading skills (e.g., Haager et al., 2007). Creating intentional reading lessons that target the specific skills students need to become proficient readers is crucial.

One of the most critical components for intervention is measuring students' progress (Stecker et al., 2008) with a psychometrically sound instrument (e.g., Capti Assess with ETS ReadBasix). Progress monitoring involves the collection of educational data on a regular basis (e.g., every 4, 6, or 8 weeks) to inform instructional practices.

A major issue in providing reading interventions in the upper grades is that teachers in Grades 4-12 may not have the training or skills required to provide individualized instruction (Bauer & Previts, 2014). However, based on the latest NAEP results, it is clear that students in all grade levels require meaningful interventions that lead to skilled reading.

There are multiple ways to support students and teachers in providing specific reading interventions; one way is to use technology. In fact, the use of technology to assist reading comprehension and fluency is well documented in reading research (e.g., Javourey-Drevet et al., 2022; Rello, et al., 2013). Specifically, the use of text simplification has been attributed to supporting students who are poor readers and may have weaker cognitive abilities and students with dyslexia (Rello et al., 2013). Automatic text simplification includes the use of computational linguistics to simplify texts at various levels (lexical, morphosyntactic, and discursive) to increase readability and preserve the original meaning (Saggion, 2017). Another strategy includes repeated reading to increase fluency (Samuels, 1979; Chomsky, 1978). More recently, using computer software to complete repeated readings has demonstrated increased oral reading fluency and comprehension (Barber et al., 2018). Other interventions for phonemic and phonological awareness (Schonberg & Hochstein, 2022), vocabulary (Merzifonluoglu & Tulgar, 2022), and morphological awareness (Qiao et al., 2022) have shown to be effective.

Digitally-based interventions have benefits for learners and teachers. Motivating learners is an important benefit as learning to read and reading achievement require learners to stay motivated (Barber & Klauda, 2020). Another benefit for both teachers and learners is feedback. When digitally-based interventions are automatically scored, data is instantaneously available to help teachers monitor learners' progress and identify problems. At the same time, learners receive individualized feedback based on their performance with some programs offering in-the-moment feedback to aid in learning.

The purpose of this research is to determine the extent to which technology can help improve foundational reading skills and reading comprehension, and the interval between testing sessions to show progress. This study will ask students in grades 3-12 to complete a diagnostic reading assessment (pretest), then complete reading interventions using an online platform differentiated based on the results, and finally, complete the same reading assessment multiple times at various intervals with a final posttest to measure the effectiveness of the reading intervention and determine the amount of time needed to show progress.

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This project's research questions include: 1. What difference(s) in pre/posttest data exists between the experimental and control group? 2. To what extent did the digital interventions improve reading skills achievement as measured by the ReadBasix subtests? a. To what extent did word recognition and decoding improve? b. To what extent did vocabulary improve? c. To what extent did morphology improve? d. To what extent did sentence processing improve? e. To what extent did reading efficiency improve? f. To what extent did reading comprehension improve? 3. What is the length of the time interval needed to use ReadBasix for the purpose of progress monitoring? a. How many data points are needed to use ReadBasix for the purpose of progress monitoring? Describe your All teachers in the study have elected to use the assessment as part of their curriculum. The instrument to be used is Capti research method(s). Assess with ETS ReadBasix, a diagnostic reading assessment for grades 3-12. ReadBasix is psychometrically sound as Provide a brief evidenced in its design and several research studies by ETS (e.g., Sabatini et al., 2019). Capti Assess offers multiple options description of the that teachers may elect to use in their curriculum. For example, teachers may decide to give the ReadBasix assessment every participants, the 4, 6, or 8 weeks. Please note, that the entire battery is not given each time; rather, only specific subtests are administered timeline of what was based on students' differentiated needs. Another option that teachers may elect to use is an online intervention that is done, and the data catered to the reading skills students need to develop based on their ReadBasix results. that was collected. Capti Assess and ETS ReadBasix have consented to a data-sharing agreement with the research team. All data used by the research team will not include personally identifiable information. In the user interface, the data is anonymously grouped by class, which will allow us to determine the frequency with which the assessment was completed and allows us to determine which classes used the reading interventions. Mining the data in this way will allow us to determine the intervals at which the assessment shows progress and whether the interventions improved reading skills. The data analysis will consist of multiple phases. The first phase will include descriptive statistics, specifically central tendency and variability. The second phase will include inferential statistics. Before the statistical analysis, the overall pre- and posttest scores will be recorded in Excel. Then, the Excel file will be imported to SPSS to provide descriptive statistics. Descriptive statistics will provide summaries of the data, including the distribution, central tendency, and dispersion of scores (Creswell, 2014). The following will be calculated for both groups: the mean, median, mode, range, variance, and standard deviation. After testing for normality, inferential statistics will be calculated for the pre- and posttest scores using paired samples t test. This will help determine the intervention effect. The final stage will be determining the amount of time necessary for progress monitoring. This stage will include descriptive statistics, including the distribution, central tendency, and dispersion of scores (Creswell, 2014). The following will be calculated for each group: the mean, median, mode, range, variance, and standard deviation. Then comparison of the data will help determine which timeframe is best for demonstrating changes over time. Describe your research method(s) Teachers and students are already using Capti Assess with ReadBasix in the Granite School District. A literacy specialist is willing to recruit teachers to test the amount of time needed between test administrations. The timeline includes 16 weeks of the 2023-24 school year. We would like to have the data collected throughout the school year in order to see the amount of time that passes between administrations that works for capturing progress monitoring growth. Teachers will have their students complete the assessment at 4, 6, or 8 week intervals. The students' data will be anonymous to us but matched so that we can look at their data to determine trends. We are not sure what the results will be. We do expect to see growth in foundational reading skills over time, but we are Summarize your expectations and the unsure of how long between administrations is needed to see a change in score. results. Provide a brief description of Results: [insert here] your findings and compare those to what you were anticipating. **Benefit to Granite** Teachers in Granite School District have been asking me for this type of data for the past year. Knowing how often to assess School District. students will give teachers more autonomy to do what is best for their students, especially middle school students who are Describe how your struggling to read. research will benefit **Granite School** District.

Research Applications During the 2023-2024 School Year

How will parental permission be obtained?	Not applicable
Schools requested	Not identified in application

Learning to observe: A case study of secondary science students' development of observational expertise

Investigator: Lynne Zummo

Granite administrator or teacher: No

IRB: University of Utah

Proposal ID: 2023-007-Zummo

Status: Approved

Anticipated Start Date: 10/02/2023
Anticipated Completion Date: 05/31/2024

Research Classification: Student learning strategies [Strategies emphasizing student meta-cognitive/self-

regulated learning: Meta-cognitive strategies]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? This research focuses on scientific observation because it is often underestimated as a foundational or simple skill. Observation is used pervasively in NGSS and Utah SEEd aligned science instruction to generate data and evidence which learners use to support their reasoning and sensemaking. However, it is often presumed to be an easy skill, appropriate for young children. When challenges arise, they are treated as obstacles to be overcome, not learning opportunities (e.g. Chinn & Malhotra, 2002; Eberbach & Crowley, 2009; Ford, 2005; Trumbull, Bonney, and Grudens-Schuck 2005). Furthermore, a recent lexical analysis (Merritt & Bowers, 2020) of the Next Generation Science Standards (NGSS; Achieve, 2013) revealed that scientific observation is prevalent at the elementary level with diminishing presence in the middle and high school levels. The absence of scientific observation as a focus at the secondary levels demonstrates the lack of attention it has received by the research and practitioner communities. Yet, we know from existing research that making scientific observations in a discipline requires the coordination of relevant knowledge, the disciplinary context, and the social and interactional practices of the discipline (Stevens & Hall, 1998; Mogk & Goodwin, 2012).

