E-Poster Abstracts

CHEMISTRY

PROGRESS TOWARD SUBSTRATES FOR (5+2) CYCLOADDITION VIA REACTIONS OF MALTOL AND TECHNIQUES INVOLVED

Presenter(s): Christenson, Gavin, Undergraduate, Chemistry
Mentor: Dr. Andy Mitchell

(5+2) Cycloadditions are useful reactions and substrates to explore them include maltol protection, bromination, and amination. The protection of maltol is achieved through reaction with imidazole and tert-butyldiphenylsilyl chloride (TBDPS-Cl) in DCM. TBDPS is used as the protecting agent and imidazole is a base to remove the hydrogen from the alcohol on maltol. To monitor the reaction, thin layer chromatography (TLC) is used to compare the reaction products with the starting material. Flash column chromatography is used after extraction to purify the product which is analyzed by 1H-NMR spectroscopy. If the reaction is carried out properly, the product can be obtained in high yield and purity and will be used in the subsequent bromination and amination reactions.

CREATIVE TECHNOLOGIES

THE DEVELOPMENT OF A YOUNG ADULTS CANCER PATIENT PEER MATCH APPLICATION

Presenter(s): Kalantari, Mojde, Graduate, Creative Technologies
Mentor: Dr. Kristin Carlson
Co-Mentor: Prof. Simone Downie

This research explores the challenges and needs of young adult cancer patients, along with potential online resources to aid them, that includes social media, public and private organizations, and mobile applications. The focus of this research narrows down to communication and social networking mobile applications, particularly those with peer matching features. The research aims to underscore the need for a dedicated mobile application that connects young adult cancer patients with the same diagnosis. In response to this need, a mobile app named "YA Peer Match" was developed. The app facilitates connections among young adult cancer patients, allowing them to share the hidden aspects of their cancer treatments and build stronger support networks.

ECONOMICS

MORAL DILEMMAS IN GREY'S ANATOMY: ANALYZING THE STRATEGIC CHOICES OF DOCTORS ADAMS AND GRIFFITH IN SEASON 19 FINALE

Presenter(s): Marsalla, Jack, Undergraduate, Economics
Mentor: Dr. Susan Chen
Authorship: Jack Marsalla

This paper examines the strategic moves of two main characters, the doctors who are Adams and Griffith, in the dramatic Season 19 finale of a well-liked medical drama Grey's Anatomy. A game theoretical model is presented as Adams and Griffith make the difficult decision, to revive a DNR patient or not. Individuals are tested to the limits of their personal values and professional ethos as they become trapped in a maze of moral difficulties.

EDMONTON OILERS POWERPLAY

Presenter(s): Slavin, Julian, Undergraduate, Economics
Mentor: Dr. Susan Chen

This paper examines a critical move in a Hockey Powerplay between the Oilers and the Blackhawks in a regular season hockey game. Each team's strategies are presented in a zero-sum game. The best-response method will be used to identify the Nash equilibrium outcome. The implications of this model can be applied to various other sports.

ENGLISH

THE MADWOMAN IN 21st CENTURY WRITING: A COMPARISON OF ALEXIS WRIGHT'S *THE SWAN BOOK* AND YAA GYASI'S *HOMEGOING*

Presenter(s): O'Leary, Heather, Graduate, English Studies

Mentor: Dr. Ela Przybyło

A great deal of scholarship has analyzed the "madwoman in the attic" of Charlotte Bronte's Jane Eyre and Jean Rhys's postcolonial response, Wide Sargasso Sea. In the twenty-first century, the conversation concerning women, madness, and the colonial subject has expanded: Alexis Wright takes on settler colonialism in Australia in The Swan Book, while Yaa Gyasi addresses the slave trade in Homegoing.

Where Bertha has been seen as Jane's maddened double, and Antoinette as the sacrificed colonized other, Wright's protagonist Oblivia and Gyasi's Akua battle with trauma passed on through generations of colonization. Both Oblivia and Akua have been raised by white outsiders, experience the world in a different way from those around them, and are ostracized by their communities. Both see visions, which, based on narrative construction, seem to be a true part of each character's reality. Both characters, like Bertha/Antoinette, face periods of containment and find themselves surrounded by fire.

This paper asks, "what does it mean to be mad in a mad world?" Building on existing scholarship of Jane Eyre and Wide Sargasso Sea, and using the lenses of postcolonialism and feminist disability studies, I investigate the different facets of Oblivia and Akua's madness: as a reaction to colonial oppression, as a consequence of not fitting societal norms, but also as an embodied mental illness.

Gyasi offers her readers reconciliation, as Akua eventually comes to accept her visions, is accepted in turn by her granddaughter, and lives happily by the sea. Wright, however, leaves Oblivia's ending uncertain, unresolved, the reader unsure whether she is alive or a ghost. Where Gyasi works to heal colonial trauma, Wright provides a cautionary tale of what may come for all of us.

GEOGRAPHY, GEOLOGY, AND THE ENVIRONMENT

AMERICAN PHILANTHROPIC FOUNDATIONS AND WATER POLICY: GEOGRAPHIES AND PROBLEM FRAMING

Presenter(s): Corray, Shannon, Undergraduate, Geography, Geology, and the Environment
Mentor: Prof. Melissa Heil
Authorship: Shannon Corray, Melissa Heil

This research project investigated how American philanthropic foundations are intervening on the issue of household water insecurity in the United States, which is consistently a nationally growing concern. To chronicle their influence, we developed a dataset of foundation grants related to household water insecurity, collecting information on the philanthropic foundation, grantee organization, grant amount, grantee location, and grant description. Using this dataset, we totaled the number of grants and their monetary value, as well as the amount of money being directed to particular cities, states, and regions. We performed content analysis on the grant descriptions, coding each of these descriptions using NVivo. We used NVivo's analysis functions to identify which problem framings and change-making strategies are most prominent, which received the most funding, and any related variation geographically across the United States. With these results, we have been able to draw conclusions to questions surrounding how philanthropies have played a role in household water insecurity across the United States.

