

3-14-2017

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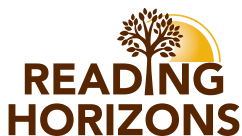


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Recommended Citation

Rosaen, C. L., Meyer, A., Strachan, S., & Meier, J. (2017). Learning to Facilitate Highly Interactive Literary Discussions to Engage Students as Thinkers. *Reading Horizons: A Journal of Literacy and Language Arts*, 56 (1). Retrieved from https://scholarworks.wmich.edu/reading_horizons/vol56/iss1/4

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Abstract

Helping novices learn to facilitate interactive whole-class discussions is an important “high-leverage practice” for becoming an effective teacher due to its strong potential to increase students’ learning opportunities. A semester-long classroom-based assignment in a senior-level elementary literacy methods course supported preservice teachers in developing the practice of leading one text-based interactive literary discussion, along with learning to establish norms and routines for discussions, and to analyze instruction for the purpose of improving it. Analysis of 83 preservice teachers’ written work investigated their learning during the beginning stages of developing the complex practice of leading discussions. We propose a learning trajectory outlining three areas of development that may offer direction for helping preservice teachers improve in specific areas and provide a focus for future research.

KEYWORDS: preservice teachers, elementary literacy, dialogic teaching, discussions

Scholars advocate teaching instructional practices systematically as a central focus of teacher preparation (Ball & Forzani, 2009; Grossman, Compton, Igra, Ronfeldt, Shahan et al., 2009). For example, learning to facilitate interactive whole-class discussions is widely recognized as an important “high-leverage practice” that is central to becoming an effective teacher due to its strong potential to increase pupils’ opportunities for meaningful learning (Ball & Forzani, 2009; Grossman, Hammerness & McDonald, 2009;

Shanahan, Callison, Carrier, Duke, Pearson et al., 2010). There is ample evidence that highly interactive classroom discussions focused on the meaning of texts result in literacy achievement gains and improved communication skills (Langer, 1995; Lawrence & Snow, 2011; Murphy, Soter, Wilkinson, Hennessey & Alexander, 2009; Nystrand & Gamoran, 1991). Langer (1990) argues further that, "...beginning a discussion with an open-ended question that taps students' understandings (not the teacher's) is a powerful way to invite students to be thinkers" (p. 816). Developing one's practice to achieve these purposes is a complex undertaking that requires a high degree of teacher knowledge and skill.

Because developing proficiency may take years, it is important to articulate which elements of leading discussions preservice teachers should focus on and what types of supports they need to promote their initial learning (Grossman et al., 2009; Kucan & Palincsar, 2011; Rosaen, 2015). Preservice teachers also need to develop the capacity for continual and systematic analysis of their classroom teaching in order to learn from and revise their practice based on evidence (Hiebert, Morris, Berk & Jansen, 2007; Schon, 1990).

This exploratory descriptive study took place in a senior-level elementary literacy methods course. We designed a semester-long classroom-based assignment, *The Language Arts Lesson and Reflection Project*, to support preservice teachers in taking initial steps in working toward developing the practice of leading an interactive literary discussion. Such discussions are characterized by teachers and students constructing meaning collaboratively through exchanges that center around asking authentic questions, engaging participants in analysis and critical thinking, and building on student ideas (Almasi, 1996; Cazden, 2001; Kucan & Palincsar, 2013; Nystrand & Gamoran, 1991). We also focused on two related high-leverage practices necessary for leading discussions and learning from them: establishing norms and routines for classroom discussions, and analyzing instruction for the purpose of improving it (high-leverage practices). We analyzed 83 preservice teachers' written work to investigate what they learned from their initial experience in planning, teaching, and analyzing a whole-class discussion. This study contributes to understanding the learning made possible during the beginning stages of developing the complex practice of leading discussions. We propose a learning trajectory outlining three areas of development (lesson design, knowledge and beliefs, and professional learning) that may offer direction for helping preservice teachers improve in specific areas and provide a focus for future research.

Theoretical Perspective and Literature Review

Fostering Highly Interactive Discussions in Language Arts

From a sociocultural perspective (Vygotsky, 1978), engaging in interactive discussions deepens conceptual understanding (Applebee, Langer, Nystrand, & Gamoran, 2003); improves student achievement (Murphy et al., 2009; Nystrand & Gamoran, 1991); and promotes higher-level thinking, reasoning, and communication skills (Langer, 1995; Lawrence & Snow, 2011). These interactions promote what Nystrand and Gamoran (1991) referred to as *substantive student engagement*, which is a cognitive process that includes "the attention, interest, investment, and effort students expend in the work of learning" (Marks, 2000). Such engagement involves interaction among both teachers and students and is inherently social in nature (Nystrand & Gamorna, 1991). Literacy teacher educators must help preservice teachers learn to provide opportunities for students to construct meaning collaboratively through a dialogic model of instruction that promotes analysis, reflection, and critical thinking (Almasi, 1996; Cazden, 2001; Kucan & Palincsar, 2013).

