TEACHER RESEARCH SYMPOSIUM

Presentations by Candidates for the
M.Ed. Degree
And
M.S. in Elementary Education Degree

College of Education
University of Mary Washington
April 26, 2014
North Building, Stafford Campus

From the Dean of the College of Education...

A signature feature of the University of Mary Washington educator preparation programs is the critical action research project that our initial licensure candidates and advanced endorsement students complete. Through the research projects being presented this morning, our graduates demonstrate how being an effective education professional is informed by practitioner executed action research. Through this program requirement our graduates are encouraged to bring a critical eye to their practice and to contribute to the knowledge-base of our profession right from the beginning of and throughout their careers. Welcome to our graduates' presentations of their research, and congratulations to all of them.

Mary Gendernalik-Cooper, Ph.D.
Dean & Professor
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Advising Faculty

- Dr. Laurie Abeel, Department of Foundation, Leadership, and Special Populations – *Diverse Student Populations*
- Dr. John Broome, Department of Curriculum and Instruction – *Social Studies*
- Dr. Courtney Clayton, Department of Curriculum and Instruction – *English Language Learner* and *Literacy*
- Dr. Janine Davis, Department of Curriculum and Instruction – *English*
- Dr. Michelle Duffy, Department of Curriculum and Instruction - *Literacy*
- Dr. Beverly Epps, Department of Foundation, Leadership, and Special Populations – *Science*
- Dr. Roberta Gentry, Department of Foundation, Leadership, and Special Populations – *Special Education*
- Dr. Venitta McCall, Department of Foundation, Leadership, and Special Populations – *Mathematics, Social Studies*
- Dr. George Meadows, Department of Curriculum and Instruction – *Instructional Technology*
- Dr. Lillian Pailen, Department of Curriculum and Instruction - *Arts*
- Dr. Tamie Pratt-Fartro, Department of Curriculum and Instruction - *Literacy Specialist*
- Dr. Patricia Reynolds, Department of Foundation, Leadership, and Special Populations – *World Languages, TESL*
- Dr. Joanna Robertson, Department of Curriculum and Instruction - *Literacy*
- Dr. Marie Sheckels, Department of Curriculum and Instruction – *Mathematics*

Session 1. 9:00 a.m. – 10:00 a.m.

ROOM 108

Science and Literacy Integration in a Third Grade Inclusion Classroom*. Brittany Dray.* Throughout the past several years, science as subject area has grown exponentially in importance. Largely due to STEM initiatives, science is now seen as important for the success of students both inside the classroom and in the global economy (DeJarnette, 2012; Davis & Hardin, 2013; Roberts, 2013). However, science is not receiving much time in the elementary school classroom. Due to the lack of instructional time, American students are falling behind in the growth of individuals entering STEM related fields that many foreign countries are experiencing (DeJarnette, 2012; Davis & Hardin, 2013; Roberts, 2013). Many different methods are being explored to find the most effective way to find time for science. One of the most effective ways that has been found is cross-curricular instruction (Olson, 2008). This qualitative action research study used interviews, surveys, and pre and post assessments to explore how integrating science with literacy can improve science instruction.

The Effect of an Integrated Mathematics and Science Curriculum on Student Achievement and Perceptions. *Anna Holman.* In today's modern world, both the national and international economies are increasingly oriented towards science and mathematics, mounting pressure on our school systems to emphasize these subject areas. However, due to strict subject segregation and stringent schedules, students often see these disciplines as separate, unrelated entities instead of linked, reciprocal disciplines. By using an integrated curriculum that emphasizes hands-on, inquiry based science and mathematics instruction, students will be able to learn crucial information while fostering important connections between the subject areas. Additionally, students will also be able to apply and connect this knowledge practically to improve performance in both academic disciplines. While STEM subjects in schools, high-stakes testing, and inquiry-based instruction have all been studied extensively, the achievement of students completing an integrated, constructivist based curriculum is a novel approach. This study explored such methods by using an integrated mathematics and science curriculum in a second grade classroom to measure student achievement and perceptions.

Perceptions of Engineering and Engineering Identity Development in Elementary School Children. *Kaylee McClung.* With the growing need for individuals pursuing engineering careers, it is necessary to determine what factors may influence the decision to pursue those career choices. In an attempt to understand these factors, perceptions of engineering and Engineering Identity Development were examined in elementary school students who had prior experience with engineering tasks. Fifth grade students (13 female, 7 male, age range: 10-12 years) were asked to complete a survey and drawing task. Five students were also randomly selected to participate in one-on-one interviews. Results from the student survey, drawing exercise and interviews suggest that students associate creativity and design with the

engineering process. Student responses also showed that students recognize the use of mathematics and science knowledge in engineering. These findings also suggest that students who engage in engineering tasks develop a better understanding of the engineering process.

The Effect of Hands-on Technology Based Activities on Students' Engagement and Achievement in Science. *Kristina Pistochini.* This qualitative study explores the question of whether or not hands-on and inquiry based activities facilitate a better level of engagement and achievement for students. I began my study by observing my mentor teacher's science instruction as well as the students' behaviors while she taught. Using an Engagement Checklist (used by the International Center for Leadership in Education) I recorded the class' level of engagement. Following my mentor teacher's lessons, I implemented my science lesson that utilized littleBits and Cubelets technology. Through the use of responsive interviewing techniques, I conducted interviews with students and my mentor teacher to gain insight into their personal thoughts about the lesson (Rubin & Rubin 2012). These interviews were audio-recorded for transcription and coding of themes. Questionnaires were also given to participants after the lesson, so that each participating student had the opportunity to share their thoughts and opinions about the lesson implemented, and the technology that was used (Chapman, 2003). Finally, students' achievement was assessed through a final unit test. I analyzed the results of the specific questions on the assessment that pertained to the topic of electrical circuits; the lesson I used for my research. Although engagement levels were significant, achievement levels were not as high as I had hoped. However, there are several factors that may have contributed to this.

ROOM 109

Engagement in the High School Classroom: Giving Autonomy and Setting Goals. *Nicole Cerniglia.* This research project explores the different influences on students' engagement in the classroom. The researcher investigated what drives students' engagement, what causes disengagement, and the different needs students want to fulfill in the classroom environment. The researcher assessed student engagement levels based on the four aspects of engagement that were cited in the literature, psychological, cognitive, academic, and behavioral engagement, through a Likert scale and interviews, one primary interview and one post interview. Students collaborated with the researcher to create reachable learning goals and activities that were incorporated during a unit on A Raisin in the Sun. Findings showed that creating activities based on a student's likes and dislikes did not affect their classroom participation. Future research should primarily concentrate on the psychological makeup of different students and the impact of individual personalities have on first year teachers.