INFORMATION TECHNOLOGY

CHATBOT IMPLEMENTATION PROPOSAL FOR IT 168 CENTER

Presenter(s): Chimakurthy, Sanjay, Graduate, Information Systems
Ahmed, Md. Sabbir, Graduate, Information Systems
Nemmani, Akhilesh, Graduate, Information Systems
Mentor: Dr. Elahe, Javadi

This project aims to create a prototype chatbot for the IT learning center focusing on questions and answers related to IT 168, Java Programming Course. The integration of a generative AI chatbot at ISU's IT 168 website aims to enhance the overall student experience by providing instant tutoring support. This will improve the efficiency of the IT learning center by answering commonly asked questions and providing help to a larger body of students seeking help with their programming practices.

Codifying knowledge into a chatbot will also allow the IT learning center to record and grow knowledge base, tips, and innovative solutions provided by the tutors over years. This provides a mechanism to curate the IT Learning Center's organizational knowledge over the years which makes training of new tutors easier and management of the center more efficient.

We plan to implement a chatbot using at least two underlying large language models and to compare performance and accuracy on a pre-defined set of conversational prompts that resemble those questions asked of human tutors in the learning center.

The chatbot's functionality will encompass various aspects to enhance the learning experience. It will explain topics related to Java and direct to the resources like textbook pages, and related videos on the IT 168 website. The system will recommend relevant learning materials, study guides, and supplementary resources too. Moreover, the chatbot will play a crucial role in disseminating timely notifications about exam reviews, departmental events, and other learning events organized by the IT Learning Center.

At the symposium, we will showcase chatbot through live demos. The poster will detail our research results on state-of-the-art, open-source large language models and their potential use cases in academia, perspectives gained from users' testing our chatbot, and future directions of the work.

TEACHING AND LEARNING

STUDENT EXPERIENCES AND PERCEPTIONS WITH NO GRADES ON HOMEWORK

Presenter(s): Abney, Amy, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

This school year, the district I teach in implemented a new expectation for academic practice. The expectation from the grade school handbook states, "The purpose of homework is to practice newly taught skills, review previously mastered skills, develop independent study habits, or extend/enrich the curriculum. Practice will not be used as a behavior management tool or as a form of punishment. Due to students' varying working rates and abilities, the time spent in completing a practice assignment may vary among pupils completing the same assignment. Practice may include unfinished work from daily exercises, or extra practice, rereading a selection, etc. Teachers will communicate practice assignments with students and parents." Homework can provide valuable insights into student learning, but its accuracy as an assessment tool depends on various factors. While homework allows students to practice and apply what they have learned in class, it may not always be a comprehensive measure of their understanding and accurate assessment of their learning. This study will explore student perceptions and experiences in not taking homework grades. Data will be gathered from a student survey and interview of sixth, seventh, and eighth grade students. The school is in a rural village outside of a larger area. Tentative findings are showing varied responses with some students embracing the concept of homework without grades and others are feeling uncertain about the change. Positive student perceptions include increased motivation, less stress and a deeper understanding of material. Negative student perceptions include the lack of responsibility and accountability, along with a decrease in study habits. Homework can provide valuable insights into student learning, but its accuracy as an assessment tool depends on various factors. While homework allows students to practice and apply what they have learned in class, it may not always be a comprehensive measure of their understanding and accurate assessment of their learning.

HIGH SCHOOL HOME VISITS

Presenter(s): Baez, Kaitlyn, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

This research delves into the potential benefits of informal home visits as a strategy to enhance student and family engagement in a diverse, urban high school. Unlike structured programs like The Parent Teacher Home Visit Organization (PTHV), this study investigates whether voluntary, unpaid home visits by teachers can yield comparable results at the high school level. The research addresses challenges associated with implementing formalized programs, such as training, scheduling, and compensation. Adopting a mixed-methods case study design, the study involves 9th-grade students and their families from a highly diverse, central-Illinois high school. Selective sampling identifies participants with low initial feelings of engagement, allowing for a focused exploration of the intervention's effects. The study encompasses pre- and post-surveys, a home visit protocol, and an observation protocol to gather data on participants' experiences, perceptions, and behaviors. By exploring the impact of informal home visits on family-teacher relationships, the study provides insights for administrators and policymakers. It contributes to understanding the feasibility and potential benefits of incorporating home visits as part of teachers' roles in secondary education, offering an alternative to more structured and resource-intensive programs. The findings may guide decision-makers in shaping professional development goals for teachers and reconsidering the costs and benefits of formalized home visit programs. In a broader context, this study addresses the gap in research on effective strategies for engaging families at the high school level, aiming to pave the way for more nuanced approaches that can make a real difference for students.

PERCEPTIONS OF HIGH SCHOOL STUDENT SELF-EFFICACY AND SELF-REGULATED LEARNING

Presenter(s): Biehl, Thomas, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

In recent years, teachers at the high school level have bemoaned a lack of student self- efficacy, a reluctance to fully engage with the material due to a perceived lack of their own ability. This study looks to explore the differences in student and teacher perceptions of student self-efficacy and self-regulatory skills, how those perceptions influence teacher practices and student performance, and the possible relationship between both views. Students and teachers from a majority white small rural high school in central Illinois were invited to participate in a survey, and a small number of each participated in interviews. The results were used to analyze overall student and teacher perceptions with possible relations. So far, students have demonstrated mostly positive views concerning their belief in their own achievement and goal setting when confronted with a difficult task; while teachers, for the most part, rated their views of students lower in those same abilities. Ironically, both have indicated students felt they had achieved academically; students reported valuing knowledge over grades, teachers disagreed. These tentative finds indicate a disconnect between the two groups regarding student self- efficacy and self-regulated learning, implying that the level of support they require when confronted with a challenging task versus how much the student struggles and problem solves is perceived differently.

ANALYZING THE IMPACT OF THE AVAILABILITY OF ASSESSMENT RETAKES ON STUDENT ATTITUDES AND EXPERIENCES OF TESTING

Presenter(s): Corn, Bryan, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith
Authorship: Bryan Corn, Anna Smith

Assessment of student learning has long been a focus of teacher education and educational research. The recent increase in the adoption of standards-based grading has continued this trend and has led many school districts to examine their assessing and grade-reporting practices. Providing the opportunity to retake or redo summative assessments is one way that some teachers and school districts attempt to allow motivate their students to strive for mastery and achieve a grade that more accurately communicates their level of mastery. This study aims to gather the insights of students regarding their experiences and attitudes towards testing in high school mathematics classes and how the availability of test retakes in these classes impacts their levels of anxiety and preparation. Students enrolled in two central Illinois high schools were surveyed and a smaller sample of students were interviewed.