The Common Core State Standards for English Language Arts outline national expectations for learning in the United States and emphasize the integrated nature of reading, writing, speaking, and listening (NGA & CCSSO, 2010). The standards highlight the importance of the texts students read, literacy skills, and strong communication. Therefore, students need to learn about the various characteristics that define specific genres (Chapman, 1999) along with a range of skills and strategies that will help them respond to, interpret, analyze, and critique within and beyond texts. Within a dialogic model of instruction, as students convey thoughts and opinions about text, they contribute, experience, and consider many perspectives and often use others' opinions to form their own ideas as they move toward understanding (McIntyre, 2007).

Learning to Facilitate Discussions in Language Arts

Almasi (1996), Goldenberg (1992/1993), Langer (1995), and Kucan and Palinscar (2013) have provided advice for teachers to purposefully select and analyze literary texts, plan for effective questioning, and provide explicit support for students to learn how to participate in discussions. Because dialogic teaching, by its very nature, is not predictable, the ability to realign goals during discussions in relation to student contributions is also important (Boyd, 2012).

Grossman, Compton, and colleagues (2009) advocated “representing” the different ways an instructional practice can be enacted and “de-composing” practice in order to make its constituent parts explicit for preservice teachers. For example, interactive discussions that elicit high-level thinking and co-construction of knowledge require teachers' skillful use of several components: open-ended questions, careful listening, probing student responses to encourage elaboration and key linkages among ideas, and fostering interaction among students (Matsumura, Slater & Crosson, 2008). Because learning to bring multiple components together during classroom discussions is challenging, opportunities to “approximate” the types of activities teachers engage in permits novices to try out different components of practice prior to bringing them all together (Grossman, Compton et al., 2009).

Studies on elementary preservice teachers' learning to lead discussions provide insights into their successes and challenges. Mariage (1995) analyzed three preservice teachers' talk as they used comprehension strategies to engage students in dialogues around informational text; those who emphasized modeling and viewed their role as supporting children's thinking achieved higher student learning gains. Haroutunian-Gordon (2009) found that as two preservice teachers changed how they led interpretive literature discussions, there was increased student participation, and concluded that novices need opportunities to lead discussions, select discussable texts, prepare clusters of questions, and participate in discussions themselves.

Kucan and Palinscar (2011) studied the support provided by nine teacher educators in eight institutions for preservice teachers' learning about discussion-based comprehension instruction with informational texts in grades 3–6. The preservice teachers began to understand the complexity of comprehension and the importance of text, and that discussions can engage students in explaining and interpreting ideas, yet they needed further work to fully analyze how ideas are presented in informational text, how the text supports students in understanding ideas, and the teacher's role in mediating understanding.

A study by Hadjioannou and Loizou (2011) provided insights into 146 preservice teachers' initial attempts to discuss quality literature with Kindergarten and first-grade students during one-on-one book talks. The types of talk included *recitation* (skill-focused,

moralistic), true *book talks* (analytic thinking, experiential), and *awkward book talks* (complex questions caused confusion, lack of scaffolding to elicit interpretations). Because preservice teachers who engaged in recitation book talks were not dissatisfied with them, the authors concluded that an important starting point is to change teacher beliefs about the purpose and nature of book talks.

As these studies demonstrate, the complex and ongoing nature of learning to lead discussions suggests the need to articulate a learning trajectory that helps teacher educators make judgments about whether an instance of a preservice teacher's practice is "more or less mature, sophisticated, or successful, and to offer direction for improvement or development" (Moss, 2011, p. 2879). It also suggests the need for a curriculum and set of scaffolds to support the gradual learning process (Kucan & Palincsar, 2011; McDonald, Kazemi & Kavanagh, 2013; Rosaen, 2015).

This current study was undertaken within a literacy methods course to understand what preservice teachers learned from a semester-long project focused on taking initial steps toward developing the practice of leading a whole-class interactive literary discussion in an elementary classroom. We drew on research describing the elements of lesson planning (Hiebert et al. 2007) and interactive literary discussions (Almasi, 1996; Goldenberg, 1992/1993; Langer, 1995) to design and study the implementation of the project. We explored what type of learning is made possible during the beginning stages of developing a complex practice in a typical elementary classroom, with an eye toward understanding the developmental process for learning to lead interactive discussions. The study investigated: *What do preservice teachers learn from their initial attempts to design, enact, analyze, and reflect on a whole-class interactive text-based discussion?*

Research Methods

Teacher Preparation Program Context and Study Participants

In our preparation program, preservice teachers complete a BA degree in elementary education followed by a year-long internship to earn teacher certification. Approximately 300 juniors per year take a course focused on literacy learning that includes one-on-one work with an elementary-age child. As seniors, they take introductory methods courses in science, social studies, mathematics, and literacy, and they spend four hours per week in their mentor teacher's classroom, where together they arrange opportunities to provide individual, small-group, and whole-class instruction. Prior to this study, few preservice teachers had more than one opportunity to teach a lesson to the whole class in social studies or mathematics; science lessons were taught in small groups.