Does Teamwork Make the Dream Work: The Effects of Collaborative Learning on Intrinsic Motivation. *Michaela Godfrey.* Student motivation is a critical element of the learning process. This study sought to examine how student intrinsic motivation is influenced by working collaboratively toward a common goal. In collaborative learning settings, it is often an individual's sense of intrinsic motivation that spurs him or her on to add to the effort or interaction (Xie & Ke, 2011, p. 916). By finding the motivation to participate in classroom activities and engage in their learning, students may have an opportunity to deepen their

understanding and enrich their academic experiences. One instructional unit was taught to a group of sixth grade standard English students. The first week was taught through the direct instruction model, while students were placed in heterogeneous groups for collaborative learning during the second two weeks. Surveys, interviews, and field notes were used to provide insight to student feelings of intrinsic motivation as the unit progressed. It was posited that through a collaborative exchange of ideas and information, students may also see a change in their individual senses of intrinsic motivation. Findings, however, seem to indicate that working in a collaborative setting does not greatly influence student views of individual intrinsic motivation for better or worse. Based on findings on student attitudes and outlooks from interviews and surveys, implications include that teachers consider implementing more collaborative learning opportunities in the classroom. While findings may indicate that intrinsic motivation did not sustain much change, they also indicated that students enjoyed the opportunity and found it beneficial for reasons beyond personal motivation.

**Adolescent Interactions with Dystopian Literature in the Classroom*. Gabrielle Kuhn.* **The purpose of this study is to determine how and when adolescent students are making connections to dystopian texts in the high school English classroom when unprompted by the teacher. Students may make connections during activities like Socratic Seminars, which are student-guided discussions of texts. Examples of connections that students could make to a dystopian text involve personal experiences or identity, as they apply the themes in texts to their daily lives. Research suggests that identity is constantly evolving, and students' identities and the texts they read can be mutually shaped during the reading process. This study addresses whether adolescent students are using those texts to make connections to their lives. Initial findings show that students are capable of making connections between texts and their own experiences unprompted, and are even comfortable sharing personal stories as examples to make texts more accessible. Though teachers may need to model examples for students first, students are willing and eager to provide their own connections.

Student Perceptions in the Secondary Classroom of Text to Speak Technologies and Writing Workshops. *Kathryn Tarr.* More than ever before, students in the English classroom are expected to be able to write often and write well. Of the various methods for teaching writing, a best practice remains for students to write consistently (Fargo, Jones, & Reutzel, 2010). In order to improve student writing, students in this study participated in various writing workshops with peer editing to improve mechanical errors, overall ideas, word choice, and other common errors found within student writing. Students can develop strong feelings for writing and the writing process from their experiences. This study found that while students did not necessarily like writing, nor feel confident about their writing, they found writing workshops and the process of revision to be helpful.

ROOM 110

The Impact of Drama on the Reading Comprehension of Kindergarten Students. *Samantha Morris.* Comprehension is a key component of reading with which many students struggle. Past research shows that incorporating drama into the classroom can engage students in literacy and help students to construct meaning (Cornett, 2006). Drama helps students

better understand characters in a story (Adomat, 2012) and can also help the students to remember information (Rieg & Paquett, 2009). Research has also shown that the use of miniperformances with at-risk kindergartners result in similar findings. This qualitative action research study aimed to discover whether miniperformances have the same kind of impact on reading comprehension for kindergartners who are typically developing as they do on those who are at risk. Data suggested that the introduction of miniperformances increased student comprehension, improved student behavior and confidence, and increased student imagination and use of detail in drawings. These findings have implications for teachers and future researchers which are also discussed.

Buddy Reading: Reading Strategies and Socio-Linguistic Processes in First Grade.
Hannah Moser. This qualitative action research study explored buddy reading in a first grade classroom. The purpose of this study was to examine the reading strategies that students used during buddy reading as well as the socio-linguistic processes that occurred while students read with a partner. The students that participated in this study were between ages five and seven and were all lower-level readers. The students participated in partner reading as part of a program known as the Daily 5, which was implemented as part of their language arts instruction. Qualitative data was collected through observations and reflective field notes, audio and video recordings, and student and teacher interviews. To analyze the data, recordings were transcribed and then all of the data were coded to note the themes and patterns that emerged. Through this analysis, four main themes emerged, including the use of phonics knowledge to decode, discussion as a comprehension tool, discovery through pictures, and the formation of leader/follower roles. Implications and suggestions for further research are also discussed.

The Impact of Direct Instruction on Third-Grade Students' use of Metacognitive Strategies: Do Differences Exist between Students Identified and not Identified as Gifted.
Katherine Partenheimer. The purpose of this qualitative action research study was to gain an understanding of how gifted students and how students that had not been identified as gifted in a third grade classroom used metacognitive strategies when they were reading fiction texts. My first study goal was to see if patterns emerged between these two groups of students. My other research goal was to see how direct instruction in metacognitive strategies impacted these students' use of the strategies. Students were given a pre-assessment to determine their use of metacognitive strategies prior to instruction. Qualitative data was collected throughout instruction, and then students were given a post-assessment to assess their use of metacognitive strategies at the conclusion of the study. The findings showed that students that had been identified as gifted showed little difference in their use of metacognitive than those students who had not been identified. Other themes that emerged included students' preference for text-to-self connections and their dislike for recording strategy usage in writing. These findings have implications for classroom teachers and future researchers which are also discussed.

Do lessons in critical literacy impact fourth-grade students' reflective writing?
Kelsey Woehnker. This study explored how instruction in critical literacy impacted fourth grade students' reflective writing. For each week of the eight week study, students were read a fictional piece of children's literature that dealt with social issues. During these read-alouds, the researcher used a think-aloud procedure to expose the students to examples of critical thinking

in response to a text. Through the think-aloud procedure, the researcher demonstrated various critical thinking strategies, such as questioning the authors' purposes, challenging characters' motives, and analyzing the meaning behind the written words. Through various activities that promoted rich discussion, students were actively involved in making use of critical literacy skills. The students were also encouraged to reflect in writing on their thoughts and perspectives regarding these lessons and discussions by responding to writing prompts for each story. Data was collected through various means, including portfolios consisting of the students' writing in order to track any changes and improvement over time and researcher observation notes were kept. One-on-one student-teacher conferences were also conducted, so students could receive feedback on their writing. This also allowed the researcher to modify lesson plans in order to better meet the interests and needs of the students, in the effort to allow them to make deeper connections and reflections. The conferences were audio recorded, transcribed, and then coded. The students' writing assignments were also coded for analysis. The findings indicated that, as a result of critical literacy lessons and reflective writing prompts, students adopted a critical lens and began to write creatively in a way that incorporated this critical stance. These findings have implications for teachers as well as future researchers, which are also included.

Room 114

Effects of discipline literacy on students' self-efficacy in the secondary social studies classroom. *Josh Furnary.* Content literacy in educational research can be condensed into one capstone principle; that reading to learn should be a part of every activity designed to help students learn how to read (Duke, N.K., Pearson, P.D., Strachan, S.L. & Billman, A.K. (2011). The central concept I explore is what the effect of content literacy geared instruction is on student efficacy comprehending primary sources in the secondary social science classroom. Students are frequently required to read and analyze primary source documents in a secondary social studies classroom, which demands unique and challenging literacy skills used particularly by historians. The purpose of this mixed methods study is to examine whether or not the teaching of these content specific literacy skills will influence student efficacy concerning the comprehension of primary sources.