Surveys were quantitatively analyzed and the interviews were coded and analyzed in a qualitative manner to provide nuance to the survey findings. Students report that the availability of a retake option allows them to feel less anxiety about testing, while also reporting that their level of preparation for tests is not impacted by the availability of a retake. Based on these tentative findings, it is recommended that high school mathematics teachers strongly consider establishing a policy that provides their students the opportunity to retake summative assessments, and do so without the fear that their students will forgo preparing for the test as a result of a retake option being available to them.

INCREASING READING ENGAGEMENT IN FOURTH GRADE STUDENTS

Presenter(s): Derber, Kathleen, Graduate, Teaching and Learning

Mentor: Dr. Erin Quast

Studies show that "adolescents in the United States are among the least engaged readers in the world" (Lee et al., 2021). This study looks to increase students' reading engagement. The research will be conducted in a fourth grade classroom in rural central Illinois. There are 16 students in the classroom. All students who choose to participate will complete reflection journals that will be used to collect data. Additionally, focus groups will be formed based on teacher observations to gather further insight into students' feelings and engagement with various reading tasks and activities.

Students have shown an increased interest to read and discuss choice texts. Based on these tentative findings it is possible that students become intrinsically motivated and engaged with reading with appropriate lessons and activities. In turn encouraging intrinsic motivation and enjoyment of reading will translate to their academics.

HOW FAMILIES AND TEACHERS' COOPERATION CAN HELP IN PRE-SCREENING, INTERVENTIONS, AND CLASSROOM INSTRUCTIONS IN ASSISTING THOSE CHILDREN AT RISK OF DYSLEXIA

Presenter(s): Ettey, Monica Esinam, Graduate, Teaching and Learning

Mentor: Dr. Anna Smith

As a first-grade teacher, most of my emphasis on my curriculum was my students reading. There were instances where some students struggled with reading for their grade level. It was noticed some did not have knowledge of their previous skill of phonics at all which distorted their reading ability for grade one. My study aims to help children who might be at risk of dyslexia and how families and teachers' cooperation can help in pre-screening, interventions, and classroom instructions in assisting those children at risk. My participants would be some targeted grade one students, parents, and teachers of those students. Data will be collected through surveys and interviews of parents and teachers of those targeted students. It is going to be expedited research. A pretesting of the questionnaire in the survey and interview will be taken to ensure that the instruments can generate accurate data that will help the phenomenon under study. Descriptive statistics will be used to interpret the data obtained to meet the research. The interviews and survey will help find out parents' and teachers' perceptions in their own words and how they feel. Teachers and parents expressed the need to support students at risk of dyslexia. There should be cooperation from both sides for positive changes to occur. Based on tentative findings, By fostering a collaborative environment among families, educators, and schools, a unified front is established, allowing for a more comprehensive understanding of dyslexia's nuances and enabling proactive measures to address potential academic hurdles before they solidify The synergy between teachers' expertise in recognizing early signs, parents' vigilant observations, and schools' responsive interventions forms a vital ecosystem wherein the needs of each child are met proactively.

TEACHER BURNOUT AND JOB SATISFACTION

Presenter(s): Gallagher, Kristen, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

A major issue that exists within our education system today is teacher burnout. The present study aims to provide scholarly insight into the main causes of teacher burnout and explore potential solutions to decrease teacher burnout and improve job satisfaction. K-12 teachers across the United States were surveyed and the responses were analyzed. Teachers reported that the main causes of burnout include constant disrespect, low pay, unmanageable workload, lack of support from administration and parents, and insufficient school resources. When asked what schools could do to better support teachers and decrease burnout, some of the main suggestions reported by teachers include lightened workload, increased pay, increased classroom preparation time, increased support from administration, accountability for student behavior, and reduced class sizes. Based on these tentative findings, we recommend that school districts allocate funds to increase teacher pay, reduce teacher workloads by eliminating unnecessary obligations outside of the classroom, provide more time for lesson preparation during the school day, improve support from administration, and find a way to clearly demonstrate appreciation and respect for teachers.

LOOKING AT EDUCATION THROUGH A DIFFERENT LENS: WITNESSING AND ACTIVELY PARTICIPATING IN AN ALTERNATIVE STYLE OF EDUCATION AT THE REGIONAL ALTERNATIVE SCHOOL BLOOMINGTON

Presenter(s): Gasinski, Zoey, Undergraduate, History
Schafer, Megan, Undergraduate, English
Hopkins, Kayman, Undergraduate, Mathematics
Mentor: Prof. Jay Percell

As future educators, we are constantly evolving the way we approach teaching in the classroom, whether that be through creative lesson plans, new strategies shared by peers, or by implementing pedagogical staples taught to us by our mentors. But what about our approach to the education system as a whole? If providing a variety of means of delivering content and demonstrating skills helps teachers connect with a wider range of students, how does altering the foundational style of a classroom and school community impact students and teachers alike?

Through periods of observation in tandem with practical teaching experiences, students participating in the TCH 212 clinical sessions at the Bloomington Campus of the Regional Alternative School (RAS) are given the opportunity to witness the benefits of alternative education firsthand. This presentation is based around the insights of several past clinical students regarding their time at RAS and how their perspectives of the field of education have changed as a result.

WHERE HAVE ALL THE TEACHERS GONE: A STUDY OF TEACHER ATTRITION AND CONSIDERATIONS

Presenter(s): Hammond, Tera, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

When teaching students, one of the keys to success is consistency and fluidity. Students require the support and guidance of well-educated, trained teachers to know the students, their needs, and the content well. While students are likely to cross paths with a new educator or two throughout their schooling, it is easy to see how detrimental it could be for students if they are consistently being guided by new or "unseasoned" teachers. A nationwide survey of former and current teachers could help stakeholders in identifying and/or understanding reasons why teachers may seek early retirement or resignation from work in the classroom. Some data suggests that compensation, levels of support, and challenging student behaviors may be indicators of the increase in teacher attrition. Based on these findings, along with others, I suggest that stakeholders work together to solve the problem of teacher attrition of seasoned teachers due to early retirement or resignation.