Research has documented that learners struggle with generating scientific observations and connecting them to deeper scientific processes. These challenges stem from educators and researchers underestimating the complexity of observation tasks (Ault, 1998; Chinn & Malhotra, 2002; Metz, 2000) and from young learners having fewer prior experiences connecting their observations with relevant disciplinary knowledge (Ford, 2005; Trumbull, Bonney, & Grudens-Schuck, 2005). As a result, children's observations are often unsystematic as they notice arbitrary phenomena (Eberbach & Crowley, 2009; Schauble, 1996). Research on undergraduate students in field geology demonstrates that challenges with scientific observation persist at this level (Balliet, Riggs, & Maltese, 2015), suggesting that observation is not a basic skill but rather one rooted in learners' disciplinary knowledge systems. While existing scholarship suggests the importance of knowledge systems to learners' scientific observations, few studies have examined observation through a knowledge systems perspective.

Thus, our research focuses on the development of observational expertise among secondary science students. We intend to examine shifts in students' knowledge systems over time as they experience a variety of instructional activities aimed at engaging students in the practice of scientific observation.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. We intend to do a qualitative case study of the classrooms of 1-3 participating teachers, as they engage students with observation-based science learning activities. We will collect data: video observations of students and student-generated artifacts. These data sources will be collected approximately 8 times over the course of the school year 2023-2024. We will use qualitative case analysis (e.g., Miles et a., 2018; Yin, 2018) to describe trends in students' developing skills in scientific observation.

Describe your research method(s)

First, we will recruit teachers. Teachers will be recruited from the group of participants already enrolled in another research project currently being run at University of Utah (a geology-focused professional learning experience serving teachers across Utah). We will invite these teachers to participate in this particular study on their classrooms through in-person contact during implementation of the other project. For example, we are planning to meet with teachers this September and October as part of a grant-funded professional development program, for which they have already consented research participation. We will invite them to participate in this extension of the project, but we will emphasize that participation is voluntary.

Once teachers are recruited and the district approves, we will then attend the teacher's classes to recruit students. Here, we will introduce the study, describe the objectives, describe what participation entails, and answer any questions. We will send students home with parental permission forms and assent forms and give them at least 1 week to make a decision with their

	parents. The participant teacher will collect signed permission and assent forms. Parental permission forms and assent forms will both be offered in Spanish.
	Data collection will occur in-classroom on days specified by the participating teacher(s). The teacher(s) will tell the research team when they are implementing an instructional activity involving scientific observation. We will then go to the classroom on the designated day. Video data will be collected from groups of students in which all students have parental permission and have assented; only these students will be captured on camera/audio. Depending on number of student participants, approximately 4 video cameras and audio recorders will be placed around the room. Data will be collected as students engage in small group tasks designed by the teacher to facilitate learning through observation. Recordings will capture student to student interactions, as well as teacher interactions with students. After these classroom sessions, we will collect student-generated artifacts (e.g., sketches, lab notes, etc.) and scan them digitally.
	One or two days of data collection will occur during a field trip organized and designed by the teacher and in accordance with all guidelines of their school and district. Researchers will meet the teacher and students at the designated field trip site. Some students with parental permission and assent will be asked to wear a portable video camera and/or audio recorder to capture their interactions and observations. Students will be organized in groups, so that non-consented students will not be captured on camera.
	All data will be stored on encrypted, password-protected drives. Video and audio data will be transcribed. All data will be analyzed using qualitative methods (e.g., Miles et al., 2018).
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	We anticipate that students' skills in scientific observation will improve over the course of year. Further, we anticipate that certain instructional activities developed by the teacher(s) will be particularly useful to the development of observational expertise while others will be less helpful. This research will help us better understand which activities are helpful. Additionally, we anticipate variation in development of observation skills among students—we expect that certain activities or moments will be particularly useful for some students but not all. We hope to find patterns in these variations. Results: [insert here]
School District. Describe how your research will benefit Granite School District.	This project will support participating teachers with implementation of standards-aligned 3-dimensional science teaching activities that center observation. Additionally, findings from this work will be communicated back directly to participating teachers so that they can use those findings to strengthen their teaching of scientific observation.
How will parental permission be obtained?	We will introduce the study to students first and send them home with parental permission and assent forms (both available in Spanish and English) to be reviewed and signed. If needed, participating teachers will reach out to parents to remind them to sign and return forms.
Schools requested	Specific schools not requested

Research Applications During the 2023-2024 School Year

National Teacher and Principal Survey (NTPS)

Investigator: Maura Spiegelman

National Center for Education Statistics (NCES), Institute of Sciences (IES)

Granite administrator or teacher: No

IRB: Advancing Evidence. Improving Lives (AIR) Institutional Review Board

Proposal ID: 2023-008-Spiegelman

Status: Approved

Anticipated Start Date: 07/15/2023 Anticipated Completion Date: 07/15/2024

Research Classification: School [Leadership: School climate]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? The National Teacher and Principal Survey (NTPS) is the most comprehensive source of data on schools, teachers, and principals in the United States. NTPS provides critical information about the characteristics and qualifications of teachers and principals, teacher hiring practices, class size, and other conditions in a wide variety of schools across the nation. The NTPS system of related questionnaires allows for school, principal, and teacher characteristics to be analyzed in relation to one another. There is a longitudinal component to the NTPS in which principals and a subsample of teachers will be contacted one year later to complete a short follow-up survey. The follow-up survey will measure teacher and principal attrition and retention.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. Congress, the U.S. Department of Education, and other Federal agencies, State Departments of Education, education associations, and the education research community will use data from the next administration of NTPS to present research on a range of issues related to K-12 education. In the past, some of the most frequently published topics have included class size, number and characteristics of new teachers, teaching certification, teacher professional development, teacher attrition/retention, principal attrition and mobility, and teacher qualifications. Based on previous administrations of NTPS, the data will be used to produce national statistics on topics such as:

- Teacher qualifications, career paths, professional development activities, and school and district support for teachers' careers; and
- School organization and decision-making, management of curriculum and instruction, school programs, and school climate and safety.

Describe your research method(s)

The U.S. Census Bureau is the collection agent for NTPS data on behalf of NCES. The NTPS questionnaires are self-administered and are offered to respondents through mail questionnaires and online survey instruments. As part of an effort to increase survey response rates, subject to approval, a subsample of respondents will receive a prepaid monetary incentive in their mailed survey package.

Sampled schools are asked to assign a survey coordinator to serve as a central point of contact for NTPS. The survey does not require the use of any school personnel to administer it, other than the direct time it takes for the respondent to complete the questionnaire. The survey does not involve students. Sampled principals, teachers, and the most appropriate school staff are requested to record their answers either (a) on the paper questionnaire and return the questionnaire by mail to the U.S. Census Bureau or (b) using the online survey option to send in their responses via a secure server link. There is no use of classroom time required for the completion of these questionnaires.

Nationally, the 2023-24 NTPS will include approximately 9,920 public schools and school principals, and approximately 49,250 public school teachers. Sampling for NTPS begins by selecting schools as the primary sampling unit, and then including the principal and a relatively small sample of teachers within each selected school. Public schools selected for NTPS are sampled from the Common Core of Data (CCD), the universe of public schools supplied annually by state educational agencies to NCES. NCES modifies the list of schools from the CCD to meet the definition of a school as used by NTPS. To make sure that the sample contains sufficient numbers for estimates, the NTPS uses a stratified probability sample design. Some major stratification variables include instructional level of the school, locale, school enrollment, charter school status, and state.

Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.

NTPS helps researchers and policymakers learn about our nation's schools, teachers, and principals so they can work on improving education for all students. NTPS is the only national survey that provides this kind of information. NTPS provides a unique resource of information on elementary and secondary education by linking data provided by schools with their respective principals and teachers. Data can be analyzed not only within each component (i.e., the school, principal, and teacher data files), but also across components or data files. This linkage across the different respondent groups makes NTPS data unique among school surveys and allows researchers to study the complexities of the American education system from multiple perspectives. For example, researchers can study teacher attrition using information from not only teachers but also from their schools and principals. In addition, because NTPS collects data every two to three years, changes in education issues over time can be assessed.