Comparing the effectiveness of note taking strategies. *Matthew Eby.* Note taking is a skill that personalizes and internalizes information, and is essential across content areas. However, notes serve only an external memory function if students are not encouraged to connect new information to previously held knowledge. Because lectures are standard practice in social studies instruction, teachers place a higher importance on good notes, in which students record main ideas and are able to make connections to further his or her knowledge, than other content areas. Developed in the 1950s, the Cornell note taking method is a strategy for students to take good notes and encourages deeper understanding. The Cornell notes method has been linked to increases in both long- and short-term memory recall, but, responding to growing numbers of language deficient students, teachers in many general education classrooms have moved away from student generated notes (Belson, Hartmann, & Sherman, 2013; Larwin & Larwin, 2013). Many secondary teachers utilize "guided notes," or partially completed note handouts, to accommodate students with limited language skills, but while this form of note

taking improves note accuracy, some researchers argue this process limits the students' ability to connect new material to previously held knowledge. This action research study compared the impact of the Cornell note taking strategy to guided notes on summative quiz scores in an 11th grade VA/US general education classroom, and found student scored higher on tests when required to use the guided notes method. However, a secondary finding was that the proper note taking method strongly depends on the goal of instruction.

Guided Visualization: A Mindfulness-based Teaching Technique. *Erin Hill.* In this study, the researcher will be using a technique based in mindfulness meditation practices called guided visualization to determine its impact on students' learning gains in ninth grade World Geography, as well as their perceptions of the practice. Guided visualizations are essentially mental field trips led by the instructor to the geographical regions being studied. Not only does it allow students to build their mental maps and descriptions of the region, guided visualizations will give students an opportunity to contemplate and reflect on the material that they are learning. This study is inspired by recent research in psychology and medicine that suggests that mindfulness practices increase focus, awareness, and memory (Lykins, Baer, & Gottlob, 2012; Grossman, Niemann, Schmidt, & Walach, 2004; Jha, Krompinger, & Baime 2007; Zylowska, Ackerman, Yang, et al., 2008). This study adds to the emerging research on mindfulness practices in education, specifically illustrating the positive impact of guided visualization on students' perception of their learning and retention of the content in World Geography.

Student Perceptions of Mobile Devices and Twitter in the Classroom. *Brooke Parker.* Mobile technology and Web 2.0 services have become ubiquitous in teens' lives. Students are constantly engaged in these services, and, according to research on this new type of student known as the "digital native," this engagement has led to a change in their learning style. Digital natives retain information better in a cut and paste mode—that is jumping from this link to that picture to the button on the bottom of the page. Educators must adapt to the changing learning needs of their students by integrating more technology into their instruction, specifically, technology that allows students to collaborate and communicate with one another. Limited research exists that examines how these tools can be used in a high school classroom to enhance student learning, engagement, and interest in content. This study explored students' perceptions about the potential instructional benefits of mobile technology and Web 2.0 services in the classroom through surveys of high school seniors in a Virginia and U.S. Government class. The results show that, while these students had mixed feelings about the instructional value of mobile devices and social media, many students reported feeling more engaged and interested in class than they had been before the implementation of mobile devices and social media as instructional tools.

Room 115

Scratch Programming and Word-Problem Solving. *Jane Claire.* Problem solving is a crucial life skill that needs to be nurtured and practiced in an academic and social environment. My research project aimed to weave technology and problem solving skills for fifth grade students using Scratch Programming. Scratch Programming is a computer-programming tool for

children. This tool was implemented in a fifth grade classroom to encourage students to develop critical problem solving skills that would aid them when solving word problems.   A class of 20 fifth-graders had three weeks to become acquainted with Scratch Programming and all it had to offer. Once the students were familiar with the programming, they were given a final project. They were asked to create a program that presented and solved a multi-step word problem on Scratch. These fifth graders enjoyed working with Scratch and showed a new level of interest in problem solving. Many students who had low problem solving skills now had impetus in solving problems on Scratch. While working on their final projects, most students engaged in a trial and error method of problem solving and were able to create their desired products. Improving students' word-problem solving skills involves more than just implementing a computer programming activity for students. Scratch Programming does not have a direct effect on improving students' grades in solving word problems; however, Scratch has given the students an improved attitude towards solving problems.

Turning Fear into Fun: Can tablets usage in classroom learning centers reduce Mathematics Anxiety? *Brittany Byrd*. Studies show that math anxiety can be detrimental to mathematics scores, which are of growing concern in the United States. There is a great amount of research supporting that technology use is an essential part of high quality mathematics instruction, but is not always being used to its fullest potential. My research examines the use of tablet computers during mathematics centers, and its effect on third grade students' mathematics anxiety. Results indicated a fifty-nine percent reduction in mathematics anxiety from pre to post-test; and average mathematics anxiety post score of twenty-one on the SEMA, with the lowest possible score being a twenty. Qualitative data showed an overall better feeling toward students' ability in mathematics and a general enjoyment toward the tablets and games on them.

Virtual Zoo Webcams for Enrichment in Science Education. *Valerie Drogo.* Students need real life experience to fully grasp a concept. Unfortunately though many teachers do not take field trips anymore. The many reasons that teachers do not take their students on field trips include a schedule which is already too full, too many students in the class, lack of time for planning, problems with liability, lack of transportation, lack of funding, lack of resource people for assistance, failure of school to assume trip risks, too much red tape, and the inability of some tour guides to teach and engage youngsters (Krepel & DuVall, 1981; Disinger, 1984; Stainfield, 2000). Virtual Field Trips (VFT) are not faced with most of these problems. VFTs need to be taken more often so that students can experience the real life tie in with a lesson without having to step outside of the classroom. In this study I integrated a VFT using a live zoo webcam in a classroom and the students responded very well. The webcams had the students interacting and understanding exactly what each animal's habitat looked like and how those animals behaved in that setting. If we include more realistic instruction for the students they will have a much better chance of remember the concepts and details.

How does blogging impact students' motivation to write in a Virginia third grade classroom? *Kelsie LaSalata*. Studies show that technology has a positive impact on students' writing (Lavin, Korte, & Davis, 2010; Daniels, 2004). Given this, it makes sense to incorporate technology into classrooms. However, such technology can become expensive and not be allotted in the school or county's budget. Blogs allow for teachers to incorporate technology

into their writing instruction without an extra expense. This study looks at how the use of blogs can be used to motive third grade students to write. Results are based on students' pre and post interview questions as well as observations.

Session 2. 10:15 a.m. – 11:15 a.m.

Room 107

Oh Classity Class!?: How Whole Brain Teaching Impacts Engagement. *Allison Reed*. There have been several studies over the last decade that have indicated a lack of engagement in classroom throughout the United States. These low levels of engagement have shown to negatively affect students' behavior and academics (Marks, 2000). Whole Brain Teaching (WBT), a method of management and instruction, includes seven different teaching and learning techniques that activate students' whole brains, which is argued to keep students engaged during instruction (Biffle, 2013). This study examines academic engagement in a sample of 17 students (41% male, 59% female, 47% economically disadvantaged, 12% Hispanic, 76% White, and 12% Black) in a first grade classroom. Findings show that according to the Classroom Assessment Scoring System (CLASS) by Pianta, et al. (2007), the class' average level of engagement during a two-week social studies unit was 5.86, which supports a high level of class engagement.   According to this research, Whole Brain Teaching is a practice that teachers can use to increase engagement in their classrooms, aiding to prevent the negative effects of low engagement.