SMALL GROUP TEXT SELECTION

Presenter(s): Haynes, Emily, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

As a first grade teacher, many of my students are just learning to decode words at the beginning of the year.

I often feel pressured to use decodable books during small group reading instruction to achieve this goal. While I believe decodable books are beneficial in targeting phonics skills and possibly in building students' reading confidence, they often lack depth, which leaves little room for comprehension instruction. There are many other text options available for use during small group instruction, such as
leveled readers, printable books included with our reading curriculum, or trade books. I am often conflicted while trying to choose books for my first graders that enable them to both learn decoding skills and comprehension skills. The purpose of this study is to determine how I can select texts for small group reading instruction that target both decoding and comprehension development.

My class of 14 first grade students were invited to participate in this study, but only 10 provided their assent to participate. Throughout the study, I will utilize three different types of texts during small group reading instruction over the span of six weeks. I will use each text type two times. After reading each text type, my students will complete a self-assessment indicating whether they enjoyed the text, felt confident reading the words accurately, and felt confident understanding the story. I will have participants complete a graphic organizer for each text to show me how well they understood it. I will also take notes as I listen to students read to record their reading accuracy and their ability to comprehend the text.

I am two full weeks into my study and so far, my students' responses on the self-assessment have been all over the board. Some students seem to prefer and feel more confident with the decodable texts while others have preferred and read more accurately when using the leveled texts (which contain fewer phonetically decodable words and fewer phonics skills we've learned in class). It seems as though my students have been able to understand all text types equally well so far. As far as accuracy, I haven't noticed much of a difference between the different text types, although it seemed as if my less fluent readers were able to read more complex words than I was expecting when they read the leveled readers compared to when they read the decodable texts.

WRITING WORKSHOP & MOTIVATION: THE KEYS TO UNLOCKING WRITING IDENTITIES IN YOUNG LEARNERS

Presenter(s): Hietpas, Dana, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith
Authorship: Dana Hietpas

The purpose of this qualitative study explores the effects of the writer's workshop model on students' writing motivation and the formation of students' writing identities. Students are becoming less interested in writing and therefore forming writing identities and instilling motivation for writing in our youngest grade levels of learners is so important. This study will be conducted at an elementary school in a suburb of a large metropolitan area. All students participating in this study are in the second-grade class of Mrs. Dana Hietpas. Within this study, methods that will be used to obtain data will include student self- assessments, student self-reflections, and conferencing with students about their written pieces throughout the writing process. Student self- reflections were analyzed on the topic of writing motivation and identified that students view writing higher when they are provided the opportunity of choice in their writing. The writer's workshop model has displayed that students are developing strong interests in the subject of writing and are learning largely about themselves as writers and their overall writing identities. Students identified that the workshop model allows them to understand the types of writing and topics that interest them and they enjoy engaging in. Based on these tentative findings, we can conclude that through using the writer's workshop model, students are constantly revising their writing identities as they are learning new skills, strategies, and styles of writing that they are adding to their "writing toolbox" to make themselves the strongest writers they can be. Additional research will continue to provide scholarly insight into how the writing workshop model affects student motivation and student's overall development and formation of writing identities.

HOW STUDENTS WITH AUTISM SPECTRUM DISORDER RESPOND TO THE SYSTEMATIC USE OF WH- GRAPHIC ORGANIZERS TO SUPPORT THEIR READING COMPREHENSION

Presenter(s): Holzwarth, Elissa, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

A large percentage of students with autism struggle with their reading comprehension. Research has been conducted on using a variety of graphic organizers (wh- graphic organizers, story maps, compare/contrast Venn diagrams) to support students with autism's reading comprehension. A functional relationship has been found between graphic organizers and reading comprehension for students with autism. The research found has limitations, such as small participant sizes, large age ranges, and limited student diversity. Research designs, tools, and data collection methods varied across studies. To support the analysis of the effectiveness of specific graphic organizer tools across participants, researchers, and environments, this study looked at the effects of a wh-question graphic organizer on middle school students with autism spectrum disorder (ASD) literal text comprehension. Weekly probe data was taken and analyzed on the percentage of words/phrases participants independently and correctly sorted on their graphic organizer and the percentage of literal text questions independently and correctly answered. Data was also collected on whether students were observed using their graphic organizer tool or given passages to support answering text questions. Students were observed to use their graphic organizer to support them in answering literal text questions. A functional relationship was found between the use of a wh-graphic organizer and reading comprehension for students with ASD. Based on these findings, I would recommend teaching and providing students with autism with a wh- graphic organizer to support their reading comprehension. Additional research is recommended to continue to assess the tool's effectiveness across additional participants, researchers, and environments.

BENEFITS AND LIMITATIONS OF SCRIPTED INSTRUCTION ON STUDENT LEARNING AND TEACHER AUTONOMY

Presenter(s): Jaime, Sarah, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

The proposed study focuses on the benefits and limitations of scripted instruction and the impact that scripted instruction has on teacher autonomy. Scripted instruction does not always allow for accommodations and scaffolding. Often, there is not much deviation from the script that is allowed to be done, which makes it difficult for educators to adapt to fit student needs. To better understand the impact of scripted instruction, this study looks at the teachers' understanding and perceptions of scripted curricula at the pre-kindergarten, kindergarten, and first grade levels. Teachers at a pre-kindergarten through first grade school were surveyed, and a sample of teachers and members of administration were interviewed. Surveys and interviews will show how this form of instruction benefits different learners and whether it is beneficial to use in the younger grades. Based on these tentative findings, recommendations will be made to implement either scripted or non-scripted instruction.