	All districts ultimately benefit when good data help legislators and administrators make good decisions. The ability of NCES to provide this important information is contingent upon the voluntary participation of sampled schools, principals, and teachers; participation of these schools and staff is dependent upon their district's approval. Because your district, and your schools and staff, represent yourselves and many others like you, your participation is crucial for producing high quality information. By participating in this survey, you will ensure that information about your district's schools, principals, and teachers is included in those decisions. The data you and your schools provide will better inform and help to shape future education policies.
	 The main design objective is to provide the following data for public schools: National estimates of public schools and public school characteristics; National estimates of combined grade public schools (schools with a grade span that overlaps the elementary, middle, and/or high school levels); National estimates of public charter schools and selected school characteristics; and State-level estimates, for all of the above
	After schools are stratified and sampled, teachers within the schools are also stratified and sampled based on the broad type of teaching assignment area and full- or part-time teaching status. The sample of teachers will be selected from a list of teachers provided by the school. For each school in the sample, all teachers who teach students in grades K-12 during the fall of 2023, except for short-term substitutes, student teachers, and teacher aides, are eligible for sampling. An average of 7 teachers will be sampled from each selected school. For all public schools, the principal will be included in the survey from each selected school.
	Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	The NTPS is in alignment with Granite's Strategic Plan. NTPS helps researchers and policymakers learn about our nation's schools, teachers, and principals so they can work on improving education for all students and Granite's goal is to ensure every student is prepared to be successful. The results from this survey may provide more insight on how to better prepare students to reach that goal. NTPS is the only national survey that provides this kind of information. NTPS provides a unique resource of information on elementary and secondary education by linking data provided by schools with their respective principals and teachers. Data can be analyzed not only within each component (i.e., the school, principal, and teacher data files), but also across components or data files. This linkage across the different respondent groups makes NTPS data unique among school surveys and allows researchers to study the complexities of the American education system from multiple perspectives. For example, researchers can study teacher attrition using information from not only teachers but also from their schools and principals, which is in line with Granite's talent development priority. The integrated survey design allows NCES to collect information from the school personnel who can best supply it, providing more accurate information and resulting in less inconvenience to respondents. In addition, because NTPS collects data every two to three years, changes in education issues over time can be assessed. The NTPS measures school organization and decision-making, management of curriculum and instruction, school programs, and school climate and safety, which could be beneficial to Granite's academic priority of providing high-quality instruction.
How will parental permission be obtained?	Not applicable
Schools requested	 Academy Park, (did not agree to participate) Copper Hills, (did not agree to participate) Fox Hills, (did not agree to participate) Granite Technical Institute, (agreed to participate) Kearns High School, (did not agree to participate) Monroe, (did not agree to participate) Skyline High School, (did not agree to participate) Whittier (agreed to participate)
Selected Instrumentation	 <u>Draft- Participant-Informed-Consent-Form.pdf</u> <u>Questionnaire-PDFs.pdf</u>

Research Applications During the 2023-2024 School Year

Social media and mental health

Investigator: Sarah Coyne

Granite administrator or teacher: No

IRB: Brigham Young University Proposal ID: 2023-009-Coyne

Status: Approved

Anticipated Start Date: 01/15/2024 Anticipated Completion Date: 02/28/2025

Research Classification: Student [Motivational approach, orientation: Anxiety]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? Researchers in the United States have examined the association between social media use and adolescent well-being on a variety of outcomes (e.g., mental health, social relationships, etc.). Studies suggest that social media use might impact adolescent well-being in various ways, including depression, anxiety, social comparison, and relationships (e.g., Coyne, et al., 2020, 2023; Orben, et al., 2022; Twenge, et al., 2020; Valkenburg & Peter, 2013), but these relationships differ from person to person as a function of unique characteristics (Beyens et al., 2020; Valkenburg et al., 2021).

While there is widespread concern about the link between adolescent well-being and social media, parents, policymakers, and researchers are divided on the effectiveness of laws that allow parental monitoring and require age verification and parental consent, such as those that recently passed in Utah. These laws seek to protect adolescents from the potential negative effects of social media use, but some researchers are concerned that these measures may isolate vulnerable groups (e.g., LGBTQ+ and racial minority teens) from online social support and resources (e.g., Coyne, et al., 2023), making them uniquely vulnerable relative to other adolescents.

An examination of the effects of these policies will provide a better understanding of the intersection between adolescent social media use, well-being, and public policy. With many states across the country in various stages of the legislative process (currently more than 20 states), an examination of the policies in Utah, specifically the effect and implementation of these policies, may provide insight for policy and legislation across the country. In particular, this study can show whether the initiation of social media regulations in Utah has a measurable effect on adolescent well-being and social media use.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. The major aim of the study is to examine the long-term effectiveness of the Utah social media regulations on adolescent mental health, social relationships, and social media practices. This study will provide information about adolescents' attitudes about the regulations, and the extent to which the regulations affect adolescent social media use and well-being.

Describe your research method(s)

We propose a quantitative longitudinal study, allowing us to test the effect of the implementation of Utah's social media policy on adolescent social media use, well-being, and the quality of social relationships.

Participants will include a total of 1500 adolescents (ages 10-17) living in the state of Utah. Recruitment will take place in three different school districts across the state: Cache County, Salt Lake County, and Utah County, which represents a mix of rural and urban locations (We are hoping for around 600 students in Granite School district). Participants will take a series of questionnaires that will examine their social media use practices and wellbeing in January/February 2024 (prior to the March 1 implementation of the new law) and again with the same adolescents in September/October 2024, allowing us to examine differences over time in adolescents' social media use and well-being as a function of the new law. We will do a third wave one year after the initial survey (January/February, 2025).

In terms of method, we are open to working with the district to find the best solution. Right now we are proposing coming into a 1st period flex time or health class and having students with permission complete the survey at the beginning of class. We are anticipating that it will take around 15 minutes. Surveys 2 and 3 would be done online since students wouldn't be in the same class the next year. We have outlined the exact methodology below.

Quantitative, Survey Design

We propose a quantitative longitudinal study, allowing us to test the effect of the implementation of Utah's social media policy on adolescent social media use, well-being, and the quality of social relationships. Below is the procedure.

Wave 1

- 1. Parents will receive an email from the school describing the study and asking for consent.
- On testing day, RAs will go into selected classrooms. This will depend on the school, but it will likely be flex time during their first period.
- 3. Students will provide assent.
- 4. For students with consent, an email with the study link will be sent to student email addresses.
- 5. Students will open up email on Chromebooks and take the questionnaire. This should take around 10-15 minutes.
- 6. Mental health resources will be provided on the final screen. We will also give out hard copies for all students in the class.

	7. When students are done, they will come up and show their screen to the RA who will provide compensation and
	verify email for Wave 2. 8. Students will be given a handout showing the next steps in terms of their involvement.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	 Waves 2 and 3 Students will be emailed a link to the survey and can take on their own time. This will include an additional assent (online) at each wave. Students will be emailed an amazon gift card after their survey is completed. We are hoping to better understand under which circumstances is social media harmful or helpful for specific adolescents. We are also hoping to better understand the effectiveness of the Utah social media laws on adolescent health. We take a differential susceptibility approach and hypothesize that the laws will be helpful for those students in the majority who are most at risk for mental health problems but may be less effective for those students in the minority who are using social media for connection and belonging. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	This research will directly inform interventions aimed at reducing mental health problems linked with social media. We are working with the Utah School Board of Education around these issues to think about possible social media literacy programs aimed at encouraging healthy social media use. My students would also be willing to come present on healthy social media use to individual classes if desired.
How will parental permission be obtained?	Email sent out by the district. We also have active parental consent for the current study. However, we are open to a passive parental consent system to have more youth participate if you think this would be easier and in line with your research protocol. I am happy to work out the specifics with you as things progress.
Schools requested	TBD
Selected Instrumentation	 Youth-Assent-15-17.doc Child-Assent-7-14.doc Parent-Permission-Form.doc Survey-for-schools.docx

Research Applications During the 2023-2024 School Year

Contract #USBE-230053CT

Investigator: Dr. William Merchant Granite administrator or teacher: No IRB: University of Northern Colorado Proposal ID: 2023-010-Merchant

Status: Approved

Anticipated Start Date: 10/23/2023 Anticipated Completion Date: 05/31/2024

Research Classification: Technology, school, and out-of-school strategies [Implementation using technologies:

Technology in other subjects]
Requested research results on:

Describe the purpose of your research. What concern,

What concern, problem, or curiosity did your research investigate? This research study is in accordance with the USBE awarded contract #USBE-230053CT in accordance with Solicitation # USBE-AR23055-RFP Computer-based Social and Emotional Skills Software. The scope of work of the RFP objectives included "implementation, data collection, and data analysis that provide information on the effects of social/emotional computer-based software for Utah students.