This study included five sections of preservice teachers enrolled in the methods course taught by four participating instructors over a two-year time period. Following Institutional Review Board (IRB)-approved guidelines, after grades were submitted, all 103 preservice teachers enrolled in these sections were invited to participate in the study, and 83 volunteered. Sixty-one preservice teachers were enrolled in three sections in year one of the study, and 42 of them were enrolled in two sections during year two. Of the 83, 77 were female and 6 were male and they ranged in age from 22 to 30. Sixty-seven preservice teachers were Caucasian, 10 were African American, 5 were Asian American and 1 was an international Chinese student. The mix of gender and demographics was representative of the typical population in the teacher preparation program. There were no patterns of differences in grades the 83 preservice teachers received in the course or on the main assignments as compared with the 20 who did not volunteer to participate. The 83 preservice teachers participated equally across lower elementary and upper elementary

classrooms where mentor teachers have been increasingly required to work with scripted curricula and respond to the pressures of high-stakes testing, and therefore have fewer opportunities for extended discussions. All mentors, however, were willing to allow preservice teachers to design, teach, and analyze a lesson that was designed to promote an interactive literary discussion.

The Field Assignment and Support Provided

The project featured in this study asked preservice teachers to plan, teach, and audiotape one whole-class lesson that was designed to promote an interactive literary discussion. They reviewed the audiotape to conduct a guided analysis of teacher and student interactions and reflected on student learning and their own professional learning. Instructors followed a gradual release of responsibility model (Pearson & Gallagher, 1983) to provide explicit instruction, guided practice, and independent practice in learning this high-leverage practice across several weeks prior to the preservice teachers teaching their lessons during the eighth week of the semester. In early weeks of the semester, assigned readings represented literary discussions as interpretative and focused on higher-level thinking and decomposed, or made explicit, the elements of highly interactive discussions (e.g., Almasi, 1996; Goldenberg, 1992/1993; Langer, 1995). For example, children, as well as the teacher, take responsibility to facilitate discussions by asking questions, encouraging others to talk, responding to each others' ideas, and offering interpretations of the text. The teacher steps in only as needed to scaffold interaction and interpretation, and to pose questions that promote response, interpretation, analysis, and critique. We also examined video examples of discussions and modeled specific strategies that promote interaction (e.g., brainstorming, think-pair-share, quick-write, story map, K-W-L charts) as discussed in the course text (Tompkins, 2014). To inform their planning, preservice teachers wrote in blogs about the typical interactional norms in their assigned classroom and considered their students' prior experience with interactive discussions.

During lesson planning workshops over the next four weeks, we modeled the thought process required for planning interactive discussions, using McGee's (1996) four principles for selecting books: they are worthy of deep thinking, have multiple layers of meaning, have gaps for readers to fill, and are appealing to children and the teacher. Given the focus on discussing literary texts in the course readings and the ease of fitting their lesson into ongoing routines in their classrooms, all but four of the 83 preservice teachers chose literary rather than informational texts for their lesson (e.g., fiction, narratives, poetry). We also discussed how to select appropriate *Common Core State Standards* (NGA & CCSSO, 2010) for the lesson and modeled how to craft instructional objectives that match students' background knowledge and experiences. The preservice teachers discussed their text selection with peers and received suggestions for improvement. We required them to use peer, instructor, and mentor teacher feedback to improve their plans prior to teaching.

Supporting the preservice teachers in developing the high-leverage practice of reflecting on and learning from their lesson was a key part of this project. A set of 10 guiding questions focused their attention on documenting participation and turn-taking; identifying teacher and student roles and the questions and types of thinking generated; and interpreting evidence of opportunities for students to work toward their lesson goals. They were required to characterize their discussion as a closer fit with a literature "discussion" or "recitation," consider whether their choice of text supported their lesson objectives, and reflect on their overall learning. The final question asked them, based on evidence of student progress toward their lesson objectives, what they would focus on in a follow-up lesson. Instructors emphasized that the success or problematic aspects of the lesson would

not influence their grade on the written analysis. Rather, they were expected to closely analyze the interactions during the lesson and demonstrate their use of evidence to learn from their experience (Hiebert et al., 2007; Schon, 1990).