IMPACT OF ORACY ON ENGLISH DEVELOPMENT

Presenter(s): Johnston Carrasco, Ashley, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith
Authorship: Ashley Johnston Carrasco, Anna Smith

Students, especially multilingual students developing English, do not have adequate opportunities to practice their speaking and listening skills within the classroom, on a regular basis. This concept of oracy, or speaking and listening, allows students to improve their language skills in a more authentic manner, within the classroom, communicating with their peers. Students who are new to the United States, newcomers, are in classes in which English is the main or only language. Understanding this, students must be able to quickly navigate their academic and social lives. This study investigates the impact of oracy (oral language communication) of multilingual students in their English language acquisition. Participants are sixth through eighth grade multilingual students who are identified as newcomers (have resided one year or less in the United States). They are selected for this study since they are all acquiring English and share a Newcomer class together. This qualitative study includes pre and post interviews with my participants of their personal perceptions of oracy for learning English, as well as documents and artifacts from oracy activities. Tentative findings of this study include students' positive feedback and reflection regarding their oral growth in English. Based on these tentative findings, it is recommended to incorporate oracy activities in English into the classroom in order to benefit the English oral language development of multilingual newcomer students.

PHONICS INSTRUCTION IN THE UPPER ELEMENTARY GRADES

Presenter(s): Knauf, Tara, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Due to the COVID-19 pandemic and procedures put in place on educational settings during that time, many students did not receive the reading instruction that they typically would in the early elementary grades to set them up for reading success in the later grade levels.

Because of the lack of explicit and systematic instruction in the early elementary grades, many third and fourth graders have difficulty decoding and encoding unfamiliar words. This research study explores how to support upper elementary students who lack foundational phonics skills. This study will give teachers ideas on how to best meet the needs of students who were not given the explicit and systematic instruction in foundational reading skills due to the COVID-19 pandemic. The participants in this study include third and fourth grade students, parents, and teachers at a rural elementary school in Illinois. Third and fourth grade students are taught daily phonics lessons and complete weekly assessments to progress monitor their understanding. Students participate in one-on-one reading conferences with the grade level teacher to discuss reading motivation and ability and will complete a pre- and post- assessment on phonics understanding and application. Parents of these students will complete a survey detailing their child's at home reading habits and motivation. This data will be analyzed to determine if the daily phonics lessons were successful in improving the students' ability to decode and encode unfamiliar words and to determine if students' reading motivation increases as a result of phonics instruction. The pre-test results overwhelmingly displayed a need for phonics instruction in these grade levels. After receiving the phonics instruction, the students improved their reading abilities to decode and encode, increasing reading motivation. Based on these tentative findings, it is recommended to implement daily phonics instruction to students who are lacking foundational reading skills and additional research should be conducted to determine how students learn these foundational skills best in the upper elementary grades.

IMPACT OF QUICK MINDFUL PRACTICES ON CLASSROOM BEHAVIOR

Presenter(s): Liebentritt, Jennifer, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Many teachers have noticed a dramatic increase in student disruptions and unexpected behaviors over the last few years. As educators are struggling to figure out a solution, schools continue to take away our time to teach students about their social-emotional health. To better understand the benefits of a brief mindfulness session, this study is going to focus on the impact it has on a kindergarten classroom, and the perceived benefits students and parents see. Student behaviors will be observed for 20-minute sessions following each mindful breathing session, complete a self-reflection once a week, and conference about the intervention at the end. Parents will also be surveyed at the beginning and end of the intervention period. While educators and schools continue to struggle with disruptive behaviors in classrooms, I believe that this study will provide valuable insight to administration and educators. Findings from this study will help educators justify time taken out of their days for mindfulness. Students will also greatly benefit from learning how to be mindful and how to use those skills in their daily lives.

TECHNOLOGY IN ELEMENTARY CLASSROOMS

Presenter(s): Marx, Lexie, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

Technology has become more prevalent in classrooms across America. While technology has provided great resources for education, is there a point where it has become too much of a part of elementary classrooms? Within my third-grade classroom, students are provided with their own Chromebook device and there is a set of 12 iPads that are available to use daily. Along with these devices, we have many online programs and resources that we can use and are expected to use to help with students' academics. These online programs are a great addition into the classroom and are helping students with their learning, but what is the right amount of technology to be used within the elementary classroom? For this study, we will be looking at the perceptions third grade students and teachers at an elementary school have on having technology within the classroom. Teachers and students from a rural school within Illinois will be surveyed and asked to reflect on having technology in the classroom, while also interviewing some teachers. Students are showing that they enjoy having technology in the classroom, while teachers prefer to have a more balanced day. Based on these tentative findings, it is recommended that teacher's approach having a balanced day with technology in the classroom. Technology should not have the focus of the elementary classroom; it should be used more as a tool.

EFFECTS OF TEACHER MESSAGING ON STUDENT MOTIVATION AND PERCEPTIONS OF SELF

Presenter(s): Miller, Julie, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

Numerous studies have described the importance of student-teacher relationships. However, few discussions exist about factors involved in the formations of these relationships. This study steps back to investigate the effects of teacher communication on student motivation and self-perceptions. Specifically, the study seeks to find whether a teacher with a "warm/caring" demeanor causes students to be more motivated and feel like a better student, and whether a teacher with a "mean/harsh" demeanor could cause decreased motivation and disillusionment among students. This study includes approximately 65 eighth-grade students from a single school in semi-rural Grundy County.

These are current students of the presenter, and they provide a unique opportunity for research, as the community is quite stable and many of these students have experienced the same teachers and school culture throughout their time in elementary school. Students were given an initial survey at the beginning of February to ask them about the two categories of teachers, their feelings about themselves and their work, and their observations of classmates' behavior in each class. Early analysis indicates expected results: that students report improved self-esteem and engagement with their classwork, and report better student behavior in classes with "warm/caring" teachers. The opposite appears true as well, though with more nuance, such as students who report they take their work seriously regardless of the teacher. The initial student surveys were largely superficial, and a second survey will be given in late February to seek out more specific anecdotes or explanations of their experiences. Both sets of responses will be qualitatively analyzed to look for connections and trends between the student motivations and self-perceptions in these two differing classroom environments. The conclusions can help guide understanding into the developmental foundations of teacher relationships, and will potentially provide practical guidelines for teachers regarding the impact of their interactions on these relationships.