Therefore, we are looking to implement Peekapak's social emotional learning resources in K-3 classrooms in up to 5 LEAs within Granite School District to support the USBE funded contract. Research would be collected through pre, mid and post surveys throughout the year from both teachers and students. Additionally, academic and behavioral data will be collected as well to measure outcomes.

We are also looking for control groups to participate in the surveys only, to gather baseline data in USBE to compare with. If an LEA opts into the control group for the 2023-2024 school year, they will receive complementary access to Peekapak for K-3 for the 2024-2025 school year.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. The study will be comparing teachers and students exposed to Peekapak (test group) against teachers and students not exposed to Peekapak (control group). This will help USBE and Peekapak measure the social, emotional, behavioural and academic outcomes related to the Peekapak program.

We will compare the test and control groups through pre, mid and post surveys, as well as academic and behavioral data gathered from the LEA.

Based on interpretation of the descriptive statistics, subsequent inferential analysis is conducted as appropriate. The anticipated model for this analysis is a Multiple Analysis of Co-Variance (MANCOVA), with the unit of analysis at the student level. This model has the advantage of simultaneously analyzing multiple comparisons (e.g., social-emotional scores across various assessments) without inflating Type 1 error. A final decision on the inferential model used is based on the nature of the data, and the extent to which data meets required assumptions for the model.

Describe your research method(s)

Peekapak worked with the USBE to get in contact with Granite School District, and our key contact Libby Bailey is helping us recruit participants.

To collect data, Peekapak will distribute pre, mid and post surveys to participating teachers and students. The researchers at UNC will connect with the lead data personnel to collect behavioral and academic data.

Timeline:

- Oct 2023: Signed Data Privacy Agreement and Research Agreement
- Oct 2023: Sign and submit parent consent forms
- Oct 2023: Complete pre surveys
- Oct 2023: Complete professional development onboarding training
- Jan 2024: Mid-point survey with teachers and students on social emotional learning indicators.
- April 2024: Post survey with teachers and students on social emotional learning indicators.

Summarize your expectations and the

results. Provide a brief description of your findings and compare those to what you were anticipating.

We expect students that use Peekapak throughout the school year to report improved behavioral and academic skills.

Results: [insert here]

Benefit to Granite School District. Describe how your research will benefit Granite School District.	Leveraging Peekapak's social emotional learning resources for K-3, funded by USBE, will benefit the entire district community, including teachers, students and parents, through social emotional learning resources that are designed to improve both behavioural and academic outcomes.
How will parental permission be obtained?	Peekapak has developed Parent consent forms that can be delivered either physically or electronically through Google Forms. Parents have the options to: Opt into the research and the Peekapak program Opt out of the research, but into the Peekapak program Opt out of the research and the Peekapak program
Schools requested	 Oakwood Elementary Copper Hills Elementary Frost Elementary Arcadia Elementary Academy Park Elementary
Selected Instrumentation	 Survey-Instructions.pdf Peekapak-Parent-Consent-2023.pdf FINAL-Sept-18-2023-SDPC-NRDPA-Research-Study-with-Peekapak-2.pdf USBEPeekapak-Survey-Links.pdf IRB-Approval-for-Utah-2.png

Research Applications During the 2023-2024 School Year

Effects of phonemic awareness

Investigator: Caitlyn Young

Granite administrator or teacher: Yes IRB: Western Governors University Proposal ID: 2023-011-Young

Status: Approved

Anticipated Start Date: 10/20/2023 Anticipated Completion Date: 11/30/2023

Research Classification: Curricula [Reading, writing and the arts: Phonics instruction]

Requested research results on:		
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	The purpose of this research project is to evaluate the effectiveness of phonemic awareness on reading success. I will also find best practices for implementing phonemic awareness in the classroom that will be put into a professional development presentation.	
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	I will be researching what phonemic awareness is, why it is important, and the best strategies for implementing phonemic awareness in the classroom. I will do this by using both qualitative and quantitative data. The quantitative data that I will use is data that is found in the research that shows the correlation between phonemic awareness and student reading success. The quantitative data that I will use is by giving 5 teachers a questionnaire survey to find out what struggles and questions they have in regard to phonemic awareness. Describe your research method(s) The research method I have chosen to use is mixed. I want to use both quantitative and qualitative data for my research. I	
	have chosen to do mixed because it will give me two different perspectives. My research questions are "What effects does phonemic awareness have on reading success?" and "What are the best practices for implementing phonemic awareness that can be taught in a professional development training?" I can use quantitative data to address the effects phonemic awareness has on reading success whereas I can use quantitative data to address the best practices for implementing phonemic awareness.	
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	The results I am anticipating is creating a professional development presentation that will be motivating and educational for educators. It will teach them about the importance of phonemic awareness and the effects it has on student's reading success. Results: [insert here]	
Benefit to Granite School District. Describe how your research will benefit Granite School District.	My research will be beneficial for Granite School District because this project is aimed to benefit elementary educators with valuable information about phonemic awareness and how it can great impact student reading success.	
How will parental permission be obtained?	Not applicable	
Schools requested	Orchard	
Selected Instrumentation	none	

Research Applications During the 2023-2024 School Year

Impact evaluation of Flashlight360 in a large western school district

Investigator: Steven Ross

Granite administrator or teacher: No

IRB: Johns Hopkins University Proposal ID: 2023-012-Ross

Status: Approved

Anticipated Start Date: 11/01/2023 Anticipated Completion Date: 12/15/2023

Research Classification: Technology, school, and out-of-school strategies [Implementation using technologies:

Technology in writing]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? According to the WIDA Research Report in October 2021, Examining the English Learner Testing Proficiency Growth, growth in Speaking from 2020 to 2021, "was substantially lower in all grades than the other domains. It is quite troubling that after 2020 very little growth was recorded in Speaking in grades 5–12 (under 5 scale score points, on average), while the negative growth recorded from kindergarten to first grade nearly doubled in 2020–2021.5 Interestingly, despite the negative average growth in overall composite gains, Speaking was the only domain where sixth grade ELs exhibited positive growth. Overall, the patterns revealed show that while average EL growth has been affected in almost all domains and grades, the larger relative declines were recorded in the lower grades, and in the domain of Speaking.

(https://wida.wisc.edu/sites/default/files/resource/Report-Examining-English-Learner-Testing-Proficiency-Growth.pdf) As part of this research, we are wanting to investigate the effects of Flashlight360 on English Learners, specifically on the growth in the Speaking and Writing domains of ACCESS. During the 2022-2023 school year, some campuses in the Granite School District utilized Flashlight360. We will be comparing the data of the students that utilized Flashlight360 with those students who did not utilize the program. We are looking to determine what impact Flashlight360 had or didn't have on student Speaking and Writing growth.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. The Center for Research and Reform in Education (CRRE) at Johns Hopkins University plans to conduct a retrospective, mixed-methods quasi-experimental design (QED) that will compare speaking and writing achievement outcomes on the WiDA assessment administered to grades 1-12 students districtwide each February. In the 2022-23 school year, 37 schools (elementary, middle, high schools) implemented Flashlight360, whereas approximately 45 other schools did not.

Student achievement. The proposed design will examine student-level gains on WIDA from winter, 2022 to winter 2023. To ensure baseline equivalence for meeting ESSA and WWC rigorous evidence standards, we will potentially employ Propensity Score Weighting (PSW) to match within grade levels and across comparable grade-level schools each Flashlight360 student with a comparison student having highly similar characteristics in prior achievement and any available relevant demographic variables.