The Impact of Graphic Organizers on Students Content Knowledge and Understanding of Early Explorers. *Amy Stevens*. Social studies is a subject area that has lost instructional time because of the increased emphasis on reading and math for Standards of Learning testing. However, the discipline is complex and rich in vocabulary and content. Graphic organizers offer visual models that equip students and teachers with the tools, concepts, and language to organize, understand, and apply information. Graphic organizers are useful for reading and comprehending difficult material. They are used to highlight and categorize information, to assist students who need visual models while meeting the needs of many learning the English language. This study looks at the ways in which graphic organizers help third graders master social studies content knowledge and deepen their understanding of Early Explorers.

Integrating Literacy and Social Studies Writing for Understanding. *Megan Gallagher*. Due to the increased instruction time in language arts and mathematics instruction, other subject areas such as social studies has been drastically cut back by 33% since 2006. This article examines social studies teaching by integrating literacy instruction in a third grade classroom examining the question, "How does writing for understanding-based activities impact students' social studies comprehension in a (third grade) classroom?" Using TCI's method, Writing for Understanding, this study integrates the two separate content subjects together to allow for students' extension of the knowledge. While focused on improving writing, students will grasp key concepts of third grade SOL Famous Americans to develop strong understanding of both content areas.

Action! The Impact of Readers Theater on Student Interest in Social Studies.
Amy Gutman. The emphasis on literacy and mathematics in schools today has decreased the amount of time spent teaching social studies and created a need for the integration of social studies and other subjects. In past studies, authors have discussed the integration of literacy and writing with social studies as well as the many benefits of Readers Theater in classrooms. I conducted action research in order to answer the question, how does Readers Theater impact student's interest in social studies in a second grade Virginia social studies classroom? I taught a social studies unit on famous Americans. During this unit students wrote and performed a Readers Theater script about a famous American that their group was assigned. I measured student interest using a pre and post survey and supported my findings with student interviews and observations. Overall, the results of this research showed an average increase of about six percent in student interest throughout the class. The observations and interviews showed that most students in the class were interested in social studies when they were participating in Readers Theater.

Room 108

The impact of Collaborative Reasoning on English Language Learners' Engagement.
Laura Gomez. Critical literacy is defined as the "ability to read texts in an active, reflective manner in order to better understand power, inequality, and injustice in human relationships" (Coffey, 2002, p. 1). One specific way to implement critically literacy in the classroom is through collaborative reasoning (CR). In this, small groups of students read and analyze a text that raises an unresolved issue, then discuss and analyze the issue to search for solutions (Zhang & Dougherty Stahl, 2011). This qualitative action research explored how collaborative reasoning affected the emotional and behavioral engagement of eight third-grade English Language Learners. Results suggest that students were more behaviorally and emotionally engaged during and after CR groups. Both students and the classroom teacher reported higher levels of emotional and behavioral engagement as a result of CR groups. Students were more likely to participate in small-groups over whole-class settings. The increased engagement allowed for conversations about complex and personal topics; including poverty, racism, and personal identity. Creating this space for students to think differently allowed for connections between curriculum and the outside world. This is a key component of critical literacy, as well as student engagement.

The Impact of Implementing Photography on English Language Learners' Oral Language Development and Comprehension. *Alexandra Long.* In a projection made by the Census Bureau in 2012, the Hispanic population would more than double from 2012 to 2060; consequently, nearly one in three U.S. residents would be Hispanic (U.S. Census Bureau, 2012). Teachers' English Language Learner population will grow as the Hispanic population grows. Finding effective strategies to meet the needs of each student becomes more challenging as the classroom diversity increases. "Visual scaffolding is an approach in which the language used in instruction is made more understandable by the display of drawings or photographs that allow students to hear English words and connect them to the visual images being displayed" (Fishkin, 2010, p. 16). For my action research, I asked the question: How does the

implementation of photography affect ELL students' comprehension and oral language development? I worked with three English language learners to improve their oral language development and comprehension of an animal unit. The participants took photographs of objects and places that related to animal coverings, animal babies, and animal habitats. At the completion of the unit, I interviewed each participant individually to assess their oral language development and comprehension. The goal of my study was to improve ELLs' oral language development and comprehension through the implementation of photography.

Multicultural Literature in Read Alouds and the Effect on the Development of Positive Cultural Identity. *Suzanne Rodgers.* The U.S. Census Bureau (2010) reported that approximately one-third of the U.S. population is made up of minorities. For example, 16.3% of the population identified as Hispanic, 12.6% identified as Black or African American, and 4.8% identified as Asian. This increasing amount of diversity is evident in public schools in America today. This study examined the impact of incorporating multicultural literature into read alouds and literature circle activities in a second grade classroom. One English Language Learner student participated in read aloud sessions and follow up activities including surveys, writing assignments, and interviews. Additionally, the student was interviewed before the read aloud sessions began and at the conclusion of the study to analyze the effect of the read alouds on the development of the student's positive cultural identity and self-image. Results indicate that the read alouds, discussion, and literature activities completed in the study had a positive effect on the participant's confidence, self-image, and cultural identity.

The Effect of Morning Meetings on English Language Learners' Perceptions of Classroom Community and on Their Cultural Identity Development. *Sarah Vogt.* With the growing number of English Language Learners in the classroom, it is imperative to have culturally responsive education, defined as, "a pedagogy that empowers students, intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (Ladson-Billings, 1994, pp. 17-18). Research suggests that ELLs who are productive learners in the classroom are highly involved, challenged, understanding of diversity, and capitalize on collaborative learning. One technique to build a strong sense of classroom community is through creating time to bring students together, such as in Morning Meetings. This study investigated how Morning Meetings fostered a sense of community and cultural identity development in ELLs. The objective of this research was to answer the question: How does the implementation of Morning Meetings affect ELLs' perceptions of classroom community and their development of a cultural identity?

Room 109

Universal Design for Learning in Language Arts Instruction. *Casey Dodrill.*
"This educational action research uses mixed methods to study student engagement and perceptions of Universal Design for Learning. In language arts, twenty-two students, five of which receive Special Education services, are instructed using Universal Design in the reading of a realistic fiction novel. Students are provided with a variety of ways to interact with the material in Word Study, Writing, and Guided Reading activities. Throughout the study, students are surveyed and evaluated to determine Universal Design's impact on student engagement and

perceptions of learning. The study found that the use of Universal Design increases student engagement in all areas of language arts, but perceptions of this method vary. By increasing student engagement, Universal Design provides many more opportunities for the students to interact with material, and therefore, be more successful learners.

Using Music to Recall Multiplication Facts. *Amy Catharine Dowd.* This research project explored how children used music to recall multiplication facts in a fifth grade classroom consisting of 20 students comprised of 8 boys and 12 girls. According to the National Council of Teachers of Mathematics (NCTM), the introduction of mathematic strategies for solving multiplication facts begins in third grade. By fifth grade, students are expected to understand and apply their knowledge of multiplication facts to be able to divide whole numbers. I assessed how musical mnemonic devices help students recall multiplication facts from their long-term memory. The two research questions that guided this study are the following: how does using mnemonic devices involving music impact students' knowledge and interest in a fifth grade Virginia mathematics classroom? Will students with disabilities be able to focus and apply mnemonic devices strategies for teaching multiplication during five-minute testing? Results indicate that students had a +8% learning growth and enjoyed using this strategy. They study also demonstrated that the students would like to use musical mnemonic devices in other content areas.