INTEGRATING GLOBAL CITIZENSHIP EDUCATION (GCED) INTO YOUR LANGUAGE LESSONS

Presenter(s): Narongsaksakul, Watsachol, Graduate, Teaching and Learning
Mentor: Dr. Ellis Hurd
Authorship: Watsachol Narongsaksakul

GCED integration benefits educators of language in their multiliteracies course design. This process involves composing the learning outcomes and identifying redundancies and alignment issues in a particular area to plan effective instruction that achieves UNESCO's GCED learning objectives, along with incorporating the methods to build secondary students' identities and respond to diversity in local and global contexts. Learning English as a new language requires a cognitive load suitable for English Language Learners' (ELL) working memory. Simultaneously acquiring new concepts and languages is a challenge in most ELL classes. This presentation includes nine teacher guidelines for preparing learning objectives.

EXAMINING 19TH CENTURY MODERNIZATION IN THE UNITED STATES THROUGH SERIOUS GAMES: A CASE STUDY

Presenter(s): Parnell, Traevon, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

My master thesis is collecting data on the effectiveness of Serious Games being used as educational tools during instructional time. The study will collect quantitative data based on a comparative study method using two sample populations to compare academic progress from a unit plan pre-assessment and post-assessment. The study collect qualitative and quantitative data on the experience of students learning curricula through games, including attitude scales, surveys, and exit interviews. The educator will also detail observations and experiences through daily recordings and exit interviews. This study will be conducted over a 5-day period and is designed to give further insight on the utility of serious games as educational tools and what educators can expect utilizing Serious games in the classroom. This study will be using students attending a large, diverse high school in an urban setting in the Midwest region of the United States. The researcher will categorize participants into two distinct groups: a group of students who are non-participants and will receive their instructional with traditional instructional materials such as readings, videos, and lectures, and the participants using the gamified educational tools who will need access to technology that allows for the use of serious games as their primary instructional tool. Tentative data indicates that gaming materials provide a high degree of engagement for most participants, and correlates with increased contextualization of 19th century modernization in the United States, as well as native American resistance to United States industrialization and colonization of North American land.

THE IMPACT OF TEACHER FEEDBACK ON FOURTH AND FIFTH GRADE BOYS' WRITING MOTIVATION

Presenter(s): Phelan, Katie, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Writing proficiency across the United States is becoming a growing issue. According to a 2011 study by the National Assessment of Educational Progress, 80% of eight graders in the United States are not writing at a proficient level, and only 3% are writing at an advanced level. Even more concerning, female students are outperforming male students by 19 points. Motivation has been found to be a large factor in students' writing success. To better understand how teachers can motivate students to write, and thus boost their writing performance through their feedback, this study uses qualitative methods to look at 4th and 5th grade male students' perceptions of writing and writing feedback. These students, from a socioeconomically diverse middle school, are given surveys, interviews, and are observed reacting to writing feedback. This study also analyzes the perceptions of 4th and 5th grade teachers of their male students' writing motivation through surveys and interviews. It is hypothesized that students will have more motivation to write when the teacher uses a positive feedback approach. Corrective feedback focused on mistakes will promote less motivation among students to write. Based on tentative findings, teachers should be mindful of the type of feedback given to students and how it might impact their motivation to continue writing.

EFFECTS OF USING WORD MAPPING TO TEACH HIGH-FREQUENCY WORDS ON KINDERGARTEN SIGHT WORD ACQUISITION

Presenter(s): Richardson, Heather, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

In kindergarten classrooms throughout the country, beginning readers are tasked with learning to read a list of high-frequency words also referred to as sight words. Most schools use various sight word/high frequency word lists with the intention of having students practice words as whole units by either repeated readings of word lists, recitation of spellings, or reading words on flashcards. The message being communicated to teachers by literacy curriculums and/or schools and then conveyed to students, is that sight words should not or cannot be decoded when learning to read. However, research related to the orthographic mapping process suggests that children learn to read words by sight by forming grapheme-phoneme connections to map the spellings, pronunciations, and meanings of specific words in memory. This study explores the effects of using an instructional method called word mapping to teach regularly and irregularly spelled high-frequency words to a group of kindergartners using a mixed methods research approach. A group of kindergartners at a racially, ethnically, and linguistically diverse private early childhood school in a large suburb was given a pre and post assessment of 15 high-frequency words to determine the number of words students could read in isolation. Observations were conducted of students reading decodable texts and writing sentences containing taught high-frequency words. These observations were then analyzed to gain insight into how word mapping influences the reading and writing of high-frequency words. Student writing samples were also collected and analyzed to expand on the information gathered from the other data sources. Tentative findings revealed when students encountered a newly taught high-frequency word in a text they most often read the word fluently or decoded the word accurately using grapheme-phoneme connections for both regularly and irregularly spelled high-frequency words. Students were also able to use encoding skills to accurately write taught high-frequency words during independent writing time as well as during dictation sentence writing. Based on these tentative findings, we recommend classrooms use instructional techniques which allow students to use phonics and phonemic awareness skills when learning high-frequency words. These instructional techniques should allow students to break words apart into phonemes and connect the phonemes (sounds) to graphemes (letters) using sound boxes or word mapping mats.

THE INFLUENCE OF READING MOTIVATION STRATEGIES ON STUDENTS

Presenter(s): Singer, Addi, Graduate, Teaching and Learning
Volker, Emily, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Due to the national concern with reading scores and opportunity gaps, more attention is being put on reading motivation. While there is currently an abundance of research surrounding reading motivation, we have not observed research based strategies in classrooms. We are concerned that current practices are not reaching students of all groups, and may even be harming some. The purpose of our research is to examine the motivation strategies used in our elementary school settings and their influence on students' motivation in reading.

Both settings are Title I-funded public elementary schools in central Illinois. One is in a rural area, while the other is more suburban and has a high percentage of bilingual students. Teachers from both settings will receive a survey to identify what reading motivation strategies they are currently using in their classrooms.

We will be interviewing a smaller representative sample of teachers to get a contextualized understanding of the strategies they are currently using in their classrooms and how they feel these strategies are working for their students. We will interview a small sample of our teacher participants' students to understand how they feel about themselves as readers and what in their school experiences has made them feel that way. These students will represent various characteristics including grade levels, home language, and those receiving interventions.