All student achievement data will be deidentified prior to our receipt from the participating district.

Teacher questionnaire. With input from Flashlight Learning, we will develop an online teacher questionnaire to be administered to teachers of intervention students. The questionnaire will be administered in the fall of 2023 to teachers who used Flashlight in the prior year. Using mostly Likert-type and several open-ended items, the teacher questionnaire potentially would focus on the following topics:

- Perceived impacts of the program on:
- o Student attitudes toward speaking and writing
- o Student achievement in those areas
- Overall activities, impressions, and recommendations
- o Implementation activities
- o Alignment with regular course
- o Value to students and the school
- o Suggestions for improvement and scaleup

Usage data. CRRE will analyze any available program usage data or potential correlates of student learning (e.g., amount of teacher feedback, performance tasks submitted by students) that can be linked to student-level achievement to determine relationships between implementation/usage and performance.

The CRRE research team will be responsible for the collection of data. Only this research team will have access to the research data. Any reports resulting from this data collection will not identify any participants. Data will be stored on a secure server managed by JHU School of Education or on JH OneDrive associated with JHU, both of which are FERPA and HIPAA compliant. Based on Federal Office of Human Research Protections (OHRP) protocol, all data will be kept for five years following the completion of the study,

	Describe your research method(s) Teachers who implemented Flashlight360 during the 2022-23 school year are eligible to complete the survey. During the fall of 2023 they will receive an anonymous survey link by email, distributed by David Gomez, Director, Department of Educational Equity for Granite School District. Participation is voluntary. A small stipend is being offered by the district to teachers who complete the survey. Teachers will be given the opportunity to provide their name at the end of the survey if they would like to receive the stipend, with the survey stating that their responses will remain confidential. The survey should take approximately 10 minutes to complete.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were	The research study will be conducted to show student growth on ACCESS from the 21-22 school year to the 22-23 school year. We will be looking specifically at speaking and writing growth. We expect to show that students who utilized Flashlight360 during the 22-23 school year had greater growth than the students who didn't utilize Flashlight360 during the 22-23 school year. We will also be looking at comparable campuses to show students who utilized Flashlight360 had greater growth than comparable students. We are anticipating that students who utilized Flashlight360 during the 22-23 will have greater growth in the Speaking and
anticipating. Benefit to Granite	Writing Doman than students who did not utilize Flashlight360. Results: [insert here] At the conclusion of the research study, Granite School District will be able to see if the software, Flashlight360, that was
School District. Describe how your research will benefit Granite School District.	purchased for English Language Learners is showing a positive effect on students. Granite School District will be able to provide the school board, district staff, and parents results of the study showing impacts on student improvement and growth. In turn, the data can be used as insight to improve district and teacher capacity, as well as, student performance moving forward.
How will parental permission be obtained?	Not applicable
Schools requested	District-wide
Selected Instrumentation	 Flashlight360-Teacher-Questionnaire Consent-Language.docx Flashlight360 Teacher Survey FINAL 2023.docx ehirb.jhu.edu ehirb Letter-of-Acknowledgement NHSR.html.pdf

Research Applications During the 2023-2024 School Year

Skill development among K-3 students using a computer-based social-emotional skills program

Investigator: Shamby Polychronis Granite administrator or teacher: No IRB: Salus Institutional Review Board Proposal ID: 2023-013-Polychronis

Status: Approved

Anticipated Start Date: 11/01/2023 Anticipated Completion Date: 05/30/2024

Research Classification: Curricula [Other curricula programs: Social skills programs]

Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	Does consistent implementation of a social skills program called "we are friends" improve students' use of positive interactions with others as well as help them to self-regulate?
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	If a teacher elects to participate in the study, they will use the We Are Friends program for their class wide social skills curriculum. This is a commitment of establishing time for students to use the program a minimum of 3 times per week, for 10-minutes per session. Teachers can run the program as a whole-class activity using a digital smart board, or have students use individual devices such as an iPad, Chromebook, or laptop. At three different points in the study (beginning, midpoint, and end) each student, teacher, and parent participants will complete a 4-question survey to assess students current social-emotional skills. These surveys will begin with a statement that they are part of a research study, and participation is not required. Participants will attend grades Pre-K through 3rd grade, and will attend Utah public and charter schools. These children may have a range of social-emotional skills. Teachers who are interested in using the We Are Friends program will send home information provided by the PI about the specific curriculum being studied and that parents and students will be contacted about completing a beginning, mid-point, and end survey to evaluate any changes they have noticed. Parents will be given information about the program, and be informed that their completion of the surveys is voluntary. Parents will also be provided with contact information for the PI if they have any questions, or would like to opt their child out of completing the surveys. The PI and Teaching It Right staff will not initiate contact with the parents, but will respond to questions if contacted by them.
	Describe your research method(s) We will work with the Utah State Board of Education as well as Local Education Authorities (LEAs) from inner city, suburban and rural areas across Utah, including large and small districts, to solicit a diversified participant pool of classrooms to participate in the study. Teachers will be contacted through personal connections, the snowball method, and through assistive recruiting efforts by the Utah State Board of Education. The primary intervention is engagement in the We Are Friends program (10 minutes daily, 3-4 times per week). The program collects user progress through the lessons. All participants (students, parents, and teachers) will complete the 4-question survey to assess social-emotional skill development at a beginning, mid, and end point in the study.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	Based on previous research in special education, we hypothesize the results to be similar or improved. Results: [insert here]
Senefit to Granite School District. Describe how your research will benefit Granite School District.	Free access to a social skills curriculum for teachers. Improved social skills in the classroom, playground, and at home.
How will parental permission be obtained?	Parental permission form
Schools requested	TBD
Selected Instrumentation	 Teacher-Survey-2-3-5.pdf Teacher-Survey-K-1-5.pdf Student-Survey-with-Assent-Statement 2023 24 2-3-5.pdf

Research Applications During the 2023-2024 School Year

Student-Survey-with-Assent-Statement Schools-2023 24 PreK-1st-1-5.pdf
 Parent-Survey-2nd-3rd-5.pdf
 Parent-Survey-Pk-1-5.pdf
 Parent-Permission-if-required-by-the-district-3.pdf
 Exemption-Approval-9 22 23-2.pdf

The impact of effective classroom discussion on student understanding

Investigator: Linzie Reynolds Granite administrator or teacher: Yes IRB: Western governors university Proposal ID: 2023-014-Reynolds

Status: Approved

Anticipated Start Date: 10/30/2023 Anticipated Completion Date: 12/10/2023

Research Classification: Teaching strategies [Strategies emphasizing feedback: Classroom discussion]

Requested researc	h results on:
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	The purpose of this study is for the researcher to identify and practice strategies and techniques for directly instructing students on how to have effective mathematics classroom discussions in seventh-grade classes for them to hear others' ideas or develop their own ideas on the lesson subject.
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	I will be collecting the scores of my students' pre and post-assessments for the mathematics unit. I will be comparing the means of these two sets of quantitative data using descriptive statistics. This will allow me to study the central tendencies of each set. I can then compare the two sets to determine if teaching effective classroom discussions impacts student understanding. Describe your research method(s) I will be using students from my first period class whose parents have given consent. I expect this to take about two weeks starting and ending with an assessment to measure growth. I plan to start with a pre assessment. Teach a math unit using new techniques and strategies for discussions and then end with a post assessment. I will use the data to determine if there was a change in student understanding.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	I theorize that my students struggle to engage because they do not know how to have mathematics discussions. I plan to research and apply strategies and techniques to educate my students on how to have these discussions and measure the impact on their understanding of mathematics. I expect that the impact will be positive, and that student understanding will rise due to my intervention. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	My research will focus on classroom discussions and seek strategies and techniques to teach my students how to effectively engage in these discussions. This information will provide insight into possible methods of teaching students how to effectively engage in classroom discussions.
How will parental permission be obtained?	Not applicable
Schools requested	West Lake Stem Junior High School
Selected Instrumentation	 Pre-and-Post-Assessment.docx 7.NS .1-Assessment-Rubric.docx TC-Stakeholder-Information-Letter.docx IRB-Letter-of-Determination-WGU-IRB-24 13-Linzie-Reynolds.pdf