Data Collection and Analysis

Data sources. Primary data sources were the preservice teachers' written course work, which included lesson plans and written responses for their guided analysis of the lesson. In one of the five sections, 21 preservice teachers were also asked at the end of the semester to rate how well each course assignment supported their professional learning and to provide comments on their rating. A secondary data source was the preservice teachers' blog postings, in which they wrote about the nature of interactions in their field placement classroom. This writing provided information about potential challenges they faced in leading an interactive discussion and what they thought was possible.

Data analysis. Following the process outlined by Miles and Huberman (1994), we began with a broad set of codes based on the tasks the preservice teachers completed and remained open to generating additional codes. The research team met regularly to refine the codes through an iterative process as we discovered levels of proficiency across participants' written work (Corbin & Strauss, 2008). To illustrate, we read all of the lesson plans and reflections to identify overall trends in the preservice teachers' learning. We identified 10 areas of development that were represented in their work on planning for, enacting, and reflecting on their teaching. Next, we organized them within three main topics (discussion follows): Lesson Design (5), Knowledge and Beliefs (2), and Professional Learning (3). In order to analyze the variation in the preservice teachers' knowledge and skill within the 10 areas, we re-examined the data to specify three levels of proficiency: *beginning*, *developing*, and *mature*. The beginning level represents a potential starting point in working with literary texts with elementary children in the classroom. The developing level represents evidence of knowledge and skills needed to move toward a more mature practice. The *mature* level reflects how we represented elements of whole-class literary discussions throughout the semester (e.g., video examples, modeling, peer review of plans). It also captures our goals for their learning to develop a high-leverage practice that is grounded in research on classroom discussions (e.g., Almasi, 1996; Goldenberg, 1992/1993; Langer, 1995). We chose the label of *mature* because even mature practices can develop further. Throughout the process the research team reviewed each others' ratings and discussed and resolved all discrepant cases.

Within the topic of Lesson Design (see Table 1), we included five elements: developing objectives that work toward higher-level thinking, selecting a text that is worthy of higher-level thinking, planning teacher moves and questioning, planning a post-assessment to analyze student learning, and planning for developing classroom norms.

These elements were used to analyze and code the preservice teachers' lesson plans¹ because they are at the heart of decomposing the practice and learning to plan thoroughly to increase the possibility that a rich discussion will take place. They also are elements of planning interactive literary discussions reported by Almasi (1996), Goldenberg (1992/1993) and Langer (1995), and consistent with overall advice about lesson planning (Hiebert et al., 2007). As shown in Table 1, we developed a definition of each level of proficiency and listed examples from preservice teachers' lesson plans to illustrate each definition.

¹ The objectives and text choice were analyzed for 83 lesson plans. Planning for teacher moves and questioning, post-assessment, and classroom norms were analyzed for 66 lesson plans due to the loss of 17 lesson plans part way through the analysis process.

Table 1
Codes for Lesson Design

Areas of Development	Beginning	Developing	Mature
Developing objectives that work toward higher-level thinking	<ul style="list-style-type: none"> • Lesson objective encourages students to identify, retell, describe, label, list <p>Quote: “Students will identify and retell the story of bravery soup after I read the story aloud to the class Using the cut and paste activity sheet that I provide. We will also have a whole class discussion to make sure students understand the events.”</p>	<ul style="list-style-type: none"> • Lesson objective encourages students to differentiate, summarize, explain, infer, draw conclusions <p>Quote: “Students will listen to a reading of <i>The Rainbow Fish</i> and identify the choices/actions made by the characters during a small group discussion, and explain the consequences of such choices using evidence from the story.”</p>	<ul style="list-style-type: none"> • Lesson objective encourages students to respond to, interpret, analyze, and critique within and beyond the text <p>Quote: “(1) Students will make relevant text-to-self connections during the discussion and identify situations in their own lives that relate to the scenarios within the text. (2) Students will identify one example of injustice outside of the United States and how it is overcome during our discussion of <i>Viola Desmond Won't be Budged!</i>”</p>
Selecting texts that are worthy of higher-level thinking	<ul style="list-style-type: none"> • Chooses text on topic that interests students but may not generate deep thinking • Assumes most texts will generate a discussion if open-ended questions are posed <p>Quote: <i>Rotten Richie and the Uitimate Dare</i>: “I chose the particular book I did because I thought the students would be able to relate to it and hopefully take something away from it.”</p>	<ul style="list-style-type: none"> • Chooses text that is interesting to students and worthy of higher-level thinking (respond to, interpret, analyze) <p>Quote: <i>The Foolish Tortoise</i>: “The text described the main character's actions with little to no focus on his emotions and thoughts. My co-teacher and I were able to draw on these elements as we asked questions about how the character might be feeling or thinking.”</p>	<ul style="list-style-type: none"> • Chooses text that is interesting to students and worthy of higher-level thinking (respond to, interpret, analyze, and critique within and beyond the text) • Chooses from a range of texts (print-based, multi-modal) <p>Quote: <i>Viola Desmond Won't be Budged</i>: “The events in the story allowed for the discussion to touch on the challenges of character, social movements, everyday responsibilities, and personal experiences.”</p>
Planning teacher moves and questioning	<ul style="list-style-type: none"> • Plans questions to launch a discussion <p>Quote: “... I will have a discussion with the students about how the character was brave. I will have students retell the story by naming the major events that took place.</p>	<ul style="list-style-type: none"> • Plans a variety of questions to launch and guide a discussion toward overall objective <p>Quote: “I will use dialogic reading. Asking them questions throughout the book about what is happening and what is the same or different from what they already talked about. Make sure</p>	<ul style="list-style-type: none"> • Plans for gradual release of responsibility to scaffold working with texts (e.g., use of dialogic tools) • Plans a variety of questions to launch and guide a discussion toward overall <p>Quote: (sample questions) “During Reading: how do you think Stormi</p>