Using Concept Maps to Comprehend Virginia Studies. *Candace Hicks.* This action research study examined how using concept maps affect students' comprehension of Virginia Studies content material found in expository texts, such as textbooks. The participants in this study were 25 fourth grade students at a school in Central Virginia. The study analyzed pre and post test scores of Revolutionary War material and specifically considered the content taught using concept maps. This data will help determine if the concept maps increased students' comprehension of Virginia Studies curriculum. The students' scores on the posttest were significantly higher than those on the pretests, indicating improvement. In addition, student interviews were also conducted. Interviews revealed that concept maps were helpful in organizing information and understanding the material, as well as, improving feelings about the subject. Findings also suggested that the use of concept maps did increase students' comprehension of the material taught and had a positive effect on students' learning. In conclusion, concept maps seem to benefit students and help students comprehend Virginia Studies material found in expository texts, though further studies are needed with other Virginia Studies' topics to further support the positive effect of using concept maps.

Tangible Games as a Means to Increase Number Sense. *Ciara Norquist.* This study explored the use of tangible, number sense based games as a means to increase number sense and overall student achievement in mathematics. The study hoped to predict that if a students' number sense increases, then their overall mathematics scores will increase as well. This study used a sample of eight fifth grade students from a suburban public school in central Virginia who were below grade level in mathematics. The students were given a pretest and post test on number sense and their overall grades in mathematics were recorded before and after the study for analysis. In between the pretest and post test the students learned to play a total of five different tangible mathematics games. They were given ten to fifteen minutes at the

beginning of each math class to learn and play the games, the students spent about four days at each game before moving onto the next game.

Room 110

Movement-Based Instruction: And Its Effects on 4th Graders' Social Studies Comprehension. *Chelsea Givler*. This mixed-methods study explores the impact of kinesthetic instruction on students' comprehension of social studies. In order for students to truly engage in and benefit from instruction in the area of social studies, it is important for them to have the opportunity to glean a personal meaning from the topics and concepts presented, thus establishing a deeper comprehension. This study was conducted in a fourth grade social studies classroom, over a span of approximately six weeks. The study employed a mixture of both qualitative and quantitative methods such as one-on-one interviews with students, written assessments, and Likert scale surveys. During the study, two independent social studies classes were taught, each class consisting of 24 students. For the purpose of this study, one class served as the control group receiving traditional, lecture-style instruction, while the other served as the treatment group, receiving kinesthetic, or movement-based instruction. The class serving as the treatment group received kinesthetic instruction in the form of role-play, or acting out the role of a character, tableaux, or creating a still picture using one's body, and simulation, or the re-creation of a situation or event. A cumulative, formal assessment was given to both groups at the close of the study, and results were compared, with the treatment group showing significantly higher scores. The goal of this study was increasing student engagement through movement-based instruction to deepen content knowledge. The study findings indicate that kinesthetic or movement-based instruction benefit students' social studies comprehension.

We Were There: Exploring History Through Drama Strategies. *Bess B. TenEyck.* Arts Integration is a proven method to engage the minds and bodies of young learners in the classroom. Integrating the dramatic arts, in particular, has shown to enhance students' connection to material and enrich their social development. This study focuses on the incorporation of drama techniques (role play, pantomime, improvisation, acting out, etc.) with social studies content in one third grade classroom. The specific content was related to VA Social Studies SOL 3.3 which focused on the exploration of the Americas. This content is centered on the European Explorers Columbus, Ponce de Leon, Cartier, and Newport. Data were collected from pre- and post- tests as well as final group play presentations, and from observation recorded by the researcher. The students were first exposed to basic elements and techniques of creating theatre for the stage. Then, the social studies content was integrated with the theatre techniques. The students created plays in groups which served as assessment of learning gains along with the pre- and post- test. The study examines the benefits of integrating drama strategies with social studies subject content. Findings from the study revealed that the drama strategies used led to increased mastery of social studies subject matter.

Breaking the Box: Teaching Social Studies through Multi-Arts Strategies. *Katrina Hobbs.* Teachers often tell their students to "think outside of the box" when creativity is required. As infants, students learned through their five senses to understand the world around them. According to Renata and Geoffrey Caine (1992), infants can lose the process of investigative

discovery and fall into "discrete partitions" that schools separate information into. They further state the brain learns best through experiences and art is a beneficial way to create this learning environment. Art once again opens the students' minds to the process of investigative discovery and thinking outside the box. This qualitative and quantitative study breaks down the constraints of the box to explore the impact of students learning through music, visual art, drama, and kinesthetic movement. This study explores how teaching social studies through multi-arts strategies impacted students in a second grade classroom academically, emotionally, and socially. Over a three-week period, the students learned about Ancient China through drawing, creating a Lapbook, singing, acting out a dragon dance, building a Great Wall, and using their body movements to demonstrate inventions from Ancient China. The data collected included pre and post-tests to measure academic impact and pre and post-surveys measuring the emotional and social impact. The survey included questions such as; how do you feel exhibiting your work in class, how do you feel when it is time for Social Studies class, and how do you feel when other people have a different idea. Data was analyzed according to individual students, their gender, and levels of academic standing. The average score doubled from pre- to post-survey and pre to post-test with 100% of participants improving in both assessments. These results show gender and level of academia did not impact learning. This study revealed that teaching through multi-arts strategies positively impacted second grade students' comprehension of Ancient China, increased pride in their work, and supported social interaction with peers, all because multi-arts teaching broke the box of tradition.

Th**e Use of TPRS in the Secondary Foreign Language Classroom.** *Mariela DeMaio*.
Over the past century, educational theorists, linguists, and teachers have researched many methods of instruction to improve foreign language teaching. This mixed-methods study aimed to evaluate the effectiveness of a comprehensible input method, Teaching Proficiency through Reading and Storytelling (TPRS), as compared to the traditional grammar-based method on the acquisition of second language (L2) skills among Spanish II students. This research, also, examines students' attitudes towards these two methods. Quantitative and qualitative techniques were used to collect and analyze the data. Data was collected through pre- and post-assessments, Likert scale surveys, and field notes. The results of this study indicate that the students' scores on the post-assessment taught with the TPRS method were superior, in comparison, to the post-assessment's scores taught with the traditional grammar-based method. In addition, the quantitative and qualitative data shows that most of the students felt engaged and excited when they were taught with the TPRS method than when taught with the traditional grammar-based method.

Room 114

The Contribution of Home Factors to Below-Level Reading in First Graders with Firm Concept of Word. *Della Hall.* This study sought to determine specific home factors that contribute to below-level reading in first graders who completed kindergarten with a firm mastery of concept of word. Participants included ten current first graders and nine parents. Data were gathered using student interviews and parent surveys to identify home literacy environment ratings. Results indicated that home literacy environments were low for approximately 73% of participants. Home literacy factors contributing to the results included

parent education level, print materials within the home, student at-home reading habits, and language spoken at home. Discussion of other factors which may contribute to below-level reading, as well as implications for teachers, parents and reading specialists are considered.

