Examining the Benefits of Interactive Read-Alouds on Young Children’s Vocabulary Development: Pre-service Teachers as Researchers

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Six pre-service teacher candidates TCs, each engaged in field experiences in Kindergarten or First Grade classrooms at an urban based elementary school compared the impact of interactive read alouds and simple read alouds on children’s Tier two vocabulary meaning acquisition and usage. Each TC read a different trade book that contained at least 8 tier two words to 4 children from the classroom in which they had been assigned for field work. For two of the children, the selected text was read using 5 elaborations for each of the target words as it occurred in the text. For the other two children the same text was read without any elaborations on any of the words. Each child was then asked to retell what had been read. Each child’s usage of the target words during the retelling was noted for occurrence and accuracy of usage. Findings revealed the superiority of the interactive approach in promoting vocabulary growth as well as comprehension.

My teaching assignment at Buffalo State College includes a six credit writing intensive course in reading/ language arts methods that is facilitated at an urban professional development school (PDS). Pre-service teacher candidates (TCs) enrolled in this methods course have successfully completed the prerequisite 3 credit (45 clock hours) Introduction to Reading course; and in my offering they each engage in a three credit lecture segment offered in conjunction with a 3 credit supervised field work component. During the lecture component I provide the TCs with an overview and guiding principles for assignments to be fulfilled during the field component. Assignments include, but are not limited to, plans and implemented lessons, written assessments and reflections on practice, and a case study which includes observations of a child’s reading and other language arts performances as well as behavioral attitudes exhibited relative to instruction.

During the field work component I generally observe TCs as they implement lesson plans they have created and which have been approved by both their cooperating teachers (CT) and me. As required at this point in their training, their written plans are quite detailed with the

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procedural sections listing all the steps of widely supported teaching strategies. Yet, during the actual lesson implementations, I often note some fine (albeit important) details relative to such publicized strategies are casually eliminated, treated as inconsequential, or simply forgotten, leading to lessons that are less effective than they might have been had the details been included.

Thus it is that during the lecture segment of the course I often find myself reintroducing, demonstrating, and explaining various strategies and practices and elaborating on the importance of those fine details TCs should incorporate in lesson plan executed during as well as subsequent to their enrollment in the course. (e.g. Why categorize after brainstorming what the children know on a topic as noted in Ogle’s Know, Want to Know, Learned (KWL) strategy (1986)? Why exchange round robin reading for silent reading followed by purposeful oral reading as in Stauffer’s Directed Reading –Thinking Activity or (DRTA) (1969)). Answers to these questions are noted in the findings of numerous basic researchers.

This paper describes a research project implemented with the cooperation of six TCs completing their field experience in Kindergarten and First Grade classrooms. The purpose of the project was to have the TCs in these classrooms fulfill a case study assignment through which they would experience the effectiveness of the interactive read aloud strategy as opposed to the simple read aloud for purposes of enriching children’s oral vocabulary and retelling skills.

The Case for Interactive Read-Alouds

Even before Dolores Durkin (1966) published her classic research providing evidence of its benefits to preschool children’s early reading acquisition (1966), the practice of reading aloud daily to young children was, and still is, encouraged as a parenting as well as a teaching practice. Among other benefits, simply reading aloud to children is correlated with developing interest in books (Anderson, Hiebert, Scott, & Wilkinson, 1985), calming effects on behavior, and general reading development (Trelease, 2006). Yet within the past two decades a plethora of research has demonstrated that read-alouds are most effective when readers allows children to ask or respond to questions and make predictions about the text being read (Dickenson, 2001). Reading to children and encouraging discussion provides opportunity for children to focus and learn new words they might not absorb when passively listening (Biemiller, 2001). Dickenson and Smith (1994) as well as Beck, McKeown and Kucan (2002) have both discussed the insufficiency of

merely asking questions during read-alouds. The knowledge and usage of words among youth occurs as they construct networks of useful associations (Beck et al, 2002). If children are to develop competence in using new words, they need to have multiple encounters with each new word and its meaning. They need to hear each new word in various contexts and to be encouraged to use it in their speaking and written repertoires.