Our preliminary findings show that teachers are using research-based strategies such as read alouds and student choice but are also using tangible rewards such as classroom parties, food, and prizes. During our interviews, we hope to dig deeper into the beliefs and thought processes that guide these decisions and their influence on their students. We will use this data to guide future conversations around research-based motivation strategies and their impact on our students' reading identities.

BRIDGING THE GAP BETWEEN GENERAL MUSIC AND BAND

Presenter(s): Teater, Kaitlin, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

This study investigates the challenges faced in bridging the gap between general music education and band programs, focusing on enhancing collaboration and communication among teachers. The problem under investigation is the lack of a common language and effective collaboration strategies between general music and band educators, which one results in fragmented music education experiences for students.
Participants in this study include general music teachers and band directors from various school districts. Data collection methods include surveys and interviews to gather insights into current practices, challenges, and potential solutions. Data analysis involves qualitative methods to identify patterns and themes in teacher responses.

Tentative findings suggest that while there is a recognition of the importance of collaboration between general music and band teachers, practical barriers such as time constraints, differing pedagogical approaches, and departmental discord hinder collaboration. However, preliminary evidence also indicates a willingness among educators to overcome these barriers and develop shared practices that benefit student learning experiences.

In conclusion, this study highlights the need for intentional efforts to foster collaboration and communication between general music and band teachers. Implications include the development of professional development opportunities, shared resources, and ongoing dialogue to promote a cohesive music education curriculum that supports student growth and engagement across both general music and band programs. Addressing these challenges has the potential to enhance the overall quality and coherence of music education in schools.

TEACHING PRACTICES AND THEIR EFFECT ON STUDENT AGENCY

Presenter(s): Terbush, Samantha, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Teaching practices have continued to change dramatically over the past decade, to get farther away from traditional teacher-led instruction. It has been proven through research, that when students feel more in control of their learning and take ownership, they are more likely to succeed in and out of the classroom. This new type of teaching requires teachers to take more of a backseat to instruction and allow more student-led instruction and ownership. To better understand how various teaching practices and methods influence student agency in the classroom, this study looks at middle school classrooms, both students and teachers and how agency operates within this setting.

Teachers and students from a middle-class suburb school will be surveyed about their experiences in the classroom regarding agency. Teachers will be interviewed, and their classrooms observed on various occasions to highlight the methods and practices used, as well as student response to those chosen methods. A smaller subset of students will be more thoroughly interviewed.

These methods will demonstrate which teaching practices encourage and halt students' agency. Practices such as goal setting, effective feedback, and conferencing will most likely result in increased student agency, while rote learning and memorization will most likely hinder agency. Students may find that teachers who allow choice and provide support will give students more freedom to be in control of their own learning and therefore encourage agency.

MORNING MEETINGS: THE BRIDGE BETWEEN ACADEMICS AND SOCIAL SKILLS

Presenter(s): Tool, Megan, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

At the start of each year, students join a new classroom full of new peers, new teachers, and new expectations for the year ahead. With all these new things, students may feel an increase of emotions and pressure to make this the best year yet. Every classroom and student is unique. Most classrooms start their day differently through a variety of activities such as morning work, discussions, calendar, or even jumping right into academic skills through various lessons. Many classrooms are now beginning to implement a responsive classroom strategy known as Morning Meetings to the start of their day. Morning Meetings give students an opportunity to engage and practice both academic and social skills at the start of their day, which will not only help them prepare for their day, but it will also help develop these skills even more. Teachers are expected more than ever to help students grow academically and socially. To better understand how to support students in their academic and social skill development, while also meeting their academic and social skill needs, this study looks at a classroom of kindergarten students and their learning and development of academic and social skills through Morning Meetings. Surveys, observations, interviews, assessment data, and artifact and data collection will be analyzed to support the importance of integrating Morning Meetings into the classroom. Based on these tentative findings, I recommend that teachers complete additional research on how to implement morning meetings into their classroom to support their students' academic and social needs, ultimately setting them, up for future success in and outside of the classroom.

STUDENTS WITH LEARNING DISABILITIES IN CAREER AND TECHNICAL EDUCATION COURSES

Presenter(s): Tuning, Jackie, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast

As enrollment of students with specific learning disabilities continues to grow within general elective courses, this research is intended to address how the placement of such students into Career and Technical Education (CTE) classes affects their academic and experiential success. Students with an (Individualized Educational Plan) IEP have a right to be placed within the least restrictive environment, meaning that IEP students should be included in general education courses as much as possible, when appropriate. Elective courses, like CTE classes, are a common placement for students with disabilities and/or IEP's. There are many benefits and challenges to inclusion in general education courses like Career and Technical Education. CTE teachers, case managers, and selected student participants will engage in semi-structured interviews in order to gain understanding of the students' IEP and accommodations being utilized in the classroom. Classroom observations of student participants with reflective and descriptive notes will be utilized as well. Results of this research study should assist administrators and case managers with decisions regarding placement of students with specific learning disabilities into elective courses that are appropriate for their level of maturity, reading comprehension, and other basic soft skills. Collected information will support CTE teachers to continue to properly support and include students with a wide range of abilities.

UNDERSTANDING THE INFLUENCE OF A UNIVERSITY-BASED READING AND LITERACY CENTER TUTORING PROGRAM ON STUDENTS' LITERACY BEHAVIORS, BELIEFS, AND OUTCOMES: STAKEHOLDER PERSPECTIVES

Presenter(s): Turk, Wanda, Graduate, Teaching and Learning
Mentor: Dr. Deborah MacPhee
Authorship: Wanda Turk

The purpose of this convergent mixed methods study is to understand stakeholder perspectives of changes in students' literacy behaviors, beliefs, and outcomes following participation in a literacy tutoring program. Building on a pilot study, quantitative and qualitative data will be collected, analyzed, and integrated to understand multi-stakeholder perceptions – students, tutors, and parents/caregivers – of changes in students' literacy behaviors, beliefs, and outcomes. The summer semester pilot study provided valuable information for fall and spring studies to be conducted during the school year. Papers published from the study will add to the limited body of literature related to university-based reading and literacy centers, particularly addressing a gap in the literature with students as the focal individuals.

