INQUIRY CIRCLES AS A VEHICLE FOR COMPREHENDING INFORMATIONAL TEXTS:
PRE SERVICE TEACHERS’ REACTIONS AND PERCEPTIONS

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ABSTRACT

This study was conducted to explore teacher candidates’ reactions and perceptions regarding their participation in inquiry circles and to discover how the experience influenced their comprehension of an informational text. The 98 teacher candidates involved in this study were enrolled in a children’s literature course at a four-year university. The three instructors routinely employ literature circles using fictional texts to expose their students to reading response techniques, but were interested in finding out how teacher candidates would transfer this learning to an informational text. The results of the study indicated that many of the teacher candidates were unaware of their own strategy use in regard to reading comprehension in general, but found inquiry circles to be a beneficial vehicle to increase their own understanding of informational texts, as well as a positive teaching method to utilize in their future classrooms.

Keywords: inquiry circles, literature circles, comprehension, preservice teacher candidates, informational text

Comprehension of a variety of different genres remains a critical, lifelong skill that impacts learning across the curriculum. Research studies investigating comprehension reveal that when individuals discuss a text, their understanding improves and their motivation to read increases (Almasi, 1995; Gambrell & Almasi, 1996). Literature circles and inquiry circles provide students with a motivating interactive response strategy that can be used to enhance understanding of many genres of texts. Through participation in a “culture of inquiry” across the curriculum, students benefit not only in the content areas, but in social learning as well (Mills & Jennings, 2011, p. 590; Vygotsky, 1978).

The National Council of Teachers of English (NCTE) endorses instructional practices in which students interact with other readers and writers in a variety of literacy communities (ILA/NCTE Standards, 2012). Standard Five of the International Literacy Association’s Standards for Reading Professionals (ILA, Revised 2010) specifically encourages teacher candidates to create a literate environment that fosters reading and writing skills while affording students the opportunity to construct knowledge in meaningful ways within a safe, low-risk social environment. Thus, the NCTE and the International Literacy Association (ILA) would consider literature circles and inquiry circles as a best practice in teaching reading. Additionally, the Texas State Board for Educator Certification provides standards for beginning educators, which are based upon the literacy criteria stated in the Texas Essential Knowledge of Skills (TEKS) English Language Arts and Reading standards (TEA, 2016). The Texas State Board for Educator Certification Standards require...
preservice teachers to know “the importance of reading for understanding, know the components of comprehension, and be able to teach young students strategies for improving comprehension” (TEA, 2016, pp. ii and 11).

**LITERATURE CIRCLES/INQUIRY CIRCLES DEFINED**

Literature circles are groups of individuals, guided by a common interest in a fictional text, who meet together to discuss ideas related to the reading (Daniels, 2002; Daniels & Steineke, 2004). Inquiry circles are groups of individuals who read and discuss an informational text to enhance and extend their comprehension of the topic (Harvey & Daniels, 2009). Each group member contributes by preparing strategies ahead of time as a guide for the discussion (McCall, 2010). This focus on a continuum of reading comprehension skills contributes to the overall understanding of the targeted text.

After group members read an assigned or agreed upon portion of a chosen text, the student-led discussion groups meet to engage in authentic conversations that include a variety of comprehension approaches such as determining main ideas, making comparisons and connections, using cause-and-effect relationships, summarizing, making predictions, drawing conclusions, making generalizations, questioning, visualizing or mental imagery, determining importance, synthesizing, and monitoring (Daniels, 2002; Daniels & Steineke, 2004; Harvey & Daniels, 2009; Harvey & Goudvis, 2000; Keene & Zimmerman, 1997; Lloyd, 2004; TEA, 2016; Tompkins, 2014; Zimmerman & Hutchins, 2003). Thus, literature circles and inquiry circles can equip students of all ages with literacy skills that transfer across the curriculum, promote critical thinking and enhance the pleasurable effects of reading which, consequently, lead to life-long reading habits.