To help teachers in the process of vocabulary instruction, Beck, McKeown, and Kucan (2001) advance the notion of categorizing words into three tiers. Tier 1 words are the most basic. Most children do not need direct instruction to develop understanding of such words (e.g. boy, mother, house). Tier 2 words are lower in frequency of occurrence than tier 1 words. Such words are generally highly descriptive (e.g. murmur, rumbling, overflowing) and occur occasionally in conversation and children’s stories. Depending on a child’s background of experiences, Tier 2 words may (though not necessarily) prompt some vague familiarity and/or a low level of understanding on the part of children. Certainly Tier 2 words are not in the children’s speaking/writing vocabulary. Tier 3 words are lowest in frequency of occurrence, often because they are associated with specific content areas such as science or social studies (e.g. judicial, precipitation, longitude), though as children mature such words can become Tier 2 (and even Tier 1) words. For teachers, denoting a word as belonging to Tier 1, 2 or 3 is a judgment call guided by an understanding of the children they are working with in terms of their developmental and experiential backgrounds (Scanlon, Anderson & Sweeney, 2009, p.204)

In developing interactive read-alouds for instruction, teachers are encouraged to purposefully select a number of Tier 2 words from the text they have chosen to read aloud, and develop short explanations of their meaning using language the children can understand. During an interactive read aloud, teachers are urged to pause at points in the story where selected target words occur and interact with the children as planned with regard to the word. In line with a standard requirement for my methods course, TCs were given the option of developing a case study of children in their assigned kindergarten and first grade classrooms, as they performed as a function of interactive as opposed to non-interactive read-alouds.

**Connecting Research and Practice via Case Studies**

According to McNamara (2008), “Case studies are particularly useful in depicting a holistic portrayal of a client's experiences and results regarding a program . . . [or] . . . the
effectiveness of a program's processes." Several action research studies published in recent years have focused on how teacher educators can support TCs in making relevant connections between theory and practice. Often times these research efforts have taken the form of case studies exploring the effects of specific instructional strategies and/or practices on children’s learning (e.g. Ferrara & Ferrara, 2005; Krumsvik, & Smith 2009; Maaranen, 2009). Their findings have generally related the benefits of such activity in promoting deeper understandings about learning and instructional processes on the part of teachers in training. In a paper delivered at the AACTE conference (2009), Stooksberry, Schussler & Bercaw, relayed how a case study approach enabled teacher educators to understand how TCs reflect on intellectual, cultural and moral concerns. According to the authors, when asked to analyze cases written by others, TCs were for the most part disposed to focus on intellectual concerns--that is, finding out which instructional methodologies were most appropriate in effecting content understanding on the part of learners. Too often TC’s neglected to reflect on cultural and/or moral concerns as they related to the learner’s understandings or attitudes. The authors concluded that teacher educators should perhaps scaffold case study analyses so as to develop the TCs cultural and moral sensitivities as they related to learners with whom they worked. Stooksberry et. al.’s research methodology involved TCs in analyzing cases written by others. The project reported in this paper involved pre-service TCs in conducting case studies of actual children. In conjunction with lesson plans directed at developing word meaning through interactive vs. non interactive read alouds, the TC were asked to reflect, not only on the children’s word learning performance, but on their attitude and receptivity to the instruction as well.

Method

The project was implemented at an urban based elementary school serving as professional development site (PDS) for TCs enrolled in the Early Childhood/ Childhood Education Program at Buffalo State College. The college faculty and the school’s teachers have collaborated for over six years to provide the TCs with the real-world experiences with children and their families.

During the semester this project was implemented, the school enrolled 502 children, 96 percent of whom were African American or Hispanic. Reflecting the poverty status of the

enrollment at the school, 90 percent of the children qualified for free or reduced lunch according to the New York State Report Card.4

A teacher-enhanced version of the Harcourt Brace and Jovanovich reading series directs the school’s Reading-Language Arts curriculum, but this program is balanced with the implementation of a Project Approach curriculum (Katz, & Chard, 2000) with respect to the social studies and the other content areas. Thus, TCs engaged in field work at this PDS have opportunity to employ a variety of research based teaching strategies when planning lessons and/or curriculum; some emanating from the school’s adopted texts, while others from agreed upon themes or projects.