A Fifth Grade Boys' Book Club, Male Role Models, and Reading Motivation. *Cynthia Klein*. The purpose of this mixed-methods study was to explore how fifth grade boys' reading motivation changed as a result of a female-led vs. male-led boys only book club. Participants included the female teacher-researcher, two male book club leaders, and ten fifth grade boys. Data sources included motivation surveys, student interviews, and an observation checklist. Findings suggested that boys' motivation increased after the male-led book club, but not the female-led book club. Discussion includes motivation strategies for adolescent boys, and implications for classroom teachers and reading specialists.

Read 180's Effects on Adolescents' Reading Attitudes and Scores. *Barbara Webber.* The purpose of this study was to explore the impact of the scripted reading program Read 180 on the reading proficiency and attitudes toward reading of high schools students. Data sources included student performance on pre and post multiple choice tests, student surveys, and an interview with the classroom teacher. Findings suggest that the program had little to no effect on the reading levels, nor the reading attitudes of students. Discussion of the reliance of scripted reading programs in public schools, as well as implications for reading specialists and future research are provided.

Implementation of Raz-kids Electronic Books in Kindergarten Literacy Instruction. *Jennifer Winfree-Harbour.*   The purpose of this study was to examine the implementation of the online reading program, Raz-kids, in kindergarten literacy instruction. This qualitative study was conducted in a suburban elementary school. Participants included four kindergarten teachers, 79 students, and the school's reading specialist and principal. Data sources included an educator survey, an observation of literacy instruction, and a teacher interview. Results indicate that Raz-kids is currently being integrated in the kindergarten classroom as a literacy center to motivate and engage students , and to reinforce early reading skills through repeated readings of leveled text. Areas for further investigation and implications for stakeholders are discussed.

 Room 115

 Education = Math Classes^2: A fifth grade and kindergarten mathematics partnership. *Claire Gianelle.* This action research project examined the effects of having fifth grade students collaborate with kindergarten students through a program called "Math Buddies". The fifth grade students came down to the kindergarten classroom four times during the spring semester to work with the kindergarten students on math projects. The topics covered graphing, engineering, measurement, and fractions. The students met for about once every two weeks, for 30 minutes each visit. The action research focuses mainly on the affects that "Math Buddies" had on the academic as well as the attitudinal achievement of the kindergarten students.

Implementing Problem-Based Learning in the Secondary Classroom. *Marc Dellacanonica.* This study will address the effects of problem-based learning in the secondary classroom. While low achieving students are receiving direct instruction and utilizing models that are designed to help with classroom management, high achieving students are utilizing models that emphasize higher-level thinking and allow them to take responsibility for their learning (Lubienski, 2000). Problem-Based Learning, or PBL allows groups of students to activate prior knowledge to solve complex problems. The goals of PBL are to make students active learners, increase intrinsic motivation, and see learning as relevant to their lives. While these can be considered the goals of any educational model, it is also important to investigate whether PBL is effective for specific learning objectives. The study attempts to investigate both the local and global effects of PBL on a secondary classroom.

Collaborative Learning in the Math Classroom. *Karissa Herrick.* Middle school is often a time where students start to develop a passion or hatred towards mathematics. In various qualitative studies, research has shown that cooperative learning can help students' motivation, anxiety, and even change their disposition towards a certain subject. In addition to affecting students' attitudes towards learning, cooperative learning has also shown significant improvements in student performance. This quantitative action research study will test the relationship between cooperative learning and student's attitudes towards math, as well as the individual math performance of up to 32 seventh grade math students.

The Effect of Student Perception of Teacher Expectations on Math Anxiety in the Middle School Mathematics Classroom. *Kylie Kerr.* In an increasingly technological society it is becoming crucial for students to have a good foundation of mathematics. One issue students are facing in the classroom is math anxiety, which hinders performance and lessens the likelihood of continuing education in the content. Teachers can play a vital role in student anxiety, and the expectations they set for students carry heavy connotations that students often internalize. This action research study is structured to learn more about the effects teacher expectations have on student math anxiety in the middle school setting. Students will be taught two units, one without teacher feedback, and one with positive effort-based feedback. Surveys will be used to collect data on math anxiety and student perceptions of teacher expectations. In addition, students will answer a short response question to further the understanding and connection between the anxiety and teacher feedback.

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Session 3. 11:30 a.m. – 12:30 p.m.

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Room 108

Using Think Aloud Sessions to Gauge Students' Understanding of Science Visuals. *Lindsey Catlett.* This qualitative research study explored and attempted to understand the ways in which fourth grade students interacted with content-infused science diagrams. This study attended to limitations shown in a research study done by McTigue and Flowers (2011). In my study, a small group of fourth grade students were selected to speak with me individually during "think aloud" sessions (McTigue& Flowers, 2011) in which they interacted with a set of

science visuals These sessions were recorded, transcribed, and coded for analysis. These sessions provided an opportunity to understand how fourth grade students perceived science diagrams—what they noticed or paid attention to, or what they overlooked in regards to the textual or symbolic features of the visual. Findings showed that participants' understanding of and interactions with the diagram were often affected by their exposure to and background knowledge of the content. It is important for teachers to understand how students perceive these science visuals so that we can create instruction that explicitly teaches comprehension of these visuals.

The Impact of Readers Theatre on Second Graders' Fluency Levels with the Implementation of Student Goal Setting. *Marcella Cook.* The National Reading Panel (NRP) Summary Report states, "fluent readers can read text with speed, accuracy, and proper expression" (NICHHD, 2000, p. 3-1). Young and Rasinski (2009) define Readers Theatre, a proven method of fluency instruction, as the practicing of a script repeatedly in order to perform for an audience. Readers Theatre and student goal setting has proven to encourage and motivate students. Through the collection of qualitative and quantitative data, this study examined the incorporation of teacher modeling and student goal setting in Readers Theatre in a second grade classroom. Over a period of four weeks, each second grader participated in four different Readers Theatre performances, after given opportunities to practice scripts. Data from the pre-tests, post-tests, and performances was collected over the duration of the study found this instruction proved to be an effective method of boosting students' fluency. The initial fluency assessment and goal-setting conference encouraged students to set goals to improve words per minute (wpm), accuracy, expression, attention to punctuation, and phrasing. Students were involved in their learning by setting their own educational goals. The final observations showed the majority of students reading at a faster pace with heightened expression and more accurately than before. Students found Readers Theatre to be a fun and motivating way to become better readers.

The impact of digital storytelling on the revision stage of the writing process. *Lauren Garay.* Literacy has developed into a social, interdependent process, especially with the use of technology (Van Leeuwen et al., 2007; Sweeny, 2010). As the digital era unfolds, integrating technology into the writing curriculum has gradually taken on increased importance. As educators, it is important to analyze the effectiveness of technological tools, and evaluate what purpose it may serve during instruction. For this current study, the focus was on enhancing third grade students writing skills, using authentic practices. In traditional writing instruction, students often edit their work; however students do not revise their drafts for clarity, word choice, or organization of content. Qualitative data was collected and analyzed from twenty three third grade students to examine the impact digital storytelling had on the revision stage of the writing process. Results suggest that use of a digital storytelling program, Storybird, indicates an increased amount of revisions made in students' compositions.

