FAUS – COE
Research Committee

Summary Report

Research Conducted at the Florida Atlantic University
Grades PK – 12 Schools and Centers
2006 – 2009

Karen Slattery Educational Research Center for Early Childhood
A. D. Henderson University School / FAU High School
Palm Pointe Educational Research School at Tradition

Compiled by John Hardman, Ph.D.
Coordinator of Research Programs & Services

Florida Atlantic University

June 15, 2009
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<th>Name</th>
<th>Position</th>
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<td>Associate Professor of Early Childhood Education, and Director of the Toppel Family Early Childhood Institute</td>
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<td>Patricia Hodge</td>
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<td>Faculty, ADHUS</td>
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Karen Slattery Educational Research Center for Child Development

Mission

The Karen Slattery Educational Research Center for Child Development is a lab school for children from birth to five years of age. It is affiliated with the College of Education’s Toppel Family Early Childhood Education Institute at Florida Atlantic University. Located on FAU’s Boca Raton campus, the center’s mission is:

- To help young children grow intellectually, socially and emotionally in a learning environment that nurtures and supports optimal development.
- To provide a lab school for teacher education students, with an educational philosophy that is inclusive and intends to address the needs of all children whose development represents a range of abilities and learning styles.
- To promote research in early childhood education, child development and related disciplines.
- To serve as a fieldwork site for nursing, science and other FAU students and faculty.
- To provide a model of best practice in early childhood education for the wider educational community.

Summary of Research

2008 - 2009

**Replication of Unnecessary and Accidental Actions during Object Learning**

November 2008-November 2009

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Amy Gardiner</td>
<td>2-5 yrs old</td>
<td>96</td>
</tr>
</tbody>
</table>

**Abstract:** The current research is designed to study how children learn to use objects by watching others. It will investigate children’s understanding of which observed actions are necessary for achieving a given task.

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**The Development of Tool Use and Problem Solving**

September 2008-May 2009

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Students</th>
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<tbody>
<tr>
<td>Dr. Marissa Greif</td>
<td>Science/Psychology</td>
<td>Robert Freund</td>
<td>24-59 months</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amy Gardiner</td>
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1. Research Question: How do observational learning and experiential learning of tool use compare?

2. Purpose of the study: To better understand the means by which children learn to use objects as tools.

3. Significance of the study: Tool use is an important part of everyday life and learning how to use tools is an important part of development. This study expands our knowledge as to how children may best be able to acquire tool use skills.

4. Methodology applied: Children participated in six toy retrieval tasks that involved getting toys out of various containers by using another object as a tool. For each task, children were presented with an array of four tools, only one of which worked, and asked to choose which one they wanted to use to get the toy out. Prior to making their decision, some children watched the experimenter partially model using each tool (Observation Only), gained their own manual experience with the tools and the container (Experience Only), watched the experimenter and gained manual experience (Observation and Experience), or received no prior exposure to the task materials (No Observation and No Experience). After choosing a tool, children attempted to retrieve the toy using this tool. If they chose a non-working tool, the working tool was given to them afterward. We were interested in whether children’s tool choices and tool use performance differed between the different groups.

5. Main findings and results
   - Across all four groups, 3-year-olds were more successful than 2-year-olds at choosing correct tools and using working tools. This finding indicates that the abilities to identify working tools and use tools are still developing during the early preschool period.
   - Across all groups, children did not differ in the amount of correct tool choices they made, choosing working tools more often than non-working tools. This suggests that prior exposure to our simple tools was not necessary for children to correctly identify which tools would work to retrieve the toys.
   - We found that children who received Observation only were more successful than children in the other three groups at retrieving the toys using working tools. This suggests that observing someone else use tools may be a more efficient way for preschool children to learn tool use than their own experience. Children in the Observation and Experience group may not have done as well as children in the Observation Only group because they received too much exposure to the materials, which could have overtaxed their cognitive resources.

However, the role of experience should not be underemphasized, as other research has shown that experience plays a crucial role in children’s understanding of others’
behavior. Observing someone else may help guide children’s behavior and allow them to gain the experience they need more quickly than the trial-and-error learning involved in relying only on one’s own experience.

- Looking at the tool use performance of children who chose working tools, we found that despite choosing working tools, these children could not always translate these correct choices into successful tool use. Children chose more working tools than they were able to successfully use.

6. Tools developed, application in new settings, dissemination in conferences, etc.
- This work will be presented at the Cognitive Development Society conference in October of 2009.

7. Implications for future research
Future research of children’s tool use learning should look at how experience and observation may interact during this process, as well as the details about what kind of information children are learning through these different learning styles.

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**Slattery Family Development Project**  
October 2008-October 2009

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<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
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<tr>
<td>Dr. Paul Peluso</td>
<td>Education/Counselor</td>
<td></td>
<td>Infant-4 years</td>
<td>18-30 parents</td>
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<tr>
<td></td>
<td>Education</td>
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**Abstract:** The current research will study the influence of several parental factors (such as family environment, parents’ relationship and parents’ attachment style) on children’s physical, social, and emotional development. It will look at the impact of family-of-origin dynamics on the long-term development of children.

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**Familial Influences on the Development of Empathy in Preschoolers**  
August 2008-August 2009

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<th>Grade</th>
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<tr>
<td>Dr. Nancy Jones</td>
<td>Science/Psychology</td>
<td></td>
<td>3-5 years old</td>
<td>60</td>
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</table>
Abstract: The current research will study the relationship between maternal depression and empathy development and to examine the effects of parental depression. The study will also examine self expressiveness within the context in families of depressed parents’ versus families of non-depressed parents.

Note: This specific study is not being conducted on-site at Slattery; however, families are recruited for the study from the preschool.

**Development of Inhibition as a Function of the Presence of an Intentional Agent**

January 2009-January 2010

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<th>Grade</th>
<th># of Subjects</th>
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<tbody>
<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Ashley King</td>
<td>Pre-K 2nd grade</td>
<td>200</td>
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Abstract: The current research is designed to study the developmental differences in inhibition (the ability to resist making a response) as a result of the suggested presence of a supernatural entity, an imaginary Princess Alice.

**The Role and Impact of Culture in Early Childhood Education Curriculum**

February 2009-February 2010

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<th>Principal Investigator</th>
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<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
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<tbody>
<tr>
<td>Dr. Dilys Schoorman</td>
<td>Education/Curriculum, Culture and Educational Inquiry</td>
<td>Sumbla Pervaiz &amp; Sandra Charity-Martinez (Slattery Teachers)</td>
<td>Teachers At the Slattery Center</td>
<td>15</td>
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Abstract: The current research will explore how cultural diversity can be used as a tool for enhancing education at the early childhood level. This study will explore how students’ home culture is included in the curriculum and the impact of such inclusion on young children.

**Replication of Unnecessary and Accidental Actions during Object Learning**
This project was conducted with 2-5-year-old children at the Slattery Center during the 2008-2009 school year.

1. **Research Question:** When observing someone solve a problem, how do children decide which actions are relevant to achieving the goal, and therefore, which actions to imitate when solving the problem themselves?

2. **Purpose of the study:** To better understand why children replicate actions that are unnecessary to achieving a goal.

3. **Significance of the study:** Along with follow-up studies and other research in this field, this study will provide knowledge about how children learn to manipulate objects and solve problems by watching others.