Since receiving its charter in 2003, the school has shown slow, but gradual, improvement in New York State mandated ELA assessments, an outcome attributable to numerous factors, part of which stem from one-on-one/small group assistance provided by TCs assigned to this site for field practices.

The Teacher Candidates

Six TCs participated in this project during the spring semester of 2009. In doing so, each of them was able to fulfill and be credited with implementing 1 of 6 required lesson plan assignments (specifically, an assigned plan directed at word meaning development), as well as the development of a written case study within which they described their course of action in the project (described below), their findings, and reflective conclusions. Three of the participants, Lindsey, Melissa, and Alyssa, employed lesson plans having similar procedures with kindergarteners enrolled in their assigned field practice classrooms. Three others (Samantha, Suzanna and Sarah) employed them with first graders, also in their respective field practice classrooms.

The Children

Four children from each of the field practice classrooms participated in study. The CTs from each field practice classroom received a written memo asking them to select four children whom they considered to be at least average in academic performance for their grade. My observations, as well as those of the TCs during the course of our previous and subsequent

4 See http://www.nysed.gov.
interactions with the children suggested each of the groups of four contained children who were in the average to high average range in ability and achievement. There were 12 girls and 12 boys who took part in the project all of whom were African American or Hispanic. No child who participated was at the zone of proximal reading development (Vygotsky, 1986) at which the chosen book was written. That is, while the listening levels of the books chosen were appropriate for the children who participated (see product details given on Amazon.com), the readabilities of the books were too difficult for them to read with ease at the time the project was implemented.

**Procedure**

Each of the TCs involved in the project selected a different trade book for use in her own phase of the project. The books were cleared by me as seemingly appropriate for the purposes of the study. That is, they were written at an appropriate listening level for early primary level children, displayed pictures on each page of the text, and contained at least ten tier 2 words that could be easily defined and used in explanatory sentences with the children. Most importantly, the books were ones that, when asked, the children noted they had not been exposed to before. Listed below are the books chosen for reading to the kindergarteners and first graders:

**Books used with Kindergarteners**

*Are Trees Alive* (Miller, 2002)  
*Mr. Archimedes Bath* (Allen, 1998)  
*Ruby the Copycat* (Rathmann, 1993)  

**Books used with First Graders**

*The Old Woman Who Loved to Read* (Winch, 1998)  
*Stella Luna* (Cannon, 1993)  
*Rooster Off to See the World* (Carle, 1991)  

Each TC constructed a lesson plan that could be implemented with or without interaction on the target words with respect to the chosen book. For the interactive (experimental) version, five elaborations were prepared for each of the 10 target words and detailed within the lesson plan procedures. Each set of elaborations consisted of at least one definitional statement and four others explaining and or appropriately using the words in sentence context. The simple read aloud version of the plan simply eliminated the elaborations.
Prior to reading the selected stories to the children, the TCs asked each of the four children assigned to them if they were familiar with any of the target words and if they could use any of the words in sentences. No strong familiarity was acknowledged with reference to any of the words; although two words were confidently accepted by a TC as having been appropriately used in context by one of the children. This led to the decision for all TC to elaborate on only 8 words that were definitely unknown as they proceeded through the interactive version of the reading.

The children, seen individually, were then each read aloud the trade book chosen by their TC, with two of the children hearing the text in the interactive read aloud condition (the experimental condition) and the other two as a simple read aloud with no interaction (the control condition). Below are the rationale and the word elaboration scenario used by Melissa on the word *overflow*, as she discussed her lesson plan in a written case study.

For the study I examined if emphasizing particularly hard words as I come across them in the story, results in the students re-using the words when recapping the story. I met each student separately and read him the story *Mr. Archimedes’ Bath*. To make sure I tested the technique and could compare results, I emphasized the words for only two of the students; and for the other two, I just read the story as normal. The words I chose to emphasize were second tier words, or words that they were not familiar with. The words were: *overflowed, depth, rose, puzzled, measured, angry, responsible,* and *eureka*. An example of my emphasizing the word as I came across it would be to say the word “overflowed.” I would point and say something like,” See in the picture how the water is overflowing onto the floor?” I would ask a question such as “Does the water overflow whenever you get into your bathtub? “. I might say “The water goes all over the floor when the water overflows. What do you think is making the water overflow?” The important thing for me was that I reuse the word five times in context.