Table 1 continued

Areas of Development	Beginning	Developing	Mature
	<p>“When each student names an event, I will write it down on a post it note and place them in order on the board.”</p>	<p>questions are open ended. What might happen? What will the pig do to this house? This is a really strong house, how will the pig blow this one down? I’m wondering, what do you think the pig is mad about? Why was the wolf blowing down houses in the original one? This is a really weak house, why doesn’t it get blown down? Is this different from the original story?</p>	<p>felt about starting new school? How do you know? <u>After Reading:</u>... I will remind the students of our rules we came up with. I will remind students that the theme of the story is the big idea of the story, or what idea the story is trying to get across. Then I will ask the first question:” What do you think the theme of this story is?” I will ask them to take a minute to think about it before I call on them. Then I will give them 2 minutes to talk to their neighbors about what they think the theme is. Then I will explain that I want the students to tell me why they think that is the theme...”</p>
Planning post-assessment to analyze student learning	<ul style="list-style-type: none"> • Post-assessment missing or not aligned with objective <p>Quote: “Mentor teacher will tally how many times students engage in discussion with class or partner by sharing thoughts, feelings, or ideas related to the story</p>	<ul style="list-style-type: none"> • Post-assessment gives limited information about student progress toward lesson objective <p>Quote: “Students will have an opportunity to act out a situation like the one in the book so that students feel the pressure that Pricilla (African Americans and whites) felt when they were told what to do. This should instill some knowledge and understanding of the situation and oppression. Students should relate to the character and connect to their feelings</p>	<ul style="list-style-type: none"> • Post-assessment provides useful information about student progress toward lesson objective <p>Quote: “I will look at their written cause and effect trees to first make sure they were able to record or think of cause and effect situations from the story. I will observe their own example of a cause and effect situation on the back of the worksheet to see if they understand the concept. I will look to see if they organized their example in a clear concise way that is accurate or reflects the cause and effect trends in the book.”</p>
Developing classroom norms	<ul style="list-style-type: none"> • Begins lesson without discussing norms OR • Tells students explicit norms for interactive 	<ul style="list-style-type: none"> • Acknowledges existing norms and scaffolds explicit norms for interactive discussions • May use dialogic tools 	<p>Acknowledges existing norms and scaffolds explicit norms for interactive discussions</p> <ul style="list-style-type: none"> • Uses dialogic tools to

Table 1 continued

Areas of Development	Beginning	Developing	Mature
	discussions Example: Lesson plan presents general expectations to think critically. Has students talk with partner and share with class.	to structure lesson sequence Example: Lesson plan tells students they will try something new today—sit in circle for discussion, discussed norms. After reading, made sure to comment on student participation to encourage it and to reinforce new norms; each student will fill out a notecard, will read it aloud before they place it in the bucket.	structure lesson sequence • Provides explicit support for students to learn to participate (e.g., anchor chart; modeling) Example: Lesson plan discusses and posts norms on board. Uses think-pair-share to activate prior knowledge. Returns to it to have students think about connections to story. Reminds of norms before discussion. Discusses theme, the share with partner and with class.

Within the topic of Knowledge and Beliefs (see Table 2), we included understanding the purpose and nature of interactive discussions and viewing children as capable thinkers because they are essential understandings for having a clear vision of the instructional practice preservice teachers are trying to develop (Langer, 1990). We developed a definition of each level of proficiency and coded the preservice teachers' written statements about what they learned about students, the content, their text selection, and themselves. To illustrate each definition, we provided a sample quote from the preservice teachers' written reflections.