4. **Methodology applied:** Children participated in four toy retrieval tasks that involved getting a toy out of different containers. Each container had a relevant moving part and an irrelevant moving part. For three of the tasks, children watched an adult get the toy out before having their own turn. For one task, the adult performed both the relevant and irrelevant actions intentionally, saying “There!” after performing each one. For another task, the adult performed the irrelevant task accidentally (saying “Whoops!”) and the relevant task intentionally (saying “There!”). For another task, the adult performed both actions without saying anything. Finally, for the last task, children were encouraged to get the toy out themselves, without having seen a demonstration first. We were interested in seeing which actions the children chose to copy, and if this depended on the demonstration they saw.

5. **Main findings and results**
   - The project is ongoing and results will be forthcoming shortly.
Palm Pointe Educational Research School at Tradition

Mission

Opened in the fall of 2008, Palm Pointe Educational Research School at Tradition has a three-fold mission of (1) being a demonstration site for teacher education; (2) developing curricula; (3) conducting research (F.S 228.0533). As a FAU/SLCSD demonstration site, the school is a partner in the teacher education process of the College of Education, providing an ideal setting for the observation of current instructional styles and strategies. The school serves as a location for pre-student teaching experiences of undergraduate elementary and secondary education students. In addition, service to practitioners in the field is provided through professional visitations, workshops, demonstrations, and teaching tapes. The school is a site for statewide, in-service clinical educator training. Faculty members may serve as instructors at FAU campuses.

The standard academic subjects, foreign language, physical education, and selected areas of the humanities, comprise ongoing curriculum development activities. Palm Pointe serves as a research site for the colleges and departments in the University, the public schools, and the private sector as well as generating school-wide action research projects. Current research and grant projects are funded through the University, the Florida Department of Education, and private/public foundations.

All three parts of the mission are based on a keystone of educating Palm Pointe students to reach their full potential.

Summary of Research

2008 - 2009

Student Success Skills
December 2008-February 2009

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<th>Co-Investigator</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Dr. Greg Brigman</td>
<td>Education/Counselor</td>
<td>Laura Taylor</td>
<td>4-8</td>
<td>345</td>
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</table>

Abstract: This study will investigate the relationship between student success skills/parenting success skills and how it impacts student behavior and student achievement. This program will investigate the necessary skills needed for success. Students will develop skills such as academic, social, and self management throughout the 6 week program (xxx).

Study in process
An Analysis of the Reading Skills of K-8 Grade Students with Autism Spectrum Disorders

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<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
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<tbody>
<tr>
<td>Jack Scott, Ph.D.</td>
<td>Education/Exceptional</td>
<td>Melody Left. M.Ed.</td>
<td>K-8</td>
<td>18</td>
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<tr>
<td>Mary Lou Duffy, Ph.D.</td>
<td>Student Education</td>
<td>(graduate student)</td>
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1. Research Question:
   a. How do the reading skills of students on the autism spectrum differ from similar age peers with and without disabilities?

2. Purpose of the study:
   This descriptive study will collect assessment data on elementary and middle school aged students with Autism Spectrum Disorder (ASD). The data will be reflective of the students’ abilities in reading decoding, vocabulary, comprehension, and fluency. By using standardized assessments in each of these areas of reading, multiple comparisons can be made between other disability groups (e.g., Specific Learning Disabilities, intellectual disabilities, etc.) as well as those students without disabilities. The ultimate goal of the study is to identify reading characteristics of students with ASD and match their needs to efficacious reading practices for this population.

3. Significance of the study:
   As the numbers of students with ASD increase, the need to understand how these students learn to read and how they are most effectively taught becomes paramount. Added to the increasing numbers, students are more frequently placed in included settings, challenging the general education teachers to apply best practices to a population about whom they may have little information. It is often realistic to find today’s elementary classrooms that have students with ASD included to have non-readers as well as students reading 2 to 3 years above grade level in the same classroom.

   The study will provide a statistical description of ASD students in a K-8 public school program, placed in both included as well as pull out program placements. Both researchers and teachers will be able to use this data to make curriculum decisions to improve the reading program options for students with ASD. The researchers will be able to compare the reading profiles of students with ASD to other disability groups and to student without disabilities.

4. Methodology applied:
   After being consented, the students are tested one on one in reading. The battery of tests used in this study includes:
   - PPVT for receptive language,
• EVT for expressive language,
• Woodcock-Johnson 3 for decoding, phonics, and reading comprehension, and
• IRI for oral reading fluency.

This sequence allows the researchers to structure the tests to meet the wide range of reading skills presented by this population. In some cases the individual student will present with above grade level skills in vocabulary (receptive language) and below grade level in comprehension. Students are pressed to do their best, but not over stressed by the demands of the tests.

5. Main findings and results:
The data collection is ongoing; however, some general comments can be made about the trends found in the sample data. It is obvious when looking at a single teacher’s classroom that the students with ASD do not present a uniform profile. For example in one teacher’s classroom (grades 1 and 2) the range of reading skills (receptive & expressive vocabulary) varies from non reader/non verbal through those on grade level to one student who tested at the 10th grade level. Other data comparisons identified students in that same classroom who tested at 4th grade level in comprehension and at Age 2 in vocabulary. The uniqueness of this population requires more profiles to make the data more robust. Even more evident is the need for teacher support to be able to work with this broad range of students.

6. Tools developed; application in new settings; dissemination in conferences, etc.
• Recommendations based on the assessment data as they relate to curriculum decisions (data driven decision-making).
• Broadening teaching strategies to support included students’ reading needs (staff development)
• Increasing teacher understanding of students with ASD in the general classroom (staff development)

As the topic of effective reading instruction is of general interest to most professional associations (Council for Exceptional Children, International Reading Association, etc), opportunities for presentations and publications are expected.

7. Implications for future research
This research can be the impetus for a variety of research lines relating to teacher practice related to students with ASD; reading strategies effective with students with ASD; and comparative language development techniques.

a. How can the reading skills of students with ASD be more effectively measured?
b. Which teaching strategies are more effective at increasing reading skills for students with ASD?
c. Would the research validated strategies used with students with ESL be effective in increasing language and reading skills of students with ASD? How effective is telegraphic speech instruction as compared to instruction in a language rich
environment? (a continuation of Claudia Clark’s (2000) research).

**Computer-Based Testing vs. Paper and Pencil Testing**
March 2009-May 2009

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<th>Grade</th>
<th># of Subjects</th>
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<tr>
<td>Heather Davis</td>
<td>Palm Pointe</td>
<td>-</td>
<td>2</td>
<td>9</td>
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1. **Research Question:**
   How will Computer-Based Testing vs. Paper and Pencil Testing for Reading Comprehension affect my 2nd grade student’s motivation and assessment score?

2. **Purpose of the study**
   With the growing use of technology, more assessments are beginning to be given on the computer rather than the old fashion way, with paper and pencil. Technology has made the distribution of reading assessments much more convenient. Tests are scored and saved in a portfolio with only a click of a button. Currently, Palm Pointe Educational Research School and some other schools in Saint Lucie County are using the Award Assessment Reading Curriculum. All assessments are computer based. Traditionally, students have taken Reading assessments with paper and pencil. This research will consider how motivation and assessment scores may differ by method of assessment.

3. **Significance of the study**
   Now that assessments are beginning to replace paper-pencil based assessments, it is imperative that tests are reliable and checked for validity.