After the stories in either condition had been read, the TCs asked each child to retell what the story was about. This was done as the TC and child leafed through the text together page by page with the TC using the picture in the text to prompt the child’s retelling or response.
All the TC’s used an adaptation of a method used in an action research project by Smith (2008) to tabulate the words used and not used by the children during their retellings. Table 1 below illustrates the words tabulated by Lindsey as her kindergarteners in each condition responded to *Ruby the Copy Cat*

**Table 1. Four Kindergarteners Vocabulary Acquisition Following Read-Alouds in Two Conditions**

<table>
<thead>
<tr>
<th>Target Words</th>
<th>Read Aloud with Multiple Interactions</th>
<th>Read Aloud with No Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anisa</td>
<td>Angel</td>
</tr>
<tr>
<td>announced</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>tiptoed</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Coincidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modeled</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Recited</td>
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<td></td>
</tr>
<tr>
<td>Murmured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scribbled</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Plopped</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5/8</strong></td>
<td><strong>4/8</strong></td>
</tr>
</tbody>
</table>

**Findings**

Similar findings in favor of the interactive read aloud condition were posited by the other five TCs with regard to the trade books they had chosen for project implementation. The total number of words used by the children while retelling and/or in response to teacher prompts were 48 in the interactive condition as opposed to 10 in the simple read aloud condition. Results from the one TC (Sarah) who noted the simple read aloud as slightly more effective gave rise to a great deal of discussion during a class debriefing session with respect to factors that may have intervened, to produce contrary results (e.g. the experimental procedures were implemented too close to lunch time; the book *Stella Luna* was too long, etc.). Some discussion centered, too, on experimental variables, and the rationale for having 6 TCs implementing similar procedures with different trade books in the attainment of overall results—a discussion which will hopefully impact the TC’s future consideration of research procedures in their field. It appeared quite clear however, that because 5 out of 6 TCs achieved results in favor of interactive read-alouds, then we could say with some level confidence that that interactive read-alouds were generally more effective than simple read-alouds in achieving the objectives of the lesson plan.
Interestingly, in her written case study discussion of the contrary group, Sarah noted that the children’s retelling in the interactive read aloud condition was surprisingly better even though the vocabulary words were not used in the retelling: “However I did notice that they seemed to have a really good understanding of what was going on in the book, even though they did not reuse the words I had emphasized.”

**Discussion and Conclusions**

As noted, for each of the TCs the results of their own piece of the research project was written in the form of a case study (see Appendix A). It seems from their own case study discussions, that for all the TCs enrolled in this pre-student teaching methods class, the use of a teacher researcher approach in conjunction with lesson planning directed toward a specific learning goal clearly resulted in some positive training outcomes. The impact of interacting during a read aloud for purposes of building vocabulary and/or for improving retelling response to literature on the part of children was both quantitatively and qualitatively observed by all the TC participants. As Alyssa noted, “It is quite evident that interactive read-alouds influence vocabulary development and reading comprehension. Describing and emphasizing vocabulary words helps students to better comprehend stories. Lindsey concurred. “The interactive read aloud produced . . . an obvious difference in outcomes and showed that multiple interactions do, in fact, make a significant difference.”

Additionally, the TCs had the opportunity to experience the exhilaration that comes from a practice skillfully implemented within a teacher as researcher process. Having systematically applied an appropriate evaluative component, they also became aware of the impact of a well constructed lesson on a learner’s attitude. As noted by Samantha in one of her reflective statements, “I was so impressed by the outcomes. Paul used every word except company during his retell of the story. That he was happy about his performance was evident from his big smile when we walked back to his classroom.” Similarly, Suzanna noted: “I felt so good after each of the interactive read-alouds. I could see that what I had done really made the children feel successful.”

Certainly, the pride that goes with their accomplishments as teacher researchers
led this group of TCs to go a step beyond the course requirements and to develop a proposal for a poster presentation of their joint finding at the college’s Student Research and Creativity Celebration – a two day weekend event late in April 2009 in which they all participated.