Research Applications During the 2023-2024 School Year

Teaching and learning international survey (TALIS) 2024

Investigator: Angela Battaglia

NAEP Coordinator | Utah State Board of Education

Granite administrator or teacher: No

IRB: National Center for Education Statistics (NCES)

Proposal ID: 2023-015-Battaglia

Status: Approved

Anticipated Start Date: 10/12/2023 Anticipated Completion Date: 04/30/2024

Research Classification: School [Leadership: School climate]

Requested researc	h results on:
Describe the purpose of your research. What concern, problem, or curiosity did your research investigate?	The Teaching and Learning International Survey (TALIS) is a survey about teachers, teaching, and learning environments. First conducted in 2008, its main objective is to provide international indicators that will help countries develop well-informed education policy. TALIS offers teachers and principals the opportunity to provide their perspectives on education in the United States. TALIS 2024 will be conducted in spring of 2024. TALIS does not have to be completed during the school day or during instructional hours. Teachers and principals can complete the survey during a time that is best for their schedule.
Describe your research method(s). Provide a brief description of the participants, the timeline of what was done, and the data that was collected.	TALIS 2024 includes the core TALIS Teacher and Principal Questionnaires that are similar to those used in prior rounds of TALIS, plus a new Teacher Knowledge Survey (TKS). Teachers will complete either the core TALIS or the TKS instrument. The questionnaires are designed to take approximately 45 minutes for principals to complete and approximately 60 minutes for teachers to complete. Questionnaires cover the following topics: • Teacher and principal background and characteristics; • School leadership and climate, including support for diversity; • Teachers' instructional approaches and pedagogical practices; • Teacher and principal professional development; and • Teacher appraisal and feedback. How will the survey be coordinated? Data collection for this survey will be carried out by staff from Westat, under contract with the U.S. Department of Education. Principals are asked to designate a School Coordinator who will liaise with TALIS staff and provide a list of 7th-, 8th-, and 9th-grade teachers; distribute materials to the principal and selected teachers; and encourage the completion of surveys by the deadline. School Coordinators will likely spend an average of 4 hours on the liaison tasks. School Coordinators will receive \$200 for their time and effort in coordinating the survey. Who will be surveyed?
	TALIS focuses on the middle and lower secondary levels: grades 7, 8, and 9 in the United States. Principals and teachers at U.S. schools have been randomly selected to participate. Schools will receive \$200 for participating. Teachers will receive \$25 for completing the Teacher Questionnaire.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	TALIS data will be used to describe the conditions of teaching and schooling across countries and to develop comparative education indicators. The data provided by principals and teachers may be used only for statistical purposes and may not be disclosed or used in identifiable form for any other purpose except as required by law (20 U.S.C., § 9573 and 6 U.S.C. §151). Reports of the findings from TALIS will not identify participating districts, schools, or individual staff. Individual responses will be combined to produce summary statistics and reports. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	The TALIS helps to inform policy makers about the successes, challenges, and conditions faced by teachers and school leaders. USBE supports the participation in this study as a way to understand the challenges in education today.
How will parental permission be obtained?	Not applicable
Schools requested	Skyline High SchoolThomas Jefferson Junior High School
Selected Instrumentation	• None

Research Applications During the 2023-2024 School Year

Investigating the relationship between Edpuzzle use and student engagement

Investigator: Sneha Tharayil Granite administrator or teacher: No

IRB:

Proposal ID: 2023-016-Tharayil

Status: Pending

Anticipated Start Date: 12/15/2023 Anticipated Completion Date: 05/31/2024

Research Classification: Technology, School, and Out-of-School Strategies [Implementation using technologies:

Technology in other subjects]
Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate?

Research Question:

How does regular Edpuzzle use in the classroom correspond to student engagement scores?

Objectives:

This research aims to investigate whether frequent Edpuzzle use (average Edpuzzle use of at least once weekly) in the classroom is associated with increased student engagement scores on a validated student engagement scale.

Background & Significance:

As schools still wrestle with recovering academic performance in a post-COVID era, one key concern and priority for schools across the nation is declining student engagement. National polls like those conducted by Gallup in partnership with The Walton Family Foundation (Wilcoxon & Marken, 2023) found that 52% of the 3,115 students between ages 12-15 gave their schools ratings of only satisfactory or lower in its ability to excite them about learning. Furthermore, 37% of these students disagreed that they had learned something interesting in school within the last seven days (at the time of completing the survey) (Gallup & Walton Family Foundation, 2023). Similarly, research conducted by EdWeek Research Center during the 2022-2023 school year found that 41% of secondary educators (n=351) believed their students were very or somewhat unmotivated, while 87% of middle and high school educators believed the COVID pandemic was a key factor in this decline in student motivation; though on average, the students surveyed reported higher levels of motivation and engagement (Kurtz et al., 2023). Nevertheless, among educators, student engagement seems to be a pressing concern and a priority area for improvement in the post-pandemic era and for good reason. Past research has repeatedly demonstrated that high student engagement is a powerful predictor of favorable academic outcomes.

Wang and Peck's meta-analysis (2013) encompassing 101 studies and over 200,000 students demonstrated a positive link between school engagement—cognitive, behavioral, and emotional—and academic achievement. Engaged students exhibit higher levels of motivation and involvement in their studies, leading to improved academic performance. In addition, Gattic's study (2009) emphasized the positive relationship between student engagement and academic outcomes, such as higher GPAs, graduation rates, and course completion. Engaged students demonstrate a heightened commitment to their studies, resulting in improved educational achievements.

Edpuzzle is a web-based platform that provides easy access to high-quality, subject-specific video lessons and equips teachers with easy-to-use tools which allow teachers to edit video content and embed questions to promote active learning, a pedagogical theory that is well-supported by the educational research literature (Prince, 2004; Michael, 2006). Past studies have shown that video-based learning can promote student engagement, motivation, learning satisfaction and overall academic performance (Norton & Hathaway, 2010; Sever et al., 2013; Zhang et al., 2006). One of Edpuzzle's key features is the ability to embed questions within a video lesson. Embedding questions and other interactive elements to drive instruction and promote active learning is also key to effecting positive academic and learning outcomes, like critical thinking and student engagement (Bonnstetter, 1988; Vural, 2013; Brame, 2016; Walker, 2003).

By exploring how EdTech usage, like Edpuzzle use, is linked to student outcomes, we seek to contribute to the current body of knowledge regarding effective strategies for enhancing student engagement. Furthermore, we aim to provide insights that can inform educational practice with the ultimate goal of fostering a culture of learning and learner agency that are in line with Utah's Personalized, Competency Based Learning (PCBL) framework. By conducting this study, we strive to bridge gaps in current knowledge and shed light on the potential benefits of Edpuzzle in improving student engagement.

Describe your research method(s). Provide a brief description of the participants, the

description of the participants, the timeline of what was done, and the data that was collected.

This study will primarily consist of quantitative analyses that will explore relationships between Edpuzzle usage data and scores on a validated survey known as the Check & Connect Student Engagement Instrument (hereafter referred to as the "SEI") (Regents of the University of Minnesota, 2020) among Utah schools and students. The SEI is a validated 35-item self-reporting inventory that measures students' cognitive and affective engagement as it relates to their experience in school (Regents of the University of Minnesota, 2020).

This study is part of a larger study comparing Edpuzzle-usage and student engagement scores across Utah schools. For the present research proposal, this study's participants will include teachers and students from schools within the Granite School

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District participating in Edpuzzle's Utah Pilot Program. The Edpuzzle Utah Pilot Program offers Utah schools or school districts free premium (educator) accounts for the 2023-2024 Academic Year (AY). As a component of this program, participating schools and districts also have the option to participate in this research. Thus, participants for this study will be recruited from schools participating in this Pilot Program.