Table 2
Codes for Knowledge and Beliefs

Areas of Development	Beginning	Developing	Mature
Understanding purpose and nature of interactive discussion	<ul style="list-style-type: none"> Views interactive discussions as everyone participating without necessarily thinking about quality of ideas expressed <p>Quote: "I learned that my students are actually very good at recalling events. I was not surprised that they did a great job of listening to the story because we often have a story time. I was positively surprised that some students who rarely participate were the ones who were excited to engage."</p>	<ul style="list-style-type: none"> Is satisfied with discussions where teacher asks open ended questions without necessarily considering quality of ideas expressed <p>Quote: "I worked at providing opportunities for students to share ideas and ask questions...The reason a correct answer was not offered was likely because students are not used to correct[ing] their class- mates or speaking when they have not been called on. I'm certain most of the student's had the correct answer and were simply waiting to be called on to offer it."</p>	<ul style="list-style-type: none"> Understands that interactive discussions involve both teacher and student participation and promote higher level thinking, problem solving, and reasoning, and improve communication Recognizes challenges of leading interactive discussions <p>Quote: "In the future I think I would use more scaffolding... I would have questions prepared that would encourage students to voice their own questions more... do small discussions in table groups, so that the teacher is only giving a</p>

Table 2 continued

Areas of Development	Beginning	Developing	Mature
Viewing children as capable thinkers	<ul style="list-style-type: none">• Doubts that all children are capable thinkers who can learn to engage in interactive discussions• Thinks children need to work on developing basic understandings of texts before they can advance to higher-level goals <p>Quote: “I learned that students liked “Story Time” teaching method. Kids enjoyed listening to [a] story. Kids struggled with “putting sentences in order” based on words. But they could do very well if I used pictures.”</p>	<ul style="list-style-type: none">• Provides examples of children engaging in higher level thinking• Shows awareness that children need to learn skills and strategies to respond to, interpret, analyze and critique within and beyond texts <p>Quote: “...I found that students have an idea of many different morals and themes; however they often are not required to support their reasoning. By requiring students to find examples in the text, it made them reflect on whether their idea is truly demonstrated in the text, or not.</p>	<p>prompt for the discussion.... This way they would get more opportunities for initiating, inquiring, facilitating, etc.... Overall they just need guidance on participating in student-led discussions and practice doing so.”</p> <ul style="list-style-type: none">• Provides examples of children engaging in higher level thinking• Views children of all ages as capable thinkers who can learn to engage in interactive discussions• Understands that all children can learn skills and strategies to respond to, interpret, analyze, and critique within and beyond texts <p>Quote: “I learned not to underestimate your students because they are able to exceed your expectations and goals set for them... After teaching, I realize that you can teach any type of lesson with any age group; you just might need to make some adaptations for your particular classroom.”</p>

Within Professional Learning (see Table 3), we included *description of enacting teacher moves* and *questioning, learning from the reflective process*, and *valuing the professional learning process* because they are necessary for helping preservice teachers learn to describe and use evidence to improve their practice (Hiebert et al., 2007). We developed a definition of each level of proficiency based on how they described teacher and student moves and questioning, and their overall interpretation of their discussion. Additionally, we analyzed their proficiency in using evidence to identify areas where their students need further work, and ideas for teaching a follow-up lesson. Finally, the comments offered in 21 preservice teachers’ rating of the *Language Arts Lesson and Reflection Project* were examined for the extent to which they valued the experiences of planning, teaching, and closely analyzing their lesson as contributing to their professional learning. We provided a sample quote from the preservice teachers’ comments to illustrate each definition.

Table 3
Codes for Professional Learning

Areas of Development	Beginning	Developing	Mature
Description of enacting teacher moves and questioning	<ul style="list-style-type: none"> • Elicits few or no student questions • Elicits majority of interaction • Elicits few or no student-to-student exchanges <p>Quote: "As evidenced by the fact that there were zero student generated questions, besides questions regarding clarification of wording, it is clear that the discussion did not provide opportunities for student-generated questions of higher level thinking. As a facilitator, I did not encourage the students to ask questions, which may have changed the outcome if I had."</p>	<ul style="list-style-type: none"> • May probe student responses to encourage elaboration and linking • May encourage students to ask questions • May foster interactions among students <p>Quote: "That's a really good point. Does anyone want to add to [his] idea?"</p>	<ul style="list-style-type: none"> • Listens carefully to students' ideas • Probes student responses to encourage elaboration and linking • Encourages students to ask questions • Fosters interactions among students • Realigns goals (if needed) during discussions based on student contributions <p>Quote: "...I tried to repeat student generated questions for everyone to hear and encouraged students to talk to each other. Students asked questions about whether the turtle would die, why the turtle took off his shell, etc. These questions pushed students to make connections, predictions, and develop evidence for their opinions [gives examples]...The discussion moved the children past quoting the story and remembering specific events, to prediction, hypothesizing, and synthesizing prior knowledge with evidence from the story.</p>
Learning from the reflective process	<ul style="list-style-type: none"> • Provides little/no evidence to examine extent to which discussion is recitation or discussion and/or provides little/no evidence of students working toward lesson objectives (or not). • Identifies no, few, or inappropriate steps for follow-up lesson(s) <p>Quote: "I saw the students recalling the events that they thought</p>	<ul style="list-style-type: none"> • Uses some evidence to examine extent to which discussion is recitation or discussion • Provides evidence of students working toward lesson objectives (or not) • Identifies next steps for follow-up lesson(s), but may not be supported by evidence <p>Quote: "My discussion fit more closely with</p>	<ul style="list-style-type: none"> • Uses concrete evidence to examine extent to which discussion is recitation or discussion • Provides evidence of students working toward lesson objectives (or not) • Identifies next steps for follow-up lesson(s) based on evidence <p>Quote: "I think that I could have done a couple of very simple</p>