Over the years, many studies have been conducted in various grade levels using literature circles to teach reading (Daniels, 2002; Diego-Medrano, 2013; Klingner, Vaughn, & Schumm, 1998; Lloyd, 2004; Long & Gove, 2003; Sanacore, 2013; Stien & Beed, 2004). However, there have been fewer studies focused on inquiry circles (Maduri, Walker, Landmann-Johnsey, & Laughter, 2015; McCall, 2010; Vaughn Allen, Kologl, & McGowan, 2015; Wilfong, 2009). This study focused on preservice teachers’ abilities to intuitively transfer and adapt knowledge of comprehension strategies from an aesthetic stance to an efferent stance (Rosenblatt, 1978; Stien & Beed, 2004).

**BACKGROUND**

In today's educational scene, high levels of comprehension are required by all students to pass rigorous high-stakes tests and to apply complex thinking skills in the competitive workplace. As students participate in inquiry circles, higher order knowledge can be developed within the context of the important 21st Century soft job skills of communication, interpersonal skills, and teamwork (Robles, 2012). To gain these critical comprehension abilities, students rely upon their teachers to explain and model how the hidden skills of comprehension work. In an inquiry circle, students are then able to practice these skills within a safe, low-risk, social environment (ILA, 1999).

In order to describe and teach comprehension strategies, teachers need to have a well-developed understanding of multiple comprehension strategies and knowledge of how to explicitly teach these strategies to their students (Pressley, 2002). Do preservice teacher candidates have a solid enough foundation regarding how to teach comprehension, or much less know and/or personally use multiple comprehension strategies? As instructors, we believed that an inquiry circle experience would be an appropriate vehicle to explore how these soon-to-be teachers would use
comprehension strategies while reading and discussing informational books. We had successfully utilized the literature circle approach with fictional texts for several years and wondered how our teacher candidates would transfer the various strategies to aid their comprehension of an informational text. This speculation led us to design a qualitative research study to gain additional insight.

The purpose of this study was to explore the perceptions of preservice teacher candidates regarding the academic and critical thinking value of using inquiry circles to facilitate the comprehension of informational texts. This instructional approach has traditionally been used with fiction, as was the case in this course, but we were interested in understanding how our university-level students would adapt the roles and comprehension strategies in discussing informational texts (Stien & Beed, 2004). Rather than the researchers simply creating a new strategy better suited for informational books, our purpose was to observe how teacher candidates would approach the task of discussing informational texts and if they would adapt or create new strategies on their own. Therefore, the research questions addressed in this study were:

1. What are preservice teachers’ perceptions regarding the academic value of adapting fiction related literature circle strategies to an informational text structure?

2. How did adapting literature circle strategies designed for a fiction text to a nonfiction text affect preservice teachers’ comprehension of the informational text?

3. What are preservice teachers’ perceptions regarding the critical thinking value of adapting fiction related literature circle strategies to an informational text structure?

RESEARCH DESIGN

The researchers chose a qualitative design involving three case studies to understand the phenomenon of inquiry circles in a Children’s Literature course and to investigate the perspectives of the preservice teachers enrolled in the course. This design enabled the researchers to explore a variety of methods “to understand the way people think about their world and how those definitions are formed” (Bogden & Biklen, 2003, p. 31). This qualitative research methodology allowed the researchers to study the experience in a natural setting to gain authentic insights from the collected data. The methods used to collect the data included informal observations, comprehension role sheets, quick write responses, and three separate narrative surveys completed by the participants. The data from these sources was then triangulated to facilitate validity (Patton, 2005). This research design allowed the researchers to make sense of the data collected and uncover characteristics significant to the study.