PRE-SERVICE EDUCATOR AWARENESS, ATTITUDES, AND PERCEPTIONS OF ISSUES LEADING TO EDUCATOR BURNOUT

Presenter(s): Twaddle, Casandra, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith
Authorship: Casandra Twaddle, Anna Smith

This study is designed to address the issue of burnout and attrition in the field of education that is prevalent within our nation by looking at the perceptions that pre-service educators hold before they enter the field. A Qualtrics survey will be sent out to undergraduate education majors at Illinois State University consisting of both open-ended prompts as well as more concrete items such as a likert scale and rating system. The survey asks candidates questions about their expectations in their future roles as educators and what goals they may have as their career progresses. The likert scale asks candidates to rate their confidence both their feelings about their preparation program and also their understanding of key education concepts such as student motivation. The final rating item asks candidates to rate ten priority items regarding the career of an educator from most to least important. Both prescriptive and descriptive analytic methods will be applied to the resulting data with a goal of continuing a dialogue on how best to avert teacher attrition rates and raise retention and interest in the profession. Other studies have shown that negative perceptions of the field can be correlated to an earlier instance of burnout and/or leaving the profession.

THE INFLUENCE OF AN EXPLICIT MULTISYLLABIC ROUTINE ON MIDDLE SCHOOL READERS' FLUENCY AND COMPREHENSION

Presenter(s): Wainwright, Cindy, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

Many students fail to meet the basic levels of reading performance in upper elementary grade with word reading. Word reading instruction is hardly give to students in these grades. When students move from grade to grade, they encounter more complex words. Teachers are faced with the issue of finding ways to help their readers in the classroom. More practice and strategy work needs to be done to help students in decoding multisyllabic words. This study explores the explicit instruction of a multisyllabic routine with fluency and comprehension in struggling middle school readers. Sixth grade intervention students at a linguistically, ethnically, and diverse public middle school were given an explicit multisyllabic routine for the study. Conferences and observations were done, and students did not see themselves as fluent readers. A pre/post text was given of each syllable type and weekly progress monitoring was done in fluency and comprehension. Tentative findings showed that students improved their overall skills in decoding longer words and also improved in fluency and comprehension.

STUDENT EMOTIONAL REGULATION AND PERSEVERANCE THROUGH MINDFULNESS STRATEGIES

Presenter(s): Weghorst, Mariah, Graduate, Teaching and Learning

Mentor: Dr. Erin Quast

Students, now more than ever, are struggling with managing their emotions when it comes to challenging work. When met with material students do not know, they tend to either shut down, or become overwhelmed with emotions they cannot regulate. To better understand how students persevere through challenges, this study looks at the behavior and attitude of fourth graders as they are given the opportunity to learn and practice mindfulness strategies in the classroom. Students at a school with a high percentage of low-income families were given self-reflections before and after being taught mindfulness strategies to help self- regulate emotions and persevere through challenges. These reflections, along with student interviews and teacher observations, were analyzed using mixed methods to gain insight into student emotional behavior and their ability to self-regulate. Students showed the ability to implement these strategies daily with teacher support. Specifically, breathing exercises were chosen by many students. Following the strategy, students could return to work and continue persevering. Based on these tentative findings, I recommend that teachers be given training on how to instruct and implement self-regulation and mindfulness strategies with students. In addition, students should be given the physical and digital tools to successfully implement these strategies to learn how to better manage emotions and work through challenging tasks.

FINDING STUDENTS' READING IDENTITY THROUGH CONNECTED TEXTS TO EXPAND THEIR FLUENCY

Presenter(s): Weiler, Kara, Graduate, Teaching and Learning
Mentor: Dr. Anna Smith

The research plans to investigate the broad topic by using student interest surveys to collect what genres and topics students are showing of interest. One other concern within the research topic is connecting fluency to student interest while in small groups. There are concerns with participants showing opposing interests where the research has too many small groups. Another idea could be to group participants in general related categories.

The research study will work with about ten to fifteen third grade students. The study will take place in my K-4 school, Charter Oak Primary School. Charter Oak is a mid-size urban school in Peoria Public Schools district.

The research study plans to use mixed methods. At the beginning of the research study, participants will be given an interest inventory survey. This will show a general idea of where students' interest is when it comes to choosing literature. From the initial survey, I will begin observing what students' interests are. Alongside observations, student participants will be asked interview-type questions to gain more information. Next, the research will work to find connected texts of the students' interests. In this process of reading one of the goals is to show students increase their fluency and automaticity. When fluent reading is encouraged, it promotes comprehension. Research focuses on the alignment between theory and assessment. The research will highlight how fluency is a part of a student's reading identity and investigate diverse ways it can be taught and assessed. Additionally, a qualitative approach through observations and note taking. Notes that will be included will be, what books participants are selecting, do the selections change interest over time, and insight into why the selection was made. Additionally, the research will be collecting information on students too, such as name, age, gender, siblings, home environment.

The findings that are proceeding well is students love to share their thoughts, feelings, ideas, and are overall curious. It is easy to get off topic. I am excited to share trends about the genres the participants are selecting. I have started to regroup students based on the feedback shared on what they would enjoy.

In conclusion, research behind building a student's reading identity is mostly about who the student is and their interest. Knowing students' interest, it will be shared how connected texts support the learner. When connected text is used in intentional instruction it impacts the students' fluency and automaticity.

CELL PHONE REMOVAL IN THE CLASSROOM

Presenter(s): Welsh, Peter, Graduate, Teaching and Learning
Mentor: Dr. Erin Quast
Authorship: Peter Welsh

Cell phones are becoming a greater distraction in our lives. As cell phone become even more entrenched within society, would removing cell phones from students produce a more productive and happier student? This study aims to look at high school students and their response to being away from their cell phones. One group of students are freshman level and the other are junior level. A mixed methods approach will be used for the research. The approach will utilize observations, surveys, and assessment analysis. The observations are currently showing that students are less motivated but spend more time on task and more are completing more of their work. Assessment show currently grades have improved over the early parts of the research. An early conclusion is that students are becoming more productive and overall happier without the ability to access their cell phones during class. Based on early research it is recommended that students do not have access to their cell phones during their time in the classroom.