4. **Methodology applied**
   Students will be assessed using both computer and pencil based reading comprehension tests. The sample will take assessments from the Award Reading program. After using both assessment methods, the students will complete an engagement survey to identify their level of motivation for each testing style.

   The population for this study is second grade students in Saint Lucie County Schools. A sample of 9 students will take a computer-based comprehension tests and a paper-based comprehension test. Three students are performing below grade level, three are on grade level, and three are above grade level. I have selected ethnically diverse groups for this research.

5. **Main findings and results**
   - Results of this study will be available June 2009.
6. Tools developed, application in new settings, dissemination in conferences, etc.
   - Paper-based comprehension assessments were created for this study.
   - A survey was created to measure the participant’s motivation when taking both types of assessments.

7. Implications for future research
   - Online math assessments vs. paper and pencil math assessments.
   - Online writing assessments vs. paper and pencil writing assessments.

The Investigation of Students’ Ability to Identify and Retell Fiction
April 2009-May 2009

<table>
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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
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<tbody>
<tr>
<td>Kathleen Melrose</td>
<td>Palm Pointe</td>
<td>-</td>
<td>3</td>
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1. Research Question:
How will my third grade students’ ability to identify and retell fictional text, including character, setting, plot, problem and solution, be impacted by using a summarizing teaching method?

2. Purpose of the study

There are 18 students in my third grade class, 8 boys and 10 girls. My class is ethnically and culturally diverse, consisting of 24% African American & Caribbean descent, 45% Caucasian, 24% Hispanic and 7% Asian. One of my students has been previously retained in first grade. I have two students pulled out daily for additional services in reading and mathematics, one of which is autistic and is capable of working independently on a first grade level. Six of my students are working below grade level and are in danger of being retained. In addition to the many academic challenges present in my classroom, there are also emotional and behavioral concerns as well. These vast differences amongst my students have brought many challenges to my classroom. However, for the most part my students work harmoniously together.

I began this inquiry after realizing a skill weakness in my students. I found that my students did not understand the purpose of a summary and instead of translating the information into a synthesized form they simply copied information from the text. Summarizing is an essential skill for students to acquire and has been identified as an instructional strategy that has a high probability of enhancing student achievement.

3. Significance of the study
I have been participating in a professional learning community at my school based on Marzano’s high yield strategies. On a weekly/bi-weekly basis I’ve had the opportunity to read about and be introduced to various Marzano strategies. In addition, I have researched various sites for articles, reviewed online presentations on Marzano’s summarizing and observed my coworker who is a Marzano facilitator. Through researching articles as well as reading Classroom Instruction that Works by Robert J. Marzano I’ve found that using appropriate summarizing techniques can potentially affect student achievement with a 34 percentile gain (Marzano, Pickering, & Pollock, 2001). In addition, student reading comprehension increases when students learn how to incorporate "summary frames" as a tool for summarizing (Meyer & Freedle, 1984). When students use this strategy, they are better able to understand what they are reading, identify key information, and provide a summary that helps them retain the information (Armbruster, Anderson, & Ostertag, 1987).

4. Methodology applied

For the purpose of this inquiry the primary resource that I will use is the Marzano summary frame for narrative text. The frame questions being used are as follows:

1. Who are the main characters and what distinguishes them from the others?
2. When and where did the story take place? What were the circumstances?
3. What prompted the action in the story?
4. How did the characters express their feelings?
5. What did the main characters decide to do? Did they set a goal, and if so, what was it?
6. How did the main character(s) try to accomplish their goals?

5. What were the consequences?

In addition to the frame questions students will be provided with various literary text passages to use with the summary frame. Although the entire class will participate in all of the lessons, I have decided to focus this inquiry on six students, 2 above grade level, 2 on grade level, and 2 below grade level.

During my research I hope to find the following generalizations with my class:

1. To effectively summarize, students must delete some information, summarize some information and keep some information.
2. To effectively delete, substitute and keep information, students must analyze information at a fairly deep level.
3. Being aware of the explicit structure of information is an aid to summarizing information.

*Classroom Instruction that Works*, by Robert J. Marzano

**Main findings and results**

- Results are not completed as of yet. Continuing to implement & collect data.

**Tools developed, application in new settings, dissemination in conferences, etc.**

- Findings to be presented at District Showcase May 28, 2009

**Implications for future research**

- The correlation of summarizing to student assessments
- The effects of summarizing strategies on specific types of students with specific subject matter
- The effects of summarizing strategies in connection to online research

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**The Investigation of Students’ Ability to Identify and Restate Factual Text**

April 2009-May 2009

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<th>Principal Investigator</th>
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<tr>
<td>Laurie Boyer</td>
<td>Palm Pointe</td>
<td>-</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

1. **Research Question:**

How will my third grade students’ ability to identify and restate factual text be impacted by using a summarizing teaching method?

2. **Purpose of the study**

There are 19 students in my third grade class, 10 boys and 9 girls. My class is ethnically and culturally diverse, consisting of 26% African American, 53% Caucasian, 16% Hispanic and 5% Asian descent. Two of my students have been previously retained in first grade. I have two students pulled out daily for additional services in reading and mathematics. One of my students has XYY syndrome and Aspergers. This student may have physical and verbal outbursts at anytime. Seven of my students are working below grade level and are in danger of being retained. Beyond the many academic challenges present in my classroom, there are also emotional and behavioral concerns as well. I have four students that seek group counseling on a weekly basis. In addition, I
have one student that receives grief counseling once a week. Currently I have one student that is diagnosed ADHD and another currently being evaluated. In addition, I have two other students going through testing with the SST (Student Support Team). On the other hand, I have two students that have been labeled gifted and two students with reading Lexile levels over 1000L. This large variation in student skills and abilities in my classroom definitely present a challenge on a daily basis but overall we are a great team.

I began this inquiry after realizing my students were unable to clearly understand the information in a passage and then put it into their own words. They tend to look up and/or read information and then copy it exactly as it is written regardless of whether it makes sense or not. Summarizing is a high yield strategy which when implemented and applied properly can increase student achievement.

3. Significance of the study

I have been participating in a professional learning community at my school based on Marzano’s high yield strategies. On a weekly/bi-weekly basis I’ve had the opportunity to read about and be introduced to various Marzano strategies. In addition, I have researched various sites for articles, reviewed online presentations on Marzano’s summarizing and observed my coworker who is a Marzano facilitator. Through researching articles as well as reading Classroom Instruction that Works by Robert J. Marzano I’ve found that using appropriate summarizing techniques can potentially affect student achievement with a 34 percentile gain (Marzano, Pickering, & Pollock, 2001). In addition, student reading comprehension increases when students learn how to incorporate "summary frames" as a tool for summarizing (Meyer & Freedle, 1984). When students use this strategy, they are better able to understand what they are reading, identify key information, and provide a summary that helps them retain the information (Armbruster, Anderson, & Ostertag, 1987).

4. Methodology applied

For the purpose of this inquiry the primary resource that I will use is the Marzano rule based strategies. The rules being used are as follows:

- Take out material that is not important to understanding
- Take out words that repeat information
- Replace a list of things with a word that describes the things in the list (e.g. use fruit for apple, orange & banana)
- Find a topic sentence

Students will be provided with multiple types of nonfiction passages to use the rule based summary
strategy. Although the entire class will participate in all of the lessons, I will be gathering and reviewing data on six students, two above grade level, two on grade level, and two below grade level.