A Case for Kinesthetics: The Effect of Movement on the Reading and Spelling of Sight Words in First Grade. *Caroline Issacson.* Although traditional methods for teaching sight words have been found to have some success, the kinesthetic strategy is an emerging method that has not previously been researched in the context of the acquisition of sight words. The purpose of this action research project was to explore the impact of kinesthetic activities on the

reading and spelling of sight words in first grade. First, sight words that each student needed to focus on were identified by asking students to read a list of grade level sight words until they missed 16 or they finished the list. The study was divided into two 2-week sessions. In the first session, students worked on half of the words they missed, but no kinesthetic activities were conducted. In the second session, students practiced the words using five kinesthetic activities such as tracing their words in rice. Data was analyzed both quantitatively and qualitatively. Students spelled all of their words during a pretest and a posttest in each session. The two posttests were analyzed using a paired sample T-test. Qualitative analysis consisted of coding and analyzing video observations of the kinesthetic activities. Themes of increased interest and enjoyment, meaningful interactions with words, and interest in tactile objects were found, as well as a significant increase in spelling accuracy.

Room 109

Readers Theater Effect on Reading Comprehension in the Inclusion Classroom.
Jessica O'Connell. The use of Readers Theater was explored with a third grade inclusive classroom to determine if it is an effective strategy to increase comprehension skills. Readers Theater is a performance based reading strategy in which students are to deliver the reading through their voice and expression (Adomat, 2009; Diller, 2005; Tompkins, 2011). The third grade classroom contained twenty-four students including four students with identified disabilities. Students were administered a pre-assessment test with comprehension questions using the traditional method; a post-assessment test which included questions/activities using Readers Theater; and a survey. The researcher collected quantitative and qualitative data to measure the students' comprehension skills. The researcher discovered that the Readers Theater strategy did benefit the students' comprehension skills, and was a more effective comprehension strategy, compared to the traditional method of reading.

Drawing: The Impact on Reading Comprehension*. **Kathleen Wallace***. This research examined how the reading comprehension strategy of drawing after reading impacts students' comprehension of the passage read. The participants in this study were 20 first grade students at a school in Central Virginia. The study looked at pretest and post test reading comprehension scores of students. For the pretest, students read a passage and answered comprehension questions using the strategy of going back and looking in the text for answers. For the post test, students read the passage, drew a picture, and used the strategy of looking back in the text for answers. A paired samples t-test was completed to analyze the data. Findings include that there was not a significant difference in the scores for the pretest (m = 69.11, s = 23.99) and the post test (m = 77.44, s = 18.10), t(17) = -1.249, p < .05. Students did not do significantly better on the post test than they did on the pre test, meaning, drawing after reading did not increase students' scores on a reading comprehension quiz."

The Pad and the Pen: The Effect of Digital Reading Technologies on Student Reading Comprehension. *Lonnie Southall.* Technological growth has not left the printed world untouched: digital text has found popularity, with more than a fifth of American adults having read an eBook within the last year (Rainie, Zickuhr, Purcell, Madden, & Brenner, 2012, p. 3). The classroom has not been impervious to this new reading technique. Devices that can read eBooks

are entering the homes of students while schools and libraries fill their databases with digital text. This quantitative action research seeks to explore this new method of reading, observing the effect of iPad eBooks on student reading comprehension in two 9th grade English classes.

Characters Becoming Writers: A Case Study of One Middle School Writing Workshop. *Hannah Kassebaum.* Most students see writing as another's creation, but even young students behave as authors within classrooms (Murray, 2005; Ray, 2002). This action research project combined writing workshops (Atwell, 2003; Lacina, 2012) with the six traits of writing (Bellamy, 2000), centering instruction on mini-lessons, conferences, notebooks, and a culminating portfolio, entailing two original writing samples, corresponding final copies, and a reflective analysis. Students' portfolios and the researcher's observational field notes provided evaluative measures. A data evaluation showed a majority of students improved their writing from original to final copies, demonstrating that if teachers scaffold the six traits, student' writing skills improve.

Room 110

The Academic and Behavioral Effects of the Whole Brain Teaching Model on a Kindergarten Mathematics Classroom. *Elizabeth Butler.* There are many new theories, methods, and models that researchers and educators have found and designed to teach the ever-changing students of today. A recent trend emphasizes a way that teaches children to become independent thinkers by using engaging tactics to encourage learning. My research focuses on the Whole Brain Teaching model, a model that is thought to utilize every part of the students growing brain in a way that develops their brain that creates successful and obedient, learners and thinkers (Biffle, 2013). It has been proven that through the use of gestures, such that the Whole Brain Teaching model incorporates, students are more likely to learn, understand, and remember the content being taught (Principal, 2013). I collected and analyzed qualitative and quantitative data, through test scores, interviews, and observations, on how Whole Brain Teaching improves mathematical understanding in regards to shapes and how it improves behaviors in an inclusion kindergarten classroom

A STEAM Approach to the Teaching of Measurement in a First Grade Classroom. *Taylor Chadman.* The STEAM model is an approach to teaching that emphasizes the integration of Science, Technology, Engineering, Arts, and Mathematics into other content areas in the classroom. STEAM is an arts-inclusive derivative of STEM, a better known teaching method that has been shown to help students develop creativity, collaboration skills, problem solving, and critical thinking skills, among other benefits (Roberts, 2013). The question that my research attempted to answer is: What is the effect of a STEAM approach to measurement instruction on first grade students' conceptual and procedural knowledge of length measurement? To address this question, I taught a STEAM integrated measurement unit to a class of first graders, collecting qualitative and quantitative data.

"Well She's Famous, so I'm Basically Famous Too": The Effect of Famous American Storyboards on Student Knowledge and Comprehension*. Janine Henley.* This study examined the effect of storyboard activities on student knowledge and comprehension in a 2nd grade famous American unit. Using a circular process, students were exposed to a narrative of each famous American, brainstormed characteristics with the aid of an anchor chart, created a storyboard on each famous American, and then created a blended storyboard narrative, combining social studies content combined with personal experiences. Data was collected in three ways: through student work, a pre-test and post-test, and interviews. The class averaged a 41.67% increase between their pre-test and post-test showing that the storyboard activities did impact student knowledge. Students were leveled into three groups based on their student work, showing varying levels of comprehension. Students scored higher and were more adept at writing narratives about their own lives than the famous Americans. Overall, the class averaged higher on the blended narratives than on the famous American narratives. Due to the complexity of some of the chosen characteristics, some students struggled relating to the characteristic, showing that many of the 2nd grade participants lacked real world experience.

I Got my Practice my British Accent: How Famous American Role-Playing Impacts Student Engagement. *Jessica Houck.* Since the enactment of the No Child Left Behind Act of 2001, social studies instruction has been pushed to the back burner. When social studies is taught in elementary schools, teachers usually resort to rote memorization of facts or teaching from a textbook. Student engagement in all areas has been decreasing, especially in social studies instruction. Because student engagement in social studies is extremely low, this study aimed to find how active learning impacts student engagement. First grade students role-played a famous Americans during a week-long social studies unit. The researchers observed student behavior, interviewed select students, and had students fill out surveys about their thoughts on engagement. According to researcher observations, the students were actively highly engaged during the role-playing activity. Students also rated themselves as highly engaged, before and after the role-playing activity. Students were highly engaged during the role-playing activity and learned the required material about the Famous American.