PARTICIPANTS

The participants involved in this study were 98 preservice teacher candidates seeking certification through our educator preparation program. The participants were enrolled in one of three sections of a children’s literature course taught by one of the three researchers. This convenience sampling provided the researchers with a population that would be well-suited to gain insights about the research questions and in understanding the topic of study. Study participants were provided anonymity through the use of an online survey software which provided each one with a unique identification number.
PROCEDURES – DATA COLLECTION
The data collected for this study involved survey questions, quick writes, literature circle role sheets, and final exam essay questions. This information was collected over the course of the semester in all three sections of the course. Questions were sent to the students through an online survey link at the beginning of the study, at mid-semester, and after the final meeting of the inquiry circles. Class members were required to complete a comprehension role sheet prior to each time they met with their group, and after the meeting they were required to respond to a quick write prompt. The prompts were:

Fiction:
1. Explain how the group experience enhanced your understanding of this section of the book.
2. How did your strategy specifically contribute to the discussion?

Informational:
1. Explain how the group experience enhanced your understanding of this section of the book.
2. How did you adapt your literature circle strategy to the informational text?

The quick write summed up the ideas and topics that were prevalent or significant as the students discussed the text within their groups. All data collected were a part of the required assignments for the course.

The comprehension role sheets helped to provide the participants with a consistent place to record notes while reading the assigned text. These pages also provided the participants with a targeted comprehension strategy to focus on during their reading. Figure one below provides the name of the role, the comprehension strategy/strategies addressed and a brief description of each role utilized in the study. These are the specific roles that candidates were required to prepare while responding to the fiction book chosen during their first and second exposures to literature circles. The third exposure was the inquiry circle. The study analyzed how participants modified the comprehension strategies explained in Table 1 to better suit the informational text structure.
### Table 1. Reading Comprehension Strategies Defined and Aligned for Each Role

<table>
<thead>
<tr>
<th>Name of the Role</th>
<th>Comprehension Strategies Utilized</th>
<th>Brief Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector</td>
<td>Synthesizing; Making Connections</td>
<td>Explain personal connections to the book being read. This could be text-self, text-text, or text-world connections.</td>
</tr>
<tr>
<td>Discussion Director</td>
<td>Questioning</td>
<td>Create thoughtful, higher-order thinking questions about the book to stimulate discussion within the group</td>
</tr>
<tr>
<td>Passage Master</td>
<td>Determining Importance</td>
<td>Select sentences or paragraphs which spotlight something interesting, powerful, funny, puzzling, or important from the text to spark discussion with members of the group</td>
</tr>
<tr>
<td>Time Liner</td>
<td>Sequencing; Summarizing</td>
<td>Sequence the events in the order they occurred in the story by creating a time line of the important happenings that took place in the targeted section of the book.</td>
</tr>
<tr>
<td>Vocabulary Enricher</td>
<td>Inferring, Monitoring</td>
<td>Highlight important or significant words in the reading that are puzzling or unfamiliar. Define and clearly explain them to your group members</td>
</tr>
<tr>
<td>Fact Finder</td>
<td>Activating Background Knowledge; Connecting;</td>
<td>Find reference in the reading section that relates to a real-life event or fact – then research it to share with members of the group</td>
</tr>
<tr>
<td>Open-Mind Portrait</td>
<td>Visualizing</td>
<td>Analyze a character from the book by visually representing them. Include both internal and external influences on the character.</td>
</tr>
</tbody>
</table>

### Data Analysis

After collecting the preliminary, midpoint and post survey data using the survey software link, each researcher individually analyzed the participants’ responses and used open coding to identify and categorize common responses and patterns echoed by the candidates when answering the question prompts. The researchers collaboratively conducted axial coding of the data in order to identify salient themes and iterations found in the candidates’ responses (Strauss & Corbin, 1990). The researchers triangulated the data by analyzing the quick write comments completed after each circle, the role sheets submitted by each of the participants, the informal observational data collected by the professor during group discussions, and the candidates’ final exam essay responses. We conducted simple statistical analysis and organized the information into tables for ease of reporting. Finally, direct quotes from various participants were selected to further support and enhance the findings with thick, rich description (Creswell & Miller, 2000).