During my research I hope to find the following generalizations with my class:

4. Students will know the four rules of rule based summaries.

5. Students will be able to successfully and effectively eliminate unneeded or unwanted information.

6. Students will summarize in their own words the main pattern in the nonfiction passage.

7. My above level learners will score a 4, on grade level learners will score a 3 and below level learners will score a 2 on the summarizing rubric.

(Classroom Instruction that Works, by Robert J. Marzano)

Main findings and results

- Results are not completed as of yet. Continuing to implement & collect data.
- Tools developed, application in new settings, dissemination in conferences, etc.

- Findings to be presented at District Showcase May 28, 2009

Implications for future research

- The correlation of summarizing to student assessments

- The effects of summarizing strategies on specific types of students with specific subject matter

- The effects of summarizing strategies in connection to online research

What Impact Will Cooperative Learning Have On Student Behavior?

March 2009-May 2009

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
</tr>
</thead>
</table>
Abstract: This study will investigate the relationship between cooperative learning and student behavior using grant awarded funds from the St. Lucie County Education Foundation. Students will design, plant, and maintain a garden of various species of Florida native vegetation.

The Effects of Podcasting on Student Engagement
April 2009-May 2009

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
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<tbody>
<tr>
<td>Hillary Cruz</td>
<td>Palm Pointe</td>
<td>-</td>
<td>7</td>
<td>20</td>
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8. **Research Question:**
   How will the use of podcasts (digital audio files in an MP3 format made available for download on the Internet) in my 7th grade World Geography classroom affect my students’ motivation to participate in online discussions?

9. **Purpose of the study:**
   I began to think about using podcasts in the classroom while taking a professional development course offered through SLCSD. Once I fully understood what a podcast was, I realized the endless possibilities for its use within the classroom. The recent, successful implementation of online blogging/e-mail program Gaggle.net proved student enthusiasm for the use of technology in the classroom.

   All students in the pod will be listening and responding to weekly podcasts, focusing on material being covered in class for that week. I will be collecting data on my homeroom class, Advanced World Geography, consisting of 20 students. There are 12 boys and 8 girls, none of which are considered ESE, Autistic, or ESOL students. Of the twelve boys eight are Caucasian, two are African American, one is Hispanic, and one is Hindi (Indian). Of the eight girls five are Caucasian, one is African American, one is Hispanic, and one is Hindi (Indian). Eight of the 20 students in the class qualify for Free and Reduced Lunch. All students have access to a computer and the Internet at home.

10. **Significance of the study:**
    This study will give further insight into use of technology in the classroom, specifically podcasting. The relation between the use of podcasting and student motivation/participation in the classroom will be observed and analyzed.

11. **Methodology applied:**
    - Each week I will create a podcast and post it to the District server.
    - Before research begins, I will teach the students about the 5 levels of student engagement (engaged, strategic compliance, ritual compliance, retreatism, and rebellion).
- I will initiate research by introducing the students to their first podcast. Using the CAVS system I will walk the class through the process of accessing the podcast step by step and play the podcast for students to listen to.

- Using Gaggle.net I will set up a Podcast Message Board for student discussion. Each podcast will provide students with several questions to be replied to in the message board. I will instruct students that podcasts will be available each Monday for them to listen to. Students must create a response to the questions in the Podcast Message Board and also reply to at least one other student’s response by 11:59 pm each and every Thursday.

- Students will have time to listen and reply to the podcasting during class or at home if they choose.

- Each Friday I will record the number of student responses and replies to each other. Student grades will be based on length, detail, and use of proper grammar.

- After the students have been through two weeks of podcasts (listening on Monday and responding/replying by Thursday), I will give the students an anonymous oral survey asking them to rate their levels of engagement with the podcasting overall thus far. Students will also be asked to list their thoughts on the use of podcasting in the classroom. Students will also rate each podcast on quality, topic, volume, voice, effects, and length.

- Student responses will be charted.

- Friday of each week students will be given an engagement survey.

- At the end of week 6, students will again be given an anonymous oral survey asking them to rate their levels of engagement with the podcasting overall. Students will be asked the same questions from the 1st oral survey given to them in week 3.

- Student responses to the questions will be charted and compared to responses given in week 3.

- The response log will be used to determine if student responses to the message increased consistently throughout the project or fluctuated depending on the topic/week.

- Grades will be used to determine if student responses were in depth and turned in on time.

12. Main findings and results

- Findings to be presented at District Showcase May 28, 2009

2009 - 2010

**Gaggle.net – Use of Student E-mail, Blogs, and Discussion Boards**

October 2009-January 2010

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th># of Subjects</th>
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</thead>
<tbody>
<tr>
<td>Dr. Maria Vazquez</td>
<td>Education/Educational</td>
<td>Cindy Harrison</td>
<td>7</td>
<td>20</td>
</tr>
</tbody>
</table>
Abstract: It is highly beneficial for students if teachers devise tasks and environments that foster active student involvement. It is vitally important to engage students in the classroom in such a way as to attract their attention and emotions, and bring meaning to their educational process by integrating their home life and their school life. Bringing an online learning environment into the classroom serves to do just that: incorporate familiar technology together with standard classroom curriculum.

Many students often lack critical thinking skills to be able to analyze what they read. Educational discussion boards and blogs have the potential to encourage students to read and respond critically to classroom assignments, to foster language skills and critical thinking skills, while simultaneously fostering technology skills and proper “netiquette.”

Students can use discussion boards and blogs to respond critically to each other’s assigned task, and draw conclusions supported by evidence from their readings. Talking with peers to negotiate an understanding of what is read is highly motivating. Not only are students likely to become involved in the active interaction often associated with peer-lead discussion groups, they may be more interested in what they are reading as they anticipate what will happen when they meet in groups to discuss what they have read and each other’s online responses.

Research Question: How will my seventh grade Reading students use of blogs, e-mail, electronic homework drop boxes, and online message boards affect motivation and critical thinking skills in the classroom?

3. Significance of the study:

Students will:

- Convey personal responses and opinions about a text reading through blogging, online and classroom discussions
- Foster language skills
- Develop critical thinking skills
- Recognize differing viewpoints and use the compare and contrast technique to analyze varying opinions
- Work cooperatively

4. Methodology applied:

I will be working with seventh grade Reading students, implementing the use of Gaggle.net: an online learning environment that will support standard seventh grade Reading curriculum. This program contains blogs, e-mail, electronic homework drop boxes, and online message boards. I will be working with a variety of learners from each of my different Reading groups. Some
students are part of the Intensive Reading class, the regular Reading class, and the Advanced Reading class. The group includes a mix of gender and ethnicity, and socioeconomic levels.

The one common factor is student interest and motivation with modern technology. Students are able to converse freely and knowledgeably about their use of technology, such as cell phones, Iphones, Ipods, e-mail, online chatting, instant messaging, how to best utilize online search engines, and much more. A large majority of students are entering school more knowledgeable than many of their teachers.

I will be conducting a standard seventh grade reading class, reading from novels, nonfiction material, educational magazines, and a variety of student choice independent reading. Students will use blogs for online journaling, online discussion boards to engage in analyzing various points of view, and the electronic homework drop box to submit class work and home work assignments. E-mailing will also be part of the program, encouraging dialogue and continuous correspondence with each other and myself. Using laptops, students will be assigned to construct their responses in word documents, where they will monitor all standard conventions of writing, and then be able to submit assignments as attachments.