As an instructor, I was pleased to find the impact of integrating a teacher as researcher assignment within the scope of my course requirements was feasible and beneficial, and am planning on developing further opportunities where other teaching practices can be similarly evaluated by pre-service TCs. Certainly the opportunity to enable such experiences is easily possible when methods classes are implemented in Professional Development Site situations where partnership with cooperating teachers is a given.
References


Appendix A

Lindsey Martin
Case Study Research Project

The research project that I completed was conclusive in the findings that children’s vocabulary can be influenced by multiple interactions with specific words. The words were used from the book *Ruby the Copycat* by Peggy Rathmann. I chose eight Tier 2 words to implement in my research: announced, tiptoed, coincidence, modeled, recited, murmured, scribbled, plopped. For the first two students I engaged them with multiple interactions on each of eight words. For the second two students I read the book without any special attention to the words. The results are as follows.

The first student I chose, Anisa, is an intelligent kindergartener who was excited to listen to the book as I read it. She was the most responsive to the Tier 2 word interactions. For example, when I described “tiptoed” I whispered the word. When asked to retell the story, Anisa whispered the word just as I did. Anisa is an ambitious young girl when it comes to school work. She always is one of the first to finish her work and she goes above and beyond. Even when she is doing bell work in the morning she gets two or three sheets done when most students barely finish one. Anisa caught on that the words I was discussing were important to the story. In the story a little girl reads a poem. Anisa remembered that she read a poem and she remembered what it was about. Anisa used five of the eight words in her retelling. She needed to be prompted to use all of the words except for tiptoed and plopped. Two of the words that Anisa did not use in the retell I realize may have been too difficult. When I asked Anisa to repeat the words coincidence and murmured she had difficulty. The fact that Anisa used five of the words during her retelling of the story supports the theory of multiple interactions.

The second child I did the reading with is a kindergartener as well. He is an ESL student but has strong reading, writing, and comprehension skills for a kindergartner. Angel seemed really interested in the story. He was pointing out details in the pictures and picking up on funny things as I was reading. He noticed things that other kids his age don’t usually pick up on. Angel also asked a lot of questions as I was reading which shows that he was truly trying to comprehend the story. When I asked Angel to retell the story he used four out of the eight Tier 2 words. He struggled with announced, recited, murmured, and plopped. Announced and
*murmured* were two words that Anisa struggled with as well. Both students are bright so I think it is safe to assume the two words that were commonly missed by both students were too difficult to use in this research project.

When I read the book with Destiny I did not emphasize or discuss any of the Tier 2 words. Destiny is a very bright girl with a lot of behavioral problems. She never does her homework and seems to need a lot of attention. When doing any ELA work in centers she will pretend she doesn’t know an answer purposely to get attention. She is definitely one of the smartest kids in the class but her desire for attention seems to affect her learning. Destiny used the two words *tiptoed* and *scribbled* in the retelling of the story. She said scribbled without any prompting at all. She also remembered a lot of the story, even when the pictures weren’t a direct representation of the text.

With Derek, just as with Destiny, I didn’t emphasize any specific vocabulary words. Derek is probably the best behaved student in the entire class. He always does his work neatly and correctly, he never shouts out, and he is very polite. Derek also does well academically. He can use inventive spelling and distinguish between different letters and sounds. When reading the book with Derek I didn’t spend any extra time on the specific Tier 2 words. When Derek retold the story he did not use a lot of detail. I would flip the page and ask Derek what happened next and he basically just told me what the picture was on each page. I had to prompt quite a bit to get him to use any details at all. Derek did not use any of the Tier 2 words in his retelling. The unknown vocabulary may have had an impact on Derek’s understanding of, and interest in, the story. I feel as if I had explained the words to Derek he would have been able to use more detail in his retelling. Derek is an excellent example of how difficult vocabulary, if not explained or discussed, can impact a child’s ability to read, listen, and comprehend.

The findings of this action project with four students support the idea of providing multiple interactions with a word in context to impact a child’s acquisition of vocabulary. The students who I used multiple interactions with during the reading used four and five of the eight words in their retelling of the story. The students who I didn’t use the multiple interactions with used zero and two Tier 2 words in their retelling of the story. That is an obvious difference in outcomes and it shows that multiple interactions do, in fact, make a significant difference.