### Findings and Discussion

One of the learning outcomes of the children’s literature course is to expose teacher candidates to high-quality children’s literature while helping them learn how to apply research-based classroom
practices to support literacy development (AACU; InTASC, 2013). To accomplish this goal we provided preservice teachers with an opportunity to experience the instructional strategy of literature circles and inquiry circles through authentic participation in small discussion groups as a part of their regular course requirements (Daniels, 2002; Daniels & Steineke, 2004; Day, Spiegel, McLellan & Brown, 2002; Harvey, 2002; Harvey & Daniels, 2009; Lloyd, 2004; Maloch & Horsey, 2013; Ness, 2016; Stien & Beed, 2004). After taking part in these groups, candidates were encouraged to reflect upon the use of literature circles and inquiry circles with their future students. The data collected from the three surveys (before, during and after), the participants’ personal quick write responses, and the actual assignment role sheets provided insight into how this experience affected the teacher candidates’ understanding of reading comprehension strategies, their comprehension level of the selected texts used for the discussion groups, and their confidence in using this type of reading response framework in their future classrooms (Daniels, 2002; Rosenblatt, 1978).

We also found that most of the preservice teachers who participated in this study thought the experience of being involved in small discussion groups positively impacted their comprehension of the text and helped them to develop a more cohesive learning community. A summary of the findings and a detailed discussion is organized by each of the research questions:

What are preservice teachers’ perceptions regarding the academic value of adapting fiction related literature circle strategies to an informational text structure?

We found the involvement in literature/inquiry circles facilitated a stronger and more positive classroom culture at the university level. Through participation in these small discussion groups, these undergraduates began to feel more comfortable around their classmates as they had multiple opportunities to talk with others outside their usual peer group. They were able to practice professional conversational skills within the safety of a defined group and overall they developed more positive interactions within the classroom. Not only did they value the oral discussion aspect of the group experience, but they also learned how important active listening skills, such as eye contact and displaying positive body language, can be in fostering a positive collaborative experience with others.

According to the participants’ responses, the ability to discuss with their peers not only helped them comprehend the book better, but the experience also allowed them to create a bond due to the commonalities and connections made through the interactions. As group members shared their personal background experiences, their social connections and depth of understanding grew stronger. Therefore, these responses highlighted the critical importance of social interaction in the development of deeper understanding as described by Lev Vygotsky (1978).

Through the focused discussion of informational texts in particular, the participants were able to experience other viewpoints they might not have previously considered. They considered this interaction to be “eye-opening” because they had not thought about the topic from a different perspective before this experience. This quote from one of the participants was selected to illustrate the academic value of being a member of an inquiry group: “Everyone in my group got along really well and we developed friendships and even cared about each other outside the [literature/inquiry] circle. It gave us the chance to be understanding, listen to each other patiently, and practice tolerance of differing viewpoints.”

Communication and collaboration are the “soft skills” that are required in the 21st century workplace, so it is important to teach, practice and nurture these skills whenever possible.
Literature circles and inquiry circles are structured in such a way that students are able to enhance their comprehension and practice the communication skills in a nonthreatening manner.

**How did adapting literature circle strategies designed for a fiction text to a nonfiction text affect preservice teachers’ comprehension of the nonfiction text?**

We found that the preservice teachers who participated in this study thought the experience of being involved in small discussion groups positively impacted their comprehension of the text and helped to develop a more cohesive learning community.

In the preliminary survey, participants were asked, “What kinds of reading comprehension strategies do you use when you read?” The responses from 98 preservice teachers revealed this group of individuals seemed to exhibit limited knowledge of reading comprehension strategies they personally used prior to their exposure to literature circles and inquiry circles. We calculated the percentage of respondents who described similar comprehension strategies and have reported these in the graph below (see Figure 1).

![Figure 1. List of most common responses given by participants when asked what comprehension strategies they used when reading a text.](image)

One of the most common strategies described by the participants was determining the meaning of unknown words. Almost half of the teacher candidates (49%) mentioned using this strategy. From this subgroup, 19% said they used context clues most often to assist them in understanding the meaning of new or unfamiliar vocabulary terms, while 30% of the subgroup made use of an electronic dictionary definition to clarify the meaning of the unknown word. The other most-used strategy mentioned by 49% of the participants was simply rereading a section of a text to clarify their understanding.