My evidence will consist of:

- Interviews
- Surveys
- Samples of Student Work

5. Main findings and results

Study is in progress.

6. Tools developed, application in new settings, dissemination in conferences, etc.

My school district provided me with an online program titled Gaggle.net. This program includes the use of blogs, e-mail, electronic homework drop boxes, and online message boards. Once supplied with this amazing program, I attended a county sponsored training, and I then took the time to explore the program, and allowed students time to get to know how to use the program before data collection. I am assigning various topics for classroom use and monitoring general student usage as I continue to study student responses.

7. Implications for future research

Study in progress.
A. D. Henderson University School/FAU High School

Mission

The Alexander D. Henderson University School (ADHUS), founded in 1969, is an elementary-middle school (K-8) and was legislated school district number 72, developmental research school, effective July 1, 1991. ADHUS is a public school under the auspices of the State University System. ADHUS holds departmental status in the College of Education at Florida Atlantic University with the Director serving as a member of the College Executive Committee. The Dean of the College of Education is the designated Superintendent.

The school has a three-fold mission of (1) being a demonstration site for teacher education; (2) developing curricula; (3) conducting research (F.S. 228.053).

As a demonstration site, the school is a partner in the teacher education process of the College of Education, providing an ideal setting for the observation of current instructional style sand strategies. The school serves as a location for pre-student teaching experiences of undergraduate elementary and secondary education students. In addition, service to practitioners in the field is provided through professional visitations, workshops, demonstrations, and teaching tapes. The school is a site for statewide, in-service clinical educator training. Faculty members also serve as instructors in the College of Education (FAU), The Schmidt College of Arts and Humanities (FAU), and Palm Beach Community College.

The standard academic subjects, foreign language, physical education, and selected areas of the humanities, comprise ongoing curriculum development activities. ADHUS serves as a research site for the colleges and departments in the University, the public schools, and the private sector as well as generating school-wide action research projects. Current research and grant projects are funded through the University, the Florida Department of Education, and private/public foundations.

All three parts of the mission are based on a keystone - educating ADHUS students to reach their full potential.

FAU High School

Profile

Florida Atlantic University’s Board of Trustees approved an intensive dual enrollment public high school on the Boca Raton Campus in the spring of 2004. FAU High School opened its doors to students for the fall semester 2004 and welcomed a cadre of trailblazers. Unlike other high schools, this program does not use extensive facilities in which to operate. Students experience college level courses in the environment of the university classroom, laboratories, and support facilities. This highly selective program offers high school students (grades 9-12) the opportunity to earn high school credits and university course hours, at the same time at no cost to parents or guardians.
Summary of Research

2006 – 2007

**Learning Laboratory School Network: Early Literacy through the Arts**
January 2006-May 2009

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Gail Burnaford</td>
<td>Education/Teaching and Learning</td>
<td>Deborah Schram (Music teacher), Jenny O’Sullivan (3rd Grade teacher), Christine McCaul (3rd grade teacher), Chrisenicia Barzey (2nd grade teacher), Lyndsay Tolerton (2nd Grade teacher), Suzy Sturrock (1st Grade teacher), Jamie Wierzba (1st grade teacher), Lynn Sestrich (kindergarten teacher), Toni Yazurlo (kindergarten teacher), Elaine Sattler (Art teacher)</td>
<td>Middle School</td>
<td>216</td>
</tr>
</tbody>
</table>

**Abstract:** In the fall of 2005, music, art and reading teachers joined with the New England Conservatory of Music in Boston in researching music education and how it can aid in learning in other subject areas. We chose to look at Literacy and the Arts in grades 1-3.

We began by compiling Florida Sunshine State Standards in Music, Language Arts, and Visual Arts that correlated with three National Music Standards: listening, analyzing and describing; reading and notating; and composing and arranging. We then identified parallel processes and skills across the subject areas and planned lessons that focused on these processes and not on final products.

Specifically, we are looking at parallel teaching processes and transfer tools that teachers use to help children connect knowledge from one subject area to another.

Our two research questions are:

1. **What are the parallels found in art, music, and reading as identified in the national standards?**
2. **What can reading, music, and art teachers do to teach for transfer?**

Our project started with one teacher from grades 1-3 and expanded last year to include all twelve classrooms from kindergarten through third grade. This level of participation is expected to continue this year. Each grade level has selected children’s literature to help teach the skills and processes. This literature is used in reading, music and art classes.
### Expressive Language Markers in Normally Developing English Language Learners: Implications for Assessment and Intervention
September 2006–December 2006

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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</thead>
<tbody>
<tr>
<td>Dr. Cynthia Core</td>
<td>Education/Communication</td>
<td>Isabel Bula (Student)</td>
<td>K</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Sciences &amp; Disorders</td>
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</table>

**Abstract:** The goal of this research study was to identify expressive language characteristics of typically developing children who have recently immigrated to the United States and are in the process of acquiring English as a second language. Specifically, this study was concerned with children who are native Spanish speakers living in South Florida, and who were therefore part of a minority ethno-linguistic community. Results from previous studies indicate there are similarities in terms of expressive language between this population and monolingual children with Specific Language Impairment (SLI). These similarities have been a common cause of erroneous assessment of English language learners, and overall contribute to the difficulty differentiating language differences from language disorders in this population. Results from the current study provided valuable information to refine assessment protocols to determine placement for English language learners. This information is especially relevant in South Florida given the significant amount of children that are constantly immigrating to this part of the state and that require valid language assessments in order to determine appropriate placement and ensure proper academic advancement.

### Self-Socialization of Gender
October 2006–December 2006

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. David Perry</td>
<td>Science/Psychology</td>
<td>Desiree Tobin</td>
<td>4 - 8</td>
<td>560</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jon Perle</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Madhavi Menon</td>
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<td></td>
<td></td>
<td>Meenakshi Menon</td>
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**Abstract:** The purpose of the study was to see if children’s beliefs about gender influence their social behavior, development, and adjustment.

A benefit of the project helped educators know what to focus on when developing programs to help children improve their relations with peers and their personal competencies.

### Effects of Age and Cognitive Performance on Children’s Binding of Actors with Actions
May 2006 –May 2007
Abstract: The purpose of this research was to investigate how a child's age and cognitive abilities related to his or her ability to associate people with the actions they perform. Evidence has shown that even if people remember a particular person and a particular action, they may have trouble conjoining the two in order to form a coherent memory. Applied to a legal context, an eyewitness might falsely identify an innocent person as the perpetrator to a crime, having correctly remembered seeing that person on a previous occasion, but incorrectly associating that person with the crime. In other words, although the eyewitness correctly remembers the actions committed during the crime and correctly remembers seeing the falsely identified person at another time, the eyewitness incorrectly associates the criminal act with the innocent person. The phenomenon of falsely identifying a familiar but innocent person is known as unconscious transference. The goal of this research was to uncover some of the characteristics of a child (i.e. age and cognitive abilities) who might be more susceptible to unconscious transference.

2007 - 2008

Does Altered Presentation Style Impact Students with Auditory Processing Dysfunction?