Table 3 continued

Areas of Development	Beginning	Developing	Mature
	were most important and trying to tell them in order. Students knew, for example that our main character began as being scared of everything and he needed to go through the forest to find the special ingredients... The after reading was more of a recitation where students did a lot of recalling and adding their own opinions about the story... I would not change my lesson if I had to do it again..."	a literature recitation because I was the one asking questions, the students responded, and then I evaluated their responses. Two people never talked in sequence with each other... I do not think that the students would have understood what I was trying to teach them if I had let the students just discuss this amongst themselves...to teach a follow-up lesson, I would focus on how to write an introduction to a persuasive essay because I think the introduction is a very important part of a persuasive essay."	things to change this.... Often, I would take one student's thought and sort of move on when I should have been asking students to build off of what the other student said or respond in some way. Or, even saying things such as "Does anyone else have an idea?" may have benefitted more of the students."
Valuing the professional learning	<ul style="list-style-type: none">• Values the experience of planning and teaching a lesson• Thinks close analysis of a lesson is not necessary for promoting professional learning <p>Quote: "The lesson planning process was fine, and the teaching went great. However, the reflection process was very extensive. I was able to do a reflection on my own after the lesson with my teacher and got a lot more out of that reflection than I did with the written one."</p>	<ul style="list-style-type: none">• Values the experience of planning and teaching a lesson• Thinks close analysis of a lesson is somewhat beneficial, but is unrealistic or a luxury <p>Quote: "I learned a lot from teaching a discussion-based lesson...I believe I could have taken away the same ideas had the assignment been shorter... The reflection was very time consuming and required a lot of tedious details to be picked out. While I realize the benefit of this, I do not think I will have this luxury as a teaching."</p>	<ul style="list-style-type: none">• Values the experience of planning, teaching, and close analysis of a lesson, and sees how it contributes to professional learning <p>Quote: "Planning and teaching the language arts lesson was really difficult for me but I think that I learned a lot. It was hard to try to incorporate a book that was going to fit into their social studies topic and then try to have a discussion about it. Through the reflection process I see where the lesson could have used some work in order to get a more meaningful discussion from the students. The reflection was the most helpful."</p>

In summary, through an iterative process (Corbin & Strauss, 2008), we analyzed and coded the preservice teachers' lesson plans and written reflections to determine their level of proficiency (*beginning*, *developing*, or *mature*) in each of the 10 areas of development described in Tables 1–3. The research team discussed and resolved all discrepant cases. We also examined whether there were any differences in findings between Years 1 and

2 of the study and did not see any clear trends. Additionally, we examined whether there were patterns in each area of development based on the preservice teachers' assigned grade levels (lower and upper elementary) and found none.

Findings

Development in Lesson Design

Throughout the planning process, we emphasized five critical features of planning a lesson that would have strong potential for conducting an interactive discussion. Analysis of lesson plans revealed that some preservice teachers were able to attend to some or all features as they planned their lessons, and others did not fully realize the impact of each feature and how they are interconnected until they reflected on their lesson afterward. Results are summarized in Table 4.

Table 4
Areas of Development

Development in Lesson Design	Beginning	Developing	Mature
Developing objectives that work toward higher-level thinking N=83	35%	49%	16%
Selecting texts that are worthy of higher-level thinking N=83	14%	33%	53%
Planning teacher moves and questioning N=66	3%	53%	44%
Planning postassessment to analyze student learning N=66	1%	67%	32%
Developing classroom norms N=66	62%	32%	6%
Development in Knowledge and Beliefs			
Understanding purpose and nature of interactive discussion N=83	11%	22%	67%
Viewing children as capable thinkers N=83	8%	71%	20%
Development in Professional Learning			
Description of enacting teacher moves and questioning N=83	23%	70%	7%
Learning from the reflective process N=83	7%	41%	52%
Valuing the professional learning process N=21	14%	62%	24%