We noted that 9% of the respondents described the test-taking, skill-based strategy of highlighting important information in the text, and 2% of respondents listed the strategy of simply skipping an unknown word as a comprehension strategy. A few of the participants (3%) were unsure or unaware of any comprehension strategies they used while reading, which may not necessarily indicate that they do not use comprehension strategies, but that the strategies have never been distinguished as such to them or perhaps they did not feel confident in describing any
comprehension strategies. The data from this study indicated the three most common strategies used by this group of university students were (1) determining the meaning of unknown words, (2) rereading a section to clarify understanding, and (3) making notes.

Additionally, we analyzed the survey responses to find out if candidates made use of multiple comprehension strategies. The findings disclosed the participants in this study relied upon one, two, or three strategies to help them make meaning of a text (see Table 2). The three most often cited methods relied upon by the study participants represent the broad reading comprehension strategy known as monitoring; therefore, the findings reflect the participants do not rely upon a wide range of strategies to gain deeper understanding.

Table 2. Percentage of Comprehension Strategies Use by Participants

<table>
<thead>
<tr>
<th>Strategies</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Undetermined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3%</td>
<td>32%</td>
<td>30%</td>
<td>22%</td>
<td>8%</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

The soon-to-be teachers in this study stated their participation in the inquiry circle experience enhanced their comprehension of the informational books they read. They expressed many positive aspects of discussing the texts with their peers, which aided their comprehension. They also mentioned how the responsibility to the group members influenced the effort they put into comprehending the text at a higher critical thinking level. One participant explained this experience with these words: “The expectation of the group discussion forced me to find out more about the subject and I really had to read (not just “fake read”) in order to participate.”

It appears that many preservice teacher candidates enter college unaware of the wide range of reading comprehension strategies that can provide study support. From the participants’ responses, it seems they have limited and varied prior knowledge or understanding of how useful these strategies and skills can be in regards to comprehension across all content areas.

What are preservice teachers’ perceptions regarding the critical thinking value of adapting fiction related literature circle strategies to an informational text structure?

As educators we must comply with state mandated curriculum standards. Additionally, as college professors, we are also responsible for following the educator standards to ensure our preservice candidates are prepared for their certification exams (TEA, 2016). The traditional practice of implementing these standards has been the “sit and get” method of instruction without explicit instruction in how to teach comprehension strategies (Durkin, 1977). A more teacher-centered method of instruction may inhibit students from thinking outside of the box and perhaps produce individuals who fulfill requirements, yet lack resourcefulness and innovation. Although we are required to comply with the standards, we do have a choice about how we can implement them for student success. Fortunately many educators have now taken the lead in designing effective instruction that is engaging and student centered to provide active participation (Daniels, 2002; Daniels & Steineke, 2004; Day, Spiegel, McLellan & Brown, 2002; Harvey, 2002; Harvey & Daniels, 2009).

Teachers’ perceptions regarding the critical thinking value of adapting fiction related literature circle strategies to informational text structures were mentioned with both a positive and a negative connotation. Participants in this study shared they generally completed assignments just...
because that was what their teacher(s) told them was required of them, but without a complete understanding of why or how an activity or assignment might help them learn a concept. We found this to be true as well since the preservice teachers in this study followed the compliant pattern of completing the assignment without much regard as to what they were learning about literature/inquiry circles or how this strategy might be applicable to their future career. They dutifully completed the nonfiction role sheets and responded to the questions regarding adapting the roles, yet we found little hard evidence that they changed their approach to the task or addressed the comprehension task through an aesthetic or efferent stance. Many shared that adapting the strategies for informational books was "difficult," yet did not strive to create a unique response. A participant said, "I had to adapt by using crucial thinking skills to figure out what event connected with the book."