Abstract: A key objective of this research was to assess the impact of a teacher’s manner of speaking on children in first and third grades who have been diagnosed with Auditory Processing Disorder (APD). There were three strategies of speaking which were investigated, including word stress (natural word emphasis without pausing), chunking (or pausing, without word stress) and a combination of word stress and chunking. Three primary findings were:

Key Findings

1) The most effective strategy impacting student behaviors was the use of chunking with word stress.
2) Regarding accuracy of response, word stress was most effective in the resource room, but word stress alone or chunking alone were equally effective in the classroom.
3) Generally, there was minimal difference in “best strategy” among APD subtypes.

Conclusions

Considering gender, grade levels, APD subtypes, classroom or resource room, behavior or response accuracy; being cognizant of how students with APD dysfunction respond with simple,
yet structured changes in prosody, benefits their ability to respond accurately and to become involved in the lesson.

**Implications for Future Research:**

Training teachers to keep the same observations, and document the data: this would provide inter-judge reliability to confirm or deny current findings.

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**The Adaptive Nature of Childhood Immaturity**  
February 2007–February 2008

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tbody>
<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Justin Rosenberg</td>
<td>K - 2</td>
<td>85</td>
</tr>
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</table>

**Abstract:** We hypothesized that children’s immature cognition (as expressed by errors typically made on simple tasks during the Piagetian-Preoperational Stage, i.e. preschool years) has adaptive value for children during a time in ontogeny when dependence on others is critical for survival.

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**Second Grade Word Problem/Problem Solving**  
September 2007–August 2008

<table>
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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tbody>
<tr>
<td>Dr. Gail Burnaford</td>
<td>Education/Teaching and Learning</td>
<td>Chris Barzey</td>
<td>2</td>
<td>24</td>
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</table>

**Abstract:** The objective of the project is to determine how effective instructional methods of teaching strategies would help second graders improve their word problem solving skills. By teaching specific problem solving strategies (use a model, write number sentences, eliminate too much information, choose the computational method, work backward, find a pattern, and solve multistep problems), students will be able to use logical reasoning to decide what strategies are required to correctly solve different types of word problems.

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**Using iPods to Increase Student Achievement**  

28
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. Gail Burnaford</td>
<td>Education/Teaching and Learning</td>
<td>Tom Ievoli</td>
<td>Middle School</td>
<td>20</td>
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**Abstract:** The purpose of this study was to determine how iPods, when used to take a test, may improve test scores and for which students and why. Students who volunteer from Grades 6 and 7 will elect to use iPods to take their standard social studies tests.

---

**Correlates of Phonological Memory, Working Memory, Phonological Awareness, and Early Literacy Skills in Kindergarteners**  
October 2007–June 2008

<table>
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<th>Principal Investigator</th>
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<th>Grade</th>
<th>Students</th>
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<tbody>
<tr>
<td>Dr. Cynthia Core</td>
<td>Education/Communication Sciences &amp; Disorders</td>
<td>-</td>
<td>K</td>
<td>25</td>
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</table>

**Abstract:** This study investigated the relationship between phonological memory and phonological awareness abilities, and examined correlates of memory (phonological and working memory) to early literacy skills, such as alphabet knowledge, reading and spelling.

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**A Study of Literacy Events in Early Childhood Classrooms**  
September 2007–May 2008

<table>
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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. Beverly Warde</td>
<td>Education/Exceptional Student Education</td>
<td>-</td>
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<tr>
<td>Dr. Peggy Goldstein</td>
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**Abstract:** The purpose of this study was to determine the most effective strategies used by teachers to support the increase in children’s vocabulary.

Objectives:
1. Identify vocabulary teaching strategies used in preschool - grade 2 classes during story reading time.
2. Identify vocabulary teaching strategies used in preschool - grade 2 classes during non-story reading activities.
3. Identify differences in vocabulary teaching strategies between the grade levels of Pre-k, K, grade 1 and grade 2.

---

**Cognitive Performance in Low and High Fit Children**  
December 2007 – December 2008

<table>
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<tr>
<th>Principal Investigator</th>
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</table>
**Abstract:** The purpose of this study is to determine whether there is a relationship between the cognitive performance (via a discrimination test) and physical fitness in children. This study will continue in 2008 – 09.

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**2008 - 2009**

*The Effect of Mindfulness Meditation on Children’s Brain Electrical Activity and Creativity*

August 2008–December 2008

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<tr>
<th>Principal Investigator</th>
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<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. Nancy Jones</td>
<td>Science/Psychology</td>
<td>Dayana Sanchez</td>
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<td></td>
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<td>(Student)</td>
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**Abstract:** The present study used a pretest-posttest design to determine the effects of a 10-week mindfulness meditation treatment in children. Thirty-five children from two 4th grade classes participated (N=16 in the meditation group). It was predicted that mindfulness meditation would enhance children’s creativity leading to higher scores on a divergent thinking task and those in the meditation group would display increased left-sided anterior EEG activation and more positive approach-type motivation.

Contrary to expectation, participants in the meditation group did not display generalized increases in left-sided anterior activation after the meditation treatment; however, they performed better on the divergent thinking task and outperformed the control group on elaboration.

Moreover, participants that increased in their divergent thinking after the meditation sessions showed more left frontal anterior activation compared to those that did not change. Moreover, participants that had increases in positive mood after the meditation sessions showed more left-sided EEG activation, suggesting that meditation training has an effect on emotional regulation, creativity and brain activity.

This is the first study, to our knowledge, reporting the effectiveness of mindfulness meditation on children’s creativity and mood and on corresponding changes in EEG activation. The findings presented on this study add valuable data to the literature on the specific effects of mindfulness meditation applied to healthy, young populations. Future research is strongly encouraged in order to create a scientific framework on the effects of mindfulness meditation in children that could be applied in education settings.
Children’s Social Reasoning
August 2008–December 2008

<table>
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<tr>
<th>Principal Investigator</th>
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<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Amy Gardiner</td>
<td>K-2</td>
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<tr>
<td></td>
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<td>Karl J. Steier</td>
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<td></td>
<td></td>
<td>Luna Medina</td>
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1. Research Question: Does the familiarity of an adult (familiar caretaker or unfamiliar stranger) affect children’s social reasoning abilities?

2. Purpose of the study: To investigate if social reasoning about a situation in which a child and an adult interact is impaired when the adult is an unfamiliar stranger.

3. Significance of the study: Social reasoning is a crucial part of human life. The ability to reason about the mental states of others emerges around 4 years of age but may be affected by certain features of a situation. This study furthers our knowledge about the features that may interfere with children’s social reasoning abilities.

4. Methodology applied: We were interested in 5-8-year olds’ reasoning during social situations in which a child in a story was trying to either find or avoid a familiar or unfamiliar adult. This project involves 2 studies:

   Study 1: Children were presented with stories that involved a child and an adult that were acted out using dolls in a dollhouse. The stories involved a child and an adult, who for half of the participants was described as a familiar caretaker of the child character and for the other half an unfamiliar stranger. In the familiar condition, the stories involved a game of hide-and-seek in which the child was seeking out the caretaker or trying to avoid being found. In the unfamiliar condition, the stories involved the child seeking out the stranger due to curiosity or trying to avoid the stranger out of fear of harm. After each story, participants were asked three control questions and two test questions. The first test question (belief) asked where the child thought the adult was located. The second test question (behavior) asked where in the house the child would move to either find or avoid the adult.