Participants will include teachers and students in 8th-12th grades from Granite School District enrolled in Edpuzzle's Utah Pilot Program. The study's design will consist of at least three administrations of the SEI within the 2023-2024 school year:

- a) once shortly after enrollment into the Edpuzzle Pilot Program (preferably, before Edpuzzle use begins)
- b) once mid-year between late February 2024-mid-March 2023 (before Spring Break)
- c) a final time during the latter half of the second semester of the 2023-2024 AY (around mid-April to early May 2024), after at least 3 months access to a pro Edpuzzle account.

Important Note:

Student responses on the Student Engagement Instrument will remain ANONYMOUS throughout the study and thereafter. If analyzing class-level data, Edpuzzle will provide unique links for each class. Students in a class will access the SEI via the unique class link and this will populate data by each class. Alternatively, if necessary, Edpuzzle may generate a list of unique survey IDs which teachers can randomly assign a survey ID to each student in class. Student responses will REMAIN ANONYMOUS and untraceable to student names.

Results from the SEI will be compared across the following conditions:

1) School-level data

- -Where Edpuzzle use across all teachers within the school was low, on average (less than once a week, on average) since gaining access to an Edpuzzle pro account
- -Where Edpuzzle use across all teachers within the school was frequent on average (at least once a week, on average) since gaining access to an Edpuzzle pro account

Note: if usage patterns show more variability, further segmenting and analyses by usage frequencies may be conducted -All of the above disaggregated by grade level and subject area (ex: 8th grade Math)

2) Class-level data (if available)

- -Classes in which teachers used Edpuzzle less than once a week, on average, since gaining access to an Edpuzzle pro account, during the 2023-2024 school year
- -Classes in which teachers used Edpuzzle at least once a week, on average, during the 2023-2024 school year

Differences between demographic data on race/ethnicity, gender, and primary languages (if demographic data is available and permissible to collect on an optional basis)

All of the above pre-Edpuzzle use, and

All of the above, post-Edpuzzle use (near the end of 2024 academic year or after at least 4 months of Edpuzzle use)

Data Analysis

This study takes a correlational approach. That is, a series of inferential statistical tests and modeling will be employed to analyze the data after the three administrations of the survey, including one-way analyses of variance (ANOVAs) and/or paired sample t-tests (and if necessary, Wilcoxon Signed Ranks test or Kruskal Wallis tests), will be used to analyze results from the student engagement surveys administered before or shortly after Edpuzzle use began, mid-year, and near the end of the 2023-2024 school year to determine if Edpuzzle use at least once weekly, on average, has any positive associations with increased student engagement scores.

Describe your research method(s)

Recruitment for this study will occur through dialogue with school personnel and administrators who are interested in enrolling their school(s) within Edpuzzle's Utah Pilot Program for the 2023-2024 Academic Year. This Pilot Program provides participating Utah schools with free Edpuzzle pro accounts during the 2023-2024 academic year. Recruitment for participation in this study will occur during info sessions and when onboarding interested schools into the pilot program. School administrators and personnel will be informed of the opportunity to collaborate with Edpuzzle on this research. Teachers within these schools would only then need to agree to administer the Check & Connect Student Engagement Instrument at most, three times during the school year: shortly after Edpuzzle use begins, once early in the spring 2024 semester, and finally, one time near the end of the 2023-2024 school year.

Timeline/Sequence of Events

- 1. Participant Recruitment and Enrollment/Onboarding into Edpuzzle Premium Accounts-October 10th-November 30, 2023
- 2. First survey administration of the Check & Connect Student Engagement Instrument (survey can be completed online via Qualtrics)-ideally by December 15, 2023-January 8, 2024
- 3. Edpuzzle used for instructional purposes within the classroom or for homework-Ongoing from November 1st, 2023-May 24, 2024

4. Second mid-Year administration of the SEI (survey can be completed online via Qualtrics)Between February 19, 2024-March 11, 2024 5. Third/Last administration of the SEI(survey can be completed online via Qualtrics) By May 10, 2023 6. Granite School Districts End of 2023-2024 School Year-May 24, 2024 7. Data Cleaning and Analysis-May 28, 2024-August 1, 2024 8. Share aggregated findings with Utah School Districts-August 19, 2024
Research Methodology As described above, this larger study takes a quasi-experimental approach with a non-equivalent groups design. It seeks to compare how student engagement scores might be associated with frequency of Edpuzzle usage within students' school learning experiences, and also how these student engagement scores might differ across different amounts of Edpuzzle usage.
Data Management: The researchers representing Edpuzzle will NOT collect any personally identifiable student information for the purpose of this research study. All survey responses will be anonymous.
Survey responses will be downloaded as a Google sheet from secure, encrypted cloud-storage services like Qualtrics and Google's suite of encrypted cloud-based software, including Drive, Workspace, and Lookerstudio. These are encrypted password-protected platforms that also incorporate automatic and timed log-offs to ensure data security. Any back-up copies of the raw data will be stored in a restricted-access folder within Edpuzzle's secure, password-protected cloud server drive.
All related data and documents shall be destroyed two years after the study's completion.
If students within a school (or a class) are assigned at least one Edpuzzle assignment a week on average, we expect to see positive associations with increased student engagement scores on the Check & Connect Student Engagement Instrument. Results: [insert here]
nesults. [insert nere]
By participating in this study and investigating the efficacy of educational technology (abbreviated to "EdTech"), Utah schools will likely benefit from this study because this research will allow them to investigate and build much-needed evidence that helps them better understand how EdTech can potentially promote student outcomes. As EdTech becomes more ubiquitous in the classroom, there is still a great deal to be learned about how and in what ways EdTech can support student learning. Conducting this type of research and building such evidence can help school administrators and teachers make more confident decisions about the EdTech tools they select and incorporate into their instructional practices to better meet the needs of 21st century learners.
More specifically, by investigating how Edpuzzle use might promote student engagement, it would uncover an effective approach to enhance student learning experiences and promote student engagement in the classroom. Increased student engagement is pivotal to moving closer toward some of Utah schools' goals of fostering a culture of learning and learner agency as outlined in Utah's 2023 Personalized, Competency Based Learning (PCBL) framework. Similarly, increased student engagement could have secondary effects of promoting academic achievement, as past research has shown to result from increased student engagement (Wang & Peck, 2013).
Moreover, building more evidence that investigates EdTech use and student outcomes can help schools secure state and federal funding, including funds distributed under the Every Student Succeeds Act (ESSA), to procure such resources like educational technology. Increasingly, state and federal funding agencies are requiring school(s)/school districts to make evidence-based decisions for resource allocations. This research aims to help schools build such evidence.
On a student level, students' engagement and thereby, their learning and academic progress may be enhanced by virtue of participating in this study that will provide all students in the class with access to an educational technology designed with the intention to promote student engagement and learning. By participating in the survey and reflecting on their engagement in school, students may engage in deeper metacognitive reflection that may potentially help them better understand themselves as learners and identify areas of strength and areas of growth.
For students to participate in the Research Study, parents/legal guardians must sign a Consent Form and students need to sign an Assent Form.
Eisenhower Junior High School
 Minor-Assent-Form-Template Granite-Research-2023-2024.pdf Check-Connect-SEI-5-Point Scale-original.pdf Site-Letter-Template-for-Granite-Public-Schools.docx.pdf

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- Parent-Consent-Form Edpuzzle-Utah-Research-2023-2024-Granite-Public-Schools.pdf
- Granite-Public-Schools-Edpuzzle-Research-Proposal-2023-2024.pdf

Understanding Utah teachers' use of benchmark modules to inform instruction

Investigator: Kyla McClure

Granite administrator or teacher: No IRB: University of Colorado - Boulder Proposal ID: 2023-017-McClure

Status: Approved

Anticipated Start Date: 12/10/2023 Anticipated Completion Date: 05/20/2024

Research Classification: Student learning strategies [Learning strategies: Practice testing]

Requested research results on:

Describe the purpose of your research.