Preservice teachers’ perceptions regarding the critical thinking value of adapting fiction related literature circle strategies to an informational text structure is also manifested as our university students reflected upon their past K-12 school experiences. Some recalled participating in small group discussions with their peers for previous class assignments; however their former teachers did not call this instructional strategy by the term "literature circles." The participants shared that most of these experiences were either highly structured and tied to a specific assessment or very informal and unstructured with little relevancy or responsibility.

Conversely, other participants shared that their former teachers had explained they were working in "literature circles," but the experience was very different from what they participated in during the Children's Literature Course. In their previous literature circle experiences, they felt as if they were passively going through the motions and had a very shallow understanding of the purpose for their discussions.

The perception of critical thinking as it pertains to adapting literature circles to informational text structure focused on the presence or absence of deeper processing of the informational texts. We found that the discussion groups definitely helped the participants understand the books at a higher level, and the interaction with classmates positively enhanced their critical thinking. They appreciated the variety of perspectives offered by the group members and enjoyed talking about the books with their peers. However, when we analyzed their responses we discovered little evidence supporting the fact that they had internalized the differences in text structures between fiction and informational genres. It seemed as though the participants were only at a novice level in their ability to adapt the strategies for the unique aspects of informational writing. We noted that overall the participants in this study gave little thought to how they would adapt the strategies for nonfiction texts and responded in much the same way as they had for the fiction books used in the previous literature circle for this course.

We intentionally did not model the problem-solving needed to adapt the roles to informational texts in order to ascertain what the participants would do on their own. Since the strategies were used for fiction, we wondered if the students would see the need to change or adapt a strategy (Wilfong, 2009; Stien & Beed, 2004). One of the desired educational outcomes of our educator preparation program is to develop critical, creative thinkers, and we wanted to discover how our candidates would go about developing innovative solutions to approaching an informational text within the framework of their literature circle experience. We found very little problem-solving was used to adapt or transfer the comprehension strategies to match the unique structural characteristics of the informational books chosen.
IMPLICATIONS
Eventually, these preservice teachers will be working with young students to help them learn various reading comprehension strategies. Since this is such a foundational learning skill, this is an area that educator preparation programs need to strengthen. We should not just “assume” that because individuals plan to become teachers, they already use multiple comprehension strategies and fully understand how to confidently share these strategies with students. We must go beyond teaching “test-taking skills” to help all students realize that reading comprehension strategies not only help readers understand the written word, but also help them think critically as they “read the world” (Freire, 1970; Rosenblatt, 1978).

We must strive to develop a culture of collaboration where teachers and students regularly use a variety of communication skills to establish a positive school or work environment. Literature/inquiry circles can enhance students’ reading, writing, listening, speaking, and teamwork skills, which promote more robust critical thinking and cognitive development. The results from this study reiterated the importance of explicitly modeling comprehension strategies to scaffold students’ development of critical thinking skills. Since we noted that this group of university students approached informational texts in much the same manner as they read fiction texts, we see a significant need to help teacher candidates understand the unique elements of various genres and to provide all readers with strategies and skills necessary to comprehend multiple text structures.

An unexpected and surprising finding that emerged from the analysis was that participants placed a high value upon having group members from various generations involved in their discussions. Perhaps this might translate into having older mentors or volunteers participate in literature/inquiry circles in schools to help foster intergenerational viewpoints. Differing perspectives could help young students experience the texts they are reading through a different lens, which could possibly deepen their understanding.

CONCLUSION
As we prepare the next generation of educators, we should strive to provide preservice teacher candidates with meaningful and purposeful instructional methods such as inquiry circles that can help learners become independent readers and meaning makers and to comprehend at deeper levels (Rosenblatt, 1978). Future educators must understand the relevance of active and student centered classroom instruction. Engaging preservice teachers in literature/inquiry circles can provide them an opportunity for meaningful practical experience and critical reflective thinking as they prepare to teach children.

REFERENCES


INQUIRY CIRCLES AS A VEHICLE FOR COMPREHENDING INFORMATIONAL TEXTS


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