   Study 2: This study was conducted as a follow-up to Study 1. The findings from Study 1 suggested that the setting may have been too complex and the salience of the stranger may have been weak. Therefore, in Study 2, avoidance and seeking scenarios involving a child and an unfamiliar or familiar adult were again used, but the set for the stories was simplified from a house to a playground. Also, the contrast between the familiar and unfamiliar adult was increased by making the familiar adult the child character’s parent and dressing the
unfamiliar adult in black. In the familiar condition, the stories involved a game of tag in which the child was seeking out the caretaker to play the game or trying to avoid being tagged. In the unfamiliar condition, the stories involved the child seeking out the stranger due to curiosity or trying to avoid the stranger out of fear of harm. After each story, participants were asked three control questions and two test questions. The first test question (belief) asked where the child thought the adult was located. The second test question (behavior) asked where in the house the child would move to either find or avoid the adult.

5. Main findings and results

- Study 1: Consistent with other research, children correctly answered where the child believed the adult was in both stories (seeking – 64.4%; avoidance – 65.8%), and accurately predicted the child’s behavior in the seeking story (68.5%). In contrast, only a small minority of participants accurately predicted the child’s behavior in the avoidance story (15.1%). There was no effect of familiarity of the adult character, indicating that performance was not dependent on the type of relationship between the characters. However, there were only a small number of children who answered the behavior question correctly for the avoidance scenario, making it difficult to discern any differences between the familiar and unfamiliar conditions for this type of scenario. The relatively low rates of overall performance for this age group (almost all children usually correctly answer these questions for seeking scenarios) indicate that this scenario may have been overly difficult.

- Study 2: Interestingly, the results from Study 2 contrast slightly with the results from Study 1. Whereas Study 1 found a difference between children’s abilities to correctly predict the child character’s behavior the seeking and avoidance scenarios, Study 2 found that children did equally well on this question in both scenarios. This was likely due to the effect that the unfamiliar condition had on children’s performance. For both the seeking and avoidance scenarios, children were less likely to correctly predict the child character’s behavior in the unfamiliar condition than in the familiar condition. This meant that participants were steering the child character away from location of the unfamiliar adult in both situations, even though this was inconsistent with where the child character believed the adult was.

This suggests a general wariness for strangers. There are several possible explanations for this finding. It may be a learned reaction from repeated orders from adults to stay away from unfamiliar people. It may be an evolved mechanism to avoid people that may be of harm. Or, it may represent an evolved learning program, in which avoiding strangers (from adults or through personal experience) is very easily learned.

6. Tools developed, application in new settings, dissemination in conferences, etc.

- Study 1 of this project was presented at the biannual meeting of the Society for Research in Child Development in April 2009. We plan to also submit this project for publication in a scholarly journal.
7. Implications for future research
   - Future research could investigate other situations in which social reasoning could be impaired or further investigate the underlying development of stranger avoidance.

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**Theory of Mind in Predator-Prey Relationships**
August 2008 – December 2008

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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
</tr>
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<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Ashley King</td>
<td>K-2</td>
<td>85</td>
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<td></td>
<td></td>
<td>(Student)</td>
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**Abstract:** Children ages 5-9 were told two stories involving animal characters that were enacted on a board set to look like a savannah complete with a pond, grassy area, and two paths, as well as two visual obstructions: a cluster of trees and a large rock. Both stories explored the theme of avoidance, with one story focusing on avoiding a fellow playmate while the other story focused on the more evolutionarily relevant concept of predator-avoidance. Children were also presented with brief, realistic sound clips of the animals from the stories to make these events more potent. After each story, children were asked a series of control questions, prior to answering a false-belief question designed to assess theory of mind abilities relating to predator-avoidance and playmate-avoidance situations.

Our findings indicate that adding sound clips to the story presentation hinders children’s performance on false-belief questions in both scenarios. At this time analyses are still being run to further determine the significance of these correlations and to extrapolate possible reasons for this hindrance.

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**The Adaptive Nature of Cognitive Immaturity**
August 2007–December 2007

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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Justin Rosenberg</td>
<td>6-12</td>
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<td>(Student)</td>
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**Abstract:** We hypothesize that children’s immature cognition (as expressed by errors typically made on simple tasks during the Piagetian-Preoperational Stage, i.e. preschool years) has adaptive value for children during a time in ontogeny when dependence on others is critical for survival. We believe that these “cognitively immature” children expressing intuitive errors will elicit 3 possible perceptions within adolescence: 1) the perception that children are not a dangerous/potential competitor for adolescence; 2) the perception that children are not independent/autonomous enough
(i.e., that they are still weak, vulnerable, and helpless); and 3) the perception that they are attractive and interesting in some way (i.e., that they are cute, endearing, etc.). As reflected within these 3 dimensions, we believe that immature cognitive “errors” will elicit caring attitudes (i.e., they will be more likely to want to nurture) in adolescence, thereby helping to ensure survival-aid at a time when children are not cognitively (or physically) capable of ensuring their own survival. We also believe that adolescents who perceive the children in these stories as being cognitively immature will be less likely to say they would harshly punish them. Additionally, we feel that participants will be less likely to attribute negative characteristics (e.g., crafty, sneaky, likely to deceive, etc.) to children whom they view as being cognitively immature.

**Action Research Mentorship Support**  
January 2009–January 2010

<table>
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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Subjects</th>
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<tr>
<td>Gail Burnaford</td>
<td>Education/Teaching &amp; Learning</td>
<td>-</td>
<td>K-12</td>
<td>Teacher mentors and mentees</td>
</tr>
<tr>
<td>Tammy Bresnahan</td>
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**Abstract:** To assess the effectiveness of a mentorship support program in a K-12 setting. This is based on the work by Sharon Feiman-Nemser who states that great teachers of children do not necessarily make great teachers of adults. In order to effectively support teachers new to teaching and those new to schools, mentors need embedded and ongoing professional development. During this study, mentors will participate in monthly professional development and support in the following areas: roles and expectations, observations, conferring, feedback, coaching, and documentation. Mentors will keep a log, complete a survey of needs, and respond to a pre-post survey that reflects their experiences as a mentor. They will observe and be observed in each other’s classroom and use a reflection sheet that helps to guide them in lesson follow-up and feedback. Observing and reflecting in other teacher’s classrooms is a practice that should be sustained over time and be connected to school change.

**Social Dominance and Prosocial Behavior in a Modified Dictator Task**  
December 2008–ongoing

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<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tbody>
<tr>
<td>Dr. David Bjorklund</td>
<td>Science/Psychology</td>
<td>Jason Grotuss (Student)</td>
<td>K-2</td>
<td>85</td>
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**Abstract:** The purpose of this experiment is to explore the relationship between prosocial behavior and social dominance. Research on the relationship between prosocial behavior and social dominance is not very extensive. However, social dominance has been demonstrated to play a major role in social structure and individual behavior in animals. The current research seeks to examine
the developmental changes in prosocial behavior in early childhood by placing children in a unique sharing situation. In line with work in economic game theory which examines the interaction between individuals who have the opportunity to choose strategies that will maximize their overall return, the current study will place children in a situation where they have the opportunity to maximize their overall gain or share with another child. One unique aspect of this study is that, even though two children are participating, only one child will have the opportunity to keep or share a single reward at a time. Another unique aspect of this study is that during the experimental task, a division of labor will be established with only one child producing all of the labor. It is expected, based on previous animal and human research, that socially dominant children will receive greater rewards than children who are less socially dominant.