What concern, problem, or curiosity did your research investigate? The objective of this study is to understand how teachers in Utah implement and use optional state-provided benchmark modules in their instruction. In Utah, the benchmark modules consist of sets of 5 – 15 items that focus on specific content standards in ELA, math, and science. Teachers may assign benchmarks to students at any point throughout the school year and more than once. Interim and benchmark modules are presented as a formative feedback strategy for teachers to collect information about student progress and adjust their instruction to serve students. However, the mechanisms through which teachers make such adjustments are left unspecified. This study aims to document the range of ways that teachers may use benchmark module assessment results to inform their instruction. Through teacher interviews, the research team will understand how teachers interpret the provided data and what specific actions they take after receiving results.

The research will be used by the state of Utah to help inform the guidelines and training for benchmark assessment use. Ultimately, the research should shed light on the extent to which benchmark modules are helpful (or unhelpful) tools for instruction, what examples of good use look like, and the extent to which using benchmark modules improves student learning. Ultimately, findings should help support teachers and students in Granite District and throughout the state of Utah for understanding appropriate use of benchmark modules.

Describe your research method(s).

Provide a brief description of the participants, the timeline of what was done, and the data that was collected. The goal of this project is to understand how teachers throughout the state of Utah are using benchmark modules to inform classroom instruction. The research team has identified six schools in five districts that display varying patterns of benchmark use. The patterns were created by looking at assessment level data of benchmark use to track when and how often teachers administer benchmark modules. The assessment data is being used by the research team (researchers from the Center for Assessment and CU Boulder) to look at patterns across the state. USBE is not tracking individual teacher, school, or district information about benchmark module use as part of this project.

The research team requests to interview three teachers and one school leader from Fox Hills Elementary School. Fox Hills Elementary was chosen because our data indicates that about half of the grade 3-5 teachers in the school use benchmark modules. We want to learn from users and non-users of benchmark modules about their reasons for use/ non-use. All interviews will be scheduled outside of class instruction time. Teachers will work with the research team to identify a time they are available for an interview. Teacher interviews will take between 75-90 minutes, and school leader interviews should take between 45-60 minutes. Interviews may be conducted in person or on zoom, depending on the availability of the teacher. Interview participants, schools, and districts will be given a pseudonym in all published research and reports.

Analysis will include qualitative coding of all interview transcripts for themes and examples of types of benchmark module use and benchmark score interpretation.

Describe your research method(s)

Once we have secured approval from the principal of our selected school site, Fox Hills Elementary, we intend to directly email five teachers asking them to participate in a one time 75 - 90 minute interview. We will ask the five teachers to complete a screening survey that inquires about their current benchmark module use. Based on the responses to the survey, we will ask three teachers to participate who describe different amounts of benchmark use. The three teachers will be asked to complete an informed consent document, and then schedule a time for an interview. The teacher interview will consist of two parts. The first part will ask teachers about the role that benchmark modules play in their instruction, and the second part will ask them to engage in a think aloud as they interpret a benchmark module report.

One school leader will be asked to participate in an interview to understand the role that benchmark modules play in the school as a whole.

Summarize your expectations and the results. Provide a

Our goal is to identify a variety of benchmark module uses within different school and organizational contexts. We expect that some teachers engage in creative and effective models of benchmark use, and we hope to highlight the strategies that they use for other teachers to model.

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brief description of your findings and compare those to what you were anticipating.	Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	The report produced from this research will help provide information to USBE about the role benchmark modules play in classroom instruction. It may be used to inform training material or use guidelines in the future to support benchmark use to improve student learning. Granite district teachers and students can use the report as a guideline for understanding how and when to effectively use RISE benchmark modules.
How will parental permission be obtained?	Not applicable
Schools requested	Fox Hills Elementary School
Selected Instrumentation	 Teacher-Interview-Protocol.docx Administrator-Interview-Protocol.docx Study-Consent-Form Teacher.docx

<u>Developing foundational phonics skills and fluent readers</u>

Investigator: Laura Heffernan Granite administrator or teacher: Yes

IRB: Southern Utah University Proposal ID: 2023-018-Heffernan

Status: Approved

Anticipated Start Date: 01/10/2024

Anticipated Completion Date: 04/24/2024

Research Classification: Curricula [Reading, writing and the arts: Phonics instruction]

Describe the purpose	The purpose of this proposed study is to examine the impact of a systematic phonics program on student reading fluency
of your research.	during small group intervention lessons. Many reports and studies have supported systematic phonics-based instruction as
What concern,	an effective instructional method for teaching children how to read (Ehri et al., 2001; Moats, 2007; Paige et al., 2019). This
problem, or curiosity	study will examine if using an explicit, systematic phonics program (UFLI Foundations) as Tier 2 intervention will improve
did your research	student reading fluency at the end of the eight-week study. Researchers have found connections between foundational
investigate?	literacy skills and student success with reading in later years (Caravolas et al., 2019). Small groups are already an established
	routine in my classroom, rather than using a mixture of resources and materials, I will follow the lessons in UFLI Foundations
	for 15 minutes per day, four days per week with one of my small groups. Ultimately, this study will be guided by the following
	research question: What will be the effect of implementing UFLI Foundations as a small group intervention program to
	improve student reading fluency?
Describe your	I will conduct the research in my first-grade classroom with a small group of approximately 5 students. Students will be
research method(s).	selected based on their MOY Acadience reading scores. Specifically, if they are approaching grade-level with their oral
Provide a brief	reading fluency skills. Both quantitative and qualitative data measures will be utilized in my study. I will collect data about
description of the	participants words correct per minute (WCPM) and accuracy at the beginning, middle, and end of the study. Additionally, I
participants, the	will keep a research journal and administer a short student self-assessment survey at the beginning, middle, and end of the
timeline of what was	study. These data measures are intended to see if an explicit, systematic phonics program has an effect on student reading
done, and the data	fluency.
that was collected.	
	Describe your research method(s)
	I will use the following methods to collect data for this study:
	1) I will keep a research journal where I take anecdotal notes each week regarding how the interventions went, common
	errors, and student successes. I will use pseudonyms to refer to all students in my research journal. All student identities will
	be kept confidential. I will then use thematic analysis to identify common themes from the observational data collected in my
	research journal.
	2) I will administer a student self-assessment survey at the beginning, middle, and end of the survey to gather student
	outlooks on their reading abilities. It is a short three question survey that asks students about their ability to read unknown
	1 1 1

	words, read sentences smoothly, and how confident they are in their reading. I will use a Likert scale analysis chart to analyze the data collected from the survey. All student identities will be kept confidential, and pseudonyms will be used. 3) For the final data collection tool, I will use an oral reading fluency measure (DIBELS 8) to collect fluency data. I will use progress monitoring passages from DIBELS 8. The assessment consists of an unfamiliar grade-level text, students will be timed for one minute while they orally read the passage. I will track errors and self-corrections while the student reads. At the conclusion of one minute, I will count the total number of words that the student read, along with their number of errors. Then I will gather their words correct per minute (WCPM) and their accuracy data. Baseline data will be gathered about students' current fluency levels at the beginning of the study. The oral reading fluency passages will be administered again in the middle and end of the study. All student data will be attached to a pseudonym only, student identities will be kept confidential. There are no incentives to participate, and no compensation will be provided. Permission from parents/guardians will be
	obtained before beginning the study. The study requires approximately 15 minutes per day, 4 times per week over an 8-week time period. Students will participate in small group instruction with me during center rotations, this is already an established routine in our classroom.
Summarize your expectations and the results. Provide a brief description of your findings and compare those to what you were anticipating.	I anticipate that there may be an increase in student WCPM and accuracy at the end of the study. Results: [insert here]
Benefit to Granite School District. Describe how your research will benefit Granite School District.	This study is intended to provide insight on the importance of developing strong foundational literacy skills to support reading fluency through explicit and systematic methods of instruction. I believe that students will see an increase in their reading fluency scores and will hopefully feel more confident in their reading abilities.
How will parental permission be obtained?	Informed consent forms
Schools requested	Woodstock Elementary School
Selected Instrumentation	Student-Survey-Thesis-Research-1.pdf LJH-Consent-Form.docx.pdf Heffernan-IRB-Approval-Letter.docx.pdf