Room 114

Supporting Core Educational Standards Through Career and Technical Education. *Teri Mills.* Research has demonstrated that schools put more emphasis on core subjects because they are required to make Adequate Yearly Progress (AYP) under the No Child Left Behind (NCLB) Act. As a result, Career and Technical Education (CTE) courses could be at risk of being eliminated. The objective of this research was to investigate stakeholders' perceptions on whether or not CTE supports core academics. This information will provide insight in to possible ways of strengthening the CTE curriculum and other ways of making CTE more viable in schools. A survey and interviews of teachers was conducted to determine how CTE and core teachers view CTE. This research will be used to develop an in-service workshop for CTE teachers.

Impact of a New Mathematics RTI Program on Elementary School Teachers. *Carolyn Ciminelli.* Research has shown that Response to Intervention (RTI) programs are beneficial to students and their success in school. Most schools utilize RTI programs for Language Arts only, with no alternative program to help improve math skills. Even though students may be struggling in both Language Arts and Math, Language Arts RTI takes precedence over Math. The objective of my research was to investigate teachers are impacted by the implementation of a new Math RTI program in an elementary school, and how teachers are involved in the implementation process. I conducted in-depth teacher interviews to determine teacher's attitude to the implementation of the new program. At the conclusion of my research I determined how the new program impacted teachers in the classroom. This research provided other teachers and school administrators insight to the implementation process of a new RTI program in an elementary school setting.

Student Achievement and Attitudes Connected to Problem Based Learning. *Luke Wolverton.* This research analyzed high school biology student attitudes towards problem based learning (PBL) and student understanding of evolutionary concepts through an action research setting. One biology class participated in a PBL lesson while the other biology class participated in traditional lecture and bookwork setting. Both groups answered pretest and post-test questions as a way to measure student gains in comprehension. Those students engaged in a PBL lesson exhibited a positive attitude, demonstrating a useful classroom strategy for a general population of students. The PBL group was also able to provide superior responses to the prompt: Explain how DNA, proteins and genetics play a role in the evolution of species. This research also highlighted the importance of appropriate scaffoldings during PBL lessons for certain student age groups, concluding that direct instruction during PBL for younger populations of students is highly beneficial.

Room 115

The Impact of Visual Art Projects On First Graders' Story Recall and Comprehension. *M. Alison McMillan.* The arts can add a creative element to any lesson, but the arts may also add personal involvement, and therefore meaning, to what is being studied. This personal meaning and active involvement is what makes a lesson "stick." The question addressed in this study is, "What is the impact of visual art projects on story recall and comprehension of first graders?" For the purpose of this study, comprehension was assessed when students demonstrated knowledge they had of characters, settings, conflicts, and resolutions. Recall was assessed by knowledge of the story elements demonstrated while giving a retelling. Twenty-two first graders, ages six and seven, listened to eight stories and completed a drawing exercise after the reading of each book. The research was designed to explore drawing processes as a means of helping students commit important details of literature to memory. If they were to be assessed on comprehension, they completed an illustrated story map after the reading. On this story map, students were asked to draw pictures of any characters in the book, the setting, a picture representing the problem, and another representing the solution. If the assessment was based on recall, they were asked to create a sequence foldable. A sequence foldable has three flaps that represent the beginning, middle, and end of a story. I created separate rubrics based on the Virginia Standards of Learning (SOLs) for English and professional input, in the form of

previous rubrics and classroom materials, from experienced teachers at the elementary school. The findings of this study suggest that having personally created images to think upon during assessment resulted in an increase in both comprehension and recall skills.

The Impact of Integrating Pictures and Text on the Literacy Comprehension of Kindergarteners. *Kathleen Mead.* Literacy comprehension is an essential part of education. As students progress in school, they are required to properly demonstrate and apply their understanding of a text. The research question addressed in this study was, "What is the Impact of Integrating Pictures and Text on Kindergarteners' Literacy Comprehension?" This qualitative study was conducted in a kindergarten classroom. Three small group read-aloud procedures were designed for this study. One-on-one interviews were conducted after each read-aloud procedure. The interview questions addressed the students' understanding of the important elements of narrative stories. These story elements consisted of identification of the setting, main character(s), and characteristics of the characters, the beginning, and the middle, the end of the story, and the overarching theme or message of the story. The first procedure followed a traditional process in which the teacher reads a narrative story to students and asks basic comprehension questions during and after the read-aloud. The second focused on the development of the students' visual literacy. During this read-aloud strategy, the students were asked to pay greater attention to the illustrations found in the story and the many details about the story that could be drawn from these illustrations. The third focused on the discussion of and development of the students' mental imagery. During this procedure, students were asked to focus on and describe the images that appeared in their minds as the story's text was read to them. Following the second and third read-alouds, the students completed drawings. These drawings served as tools for the students to use when answering the questions during the interviews. The study did not provide clear evidence that one particular procedure integrating drawing and text was more effective than another. However, the findings were consistent with the literature that addresses the benefits of incorporating pictures and illustrations to help students recall factual information from a narrative. Therefore, this study adds to the limited research available in relation to the development of literacy comprehension skills of primary grade students."

High Stakes Testing and Music Participation. *Christian Peabody.* The association between active music participation and cognitive prowess is well known, if not romanticized by its relation with many of history's greatest creative geniuses. Such laurels have sufficiently secured the presence of music as part of a wholesome educational experience. However, in the present-day practice of measuring academic achievement through high-stakes testing, aesthetic justification has become subservient to demonstrable effects of correlative benefits to learning. In an attempt to provide hard evidence of the positive correlation music participation may have on student academic achievement, this study investigated high-stakes testing scores measured at the high school level between music and non-music participants. Analysis is ongoing.

The Effects of Utilizing Kinesthetic Motion in the Music Classroom. *Katherine Preseren.* The music classroom is a place of learning and discovery through performance and appreciation. There are many methods used throughout the world to teach choral music to students. Since our state does not require a standardized test in music, music educators have some degree of flexibility when it comes to choosing a method to use in the classroom; many

educators incorporate kinesthetic motion into the classroom. This action research study was structured to learn more about the effects of kinesthetic motion on the performances of choral students in the middle school setting, as well as students' overall attitudes. Students were taught a piece of music, one without kinesthetic motion, and one with kinesthetic motion. Audio and video recordings were used to collect data on the performance results of the groups. In addition, some students were interviewed to further the understanding of the kinesthetic motions and the students' attitudes towards using them. Initial findings indicate that although the recorded performances only differed slightly between the two groups, overall, student engagement was much higher in the movement-based chorus lessons than in the non-movement-based chorus lessons. Music educators should consider incorporating more kinesthetic movement into their classrooms in order to increase the learning, engagement, and overall enjoyment of the students. Further research should investigate which particular movement activities are the most effective and how these activities affect student musicianship in the long-term.