**Effect of Mindfulness Meditation on Elementary Age Children**

January 2009–May 2009

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<th>Principal Investigator</th>
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<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. Nancy Jones</td>
<td>Science/Dept. of Psychology</td>
<td>Sara Klco (Student)</td>
<td>2 &amp; 4</td>
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**Abstract:** The purpose of this study is to determine if mindfulness meditation is good for children’s creativity, emotions, attention, and wellbeing. Two second grades and two fourth grades will participate in the meditation practice, and one each of these grades will act as control groups. Both participant and control groups will complete similar activities, but only the participant groups will be trained in the meditation practice.

**The Impact of Common-Theme Reading Centers and Sound-Field Systems on Students’ Pre-Literacy and Reading Comprehension Skills**

August 2008 – July 2009

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<tr>
<th>Principal Investigator</th>
<th>College/Dept.</th>
<th>Co-Investigator</th>
<th>Grade</th>
<th>Students</th>
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<tbody>
<tr>
<td>Terry Clark</td>
<td>ADHUS</td>
<td>Dr. Ali Danesh (Education/ Communication Sciences &amp; Disorders)</td>
<td>K</td>
<td>42</td>
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**Purpose:** To determine the influence on pre-literacy and reading comprehension when there is a sound-field system or common-theme reading centers (after whole-group instruction) and 2) to determine the long-term (K-3) ramifications of these factors for the same children.

**Significance:** If use of sound field systems and/or common-theme reading centers increases the literacy skills in young children, these “methods” need to be applied to literacy learning.
Methodology:

1. Explain the rationale to kindergarten teachers;
2. 10-15 minutes of testing in literacy skills: once at the beginning of the year; once at the end of the year;
3. Compare test results, using DIBELS for test validation purposes; and see which class achieved the largest gain in scores;
4. Follow these students through grade 3, with the same method.

Main findings and results: Study is in process; end of year testing has not been completed at this writing.

Do Children’s Gender Stereotypes Influence Children’s Perceptions of Their own Ability?

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<th>Grade</th>
<th>Students</th>
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<tr>
<td>Dr. David Perry</td>
<td>Science/Dept. of Psychology</td>
<td>Graduate students</td>
<td>4 - 8</td>
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1. **Purpose of the study:** To see if children these days still hold gender stereotypes that affect their own perceptions of their abilities in a variety of areas (academics, sports, and so forth).

2. **Significance of the study:** If children’s gender stereotypes negatively impact their perceptions of their own abilities, research should be done to identify sources of the stereotypes and to develop interventions to rid children of their stereotypes.

3. **Methodology applied:** Questionnaires

4. **Main findings and results:** Yes, most children today still possess firm beliefs that girls are better than boys at certain activities and that boys are better than girls in other areas. Moreover, these stereotypes do predict children’s beliefs about their own abilities in ways that echo the stereotypes.

5. **Tools developed**, application in new settings, dissemination in conferences, etc.
   We have developed questionnaires to assess children’s stereotypes in only a few areas. We are working on a better assessment strategy.

6. **Implications for future research**
Now we are trying to understand why children let their stereotypes influence their perceptions of their abilities. Is it because their parents make gender stereotypes salient to children and also put pressure on children to conform to them, or is it that children put pressure on themselves to conform? Our data suggest the latter!

Action Research - Mentorship Design (H08-223)

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<tr>
<td>Tammy Bresnahan</td>
<td>ADHUS</td>
<td>Dr. Gail Burnaford</td>
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<td></td>
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<td>(Education/ CCEI)</td>
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1. Research Questions:
   1) How can we support veteran teachers to become effective mentors?
   2) How does participation in a mentor support program change one’s view of mentoring?
   3) How does participation in a mentor support program change one’s practice?

2. Purpose of the study: In order to effectively support teachers new to teaching and those new to schools, mentors need embedded and ongoing professional development. The purpose of this research study is to assess the effectiveness of a mentorship support program in fulfilling the needs of the mentors in a K-12 setting.

3. Significance of the study: Supported by the work of Michael Fullan who believes that teacher leaders can work together as a cohort to build a collaborative culture and transform their schools, studying the mentor helps us to understand in what ways mentoring helps to provide long-term benefits to teachers, schools, and districts.

4. Methodology applied: Professional development was provided each month – observational and anecdotal notes were kept. Mentors and mentees observed each other’s classrooms and took notes on an observational instrument. Other instruments included a needs assessment and survey. A pre/post interview was also conducted.

5. Main findings and results
   1) I haven’t analyzed the end results from surveys/needs assessments. However, I have noticed a willingness and eagerness for mentors to come together and share their observations and challenges in working with teachers new to our school. The feedback I have received helps to inform the process for mentoring going forward. In addition, this work with mentors confirms the cry from a few researchers who call for ongoing professional development and support for mentors.
6. Tools developed, application in new settings, dissemination in conferences, etc.
   1) The survey along with the professional development helped to inform the survey that will be used for the dissertation. This revised survey will be used for the dissertation study was piloted at the end of the school year.

7. Implications for future research:
   1) What is the benefit to the students when their novice teacher is supported through mentorship by a master veteran teacher?
   2) Much is written about the value of mentoring for the mentee; however, the mentor stands to benefit as well. In what ways do mentors contribute to the profession of teaching and the quality of schools?
   3) The results from this study may help to inform other mentor programs of the process for mentoring when teachers are asked to serve as mentors in addition to their full-time teaching load.

Other Faculty Research

*Missing in Action: An Analysis of the Policy That Governs Calculations of High School Graduation Rates in the School District of Palm Beach County, Florida*

October 2008 - In process

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<th>Grade</th>
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<tbody>
<tr>
<td>Dr. Jennifer Sughrue</td>
<td>Education/Educational Leadership</td>
<td>Terri Watson</td>
<td>12</td>
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**Abstract:** The current method and rationale used to calculate graduation rates, along with their impact on African American and Hispanic students, have become crucial factors in discussions as the No Child Left Behind (NCLB) Act is considered for reauthorization. Prompted by a recent lawsuit filed by the American Civil Liberties Union (ACLU) of Florida, my intention is to provide empirical evidence in an analysis of Florida’s calculation policy in an effort to elucidate the growing debate as to how and why specific graduation rates are utilized. Using data obtained from the School District of Palm Beach County (SDPBC), Florida, and two formulas to assess graduation rates, I constructed a 4-year trend analysis calculating SDPBC’s graduates and analyzed the results. This research may influence educational leaders to give considerable emphasis to data-informed decision-making. Only with accurate data are teachers, administrators, and policymakers in a position to evaluate whether teaching and learning in high schools are improving, to identify who is progressing and who is at risk of dropping out, and to ensure that no child is missing in action. (November 2008 – November 2009)

*Regenerative Leadership: An Integral Theory for Transforming Individuals and Organizations for Sustainability in Business, Community and Education*

November 2007 – February 2009

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<th>Principal Investigator</th>
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<th>Grade</th>
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Abstract: This study examined and compared the developmental experiences of leaders who have successfully developed their capacities to engage in and maintain a vision and practice for sustainability over time in themselves and others in business, education and community. Through the application of grounded theory as a systematic comparative method for the analysis of qualitative data, the study generated a substantive theory of leadership called regenerative leadership. This leadership approach is especially relevant at a time when humankind is faced with accelerating change and increasing evidence that numerous natural and social systems at the global level have reached or are rapidly approaching points of overshoot and collapse.