Lesson objective. Table 4 shows that objectives for the lessons encouraged a range of levels of thinking. Thirty-five percent of the lessons focused on a *beginning* level of promoting basic comprehension (identify, retell, describe, label, or list), such as one preservice teacher's plan for students to "describe characters, settings, and major events in a story, using key details." About half, or 49% of the lessons were at a *developing* level and encouraged students to go further and differentiate, summarize, explain, infer, or draw conclusions. For example, one objective said, "Students will be able to explain what they believe freedom meant to slaves compared to what freedom means to them." Fewer preservice teachers (16% *mature*) developed objectives that encouraged response,

interpretation, analysis, and critique of the text or consideration of ideas beyond the text. One objective illustrates this focus: “Students will connect, react, and use information from the text to support their responses to the question, ‘if you were living in France during this time, would you allow Jews to hide from the German Nazi soldiers in your house? Why or why not?’”

Choice of text. A majority of the preservice teachers (33% *developing*, 53% *mature*) chose a text that had at least some potential for facilitating an interactive discussion. One preservice teacher whose text choice was considered *mature* noticed her selection of *Viola Desmond Won't Be Budged* (Warner & Rudniki, 2010), a text that engaged fifth-grade readers in thinking about “challenges of character, social movements, everyday responsibilities, and personal experiences,” allowed for a rich discussion in which the students were able to make several text-to-self connections based on the reading and felt motivated to participate in the discussion. By contrast, a preservice teacher whose text choice was considered to be at the *developing* level felt that although her first-grade students did relate to *Charlie Anderson* (Abercrombie, 1995), it was only on a “surface level” due to the fact that “the topics within the text may have not been hard enough of a topic for students to achieve higher-level thinking.” These examples illustrate how many preservice teachers became aware of how the choice of text can impact opportunities for student engagement.

Planning questions for launching and guiding the discussion. Only 3% of the preservice teachers’ questions focused on basics such as retelling the story. Although 53% of the preservice teachers (in the *developing* category) planned a variety of questions to launch and guide their discussion toward their overall objective, 44% (in the *mature* category) went further to provide a range of support for their students to engage in higher-level thinking throughout their lesson.

By planning questions in advance of the lesson, the preservice teachers who fit within the *mature* category were able to engage students with the content in different ways. For instance, Ellen engaged her Kindergarteners in a discussion of *The Foolish Tortoise* (Buckley & Carle, 2009) and explained, “...a variety of questions were asked during discussion including probing initial understandings (*Why do you think he feels sad?*), developing interpretations (*What kinds of things do you think the tortoise can do now without his shell?*), reflecting on personal experiences (*Can you think of a time you thought you didn't need something but then realized you did?*), and remembering/recalling/retelling (*I wonder why he took his shell off?*).” She concluded, “This variety of question types allows students at various levels and needing different amounts of scaffolding to participate in discussion by choosing which questions to ask and respond to depending on their development.” The variety of questions asked also challenged the classroom norms of focusing on remembering, recalling, and retelling questions.

Post-assessments. All but 1% of preservice teachers planned a post-assessment that provided some information about their students’ progress toward their learning objective. Sixty-seven percent (in the *developing* category) found, however, that their assessment gave them limited information (sometimes not fully attending to all of their objectives), particularly as to whether each student in the class met the objective. The 32% who planned to obtain more useful information were able to use it as evidence of student learning and to identify areas where their students needed further work.

Developing classroom norms. A vast majority of preservice teachers (82%) noted that the norms in their classroom conflicted with their goal of facilitating an interactive

classroom discussion. For example, in a blog discussion with peers, Charles shared, “My mentor teacher uses the I-R-E [the initiation-response-evaluation pattern identified by Cazden (2001)] technique almost every time she holds a discussion...My MT thrives off of having her classroom quiet and retaining full control” (Table 4). Yet 62% of preservice teachers either planned to begin their lesson without discussing norms, or they simply planned to tell students what the norms for discussion would be (e.g., everyone will participate, they should talk with each other) without providing guidance or scaffolding. Some preservice teachers (32%) primarily planned verbal prompts to make norms explicit and remind students throughout their lesson to ask questions, build on each others’ ideas and respond to one another. Only a small number (6%) introduced and established new guidelines and expectations as part of their planning by building in explicit modeling or the use of dialogic tools such as creating anchor charts to make norms explicit throughout their lesson.

Development in Knowledge and Beliefs

There were mixed results regarding preservice teachers’ developing knowledge about the purpose and nature of interactive literary discussions and beliefs about children as capable thinkers who can learn to engage in discussions (Table 4).

Understanding the purpose and nature of discussions. Preservice teachers at the *beginning* level (11%) valued full participation but tended to be satisfied with students recalling events from the story or getting a correct answer. Those at the *developing* level (22%) planned open-ended questions and wanted to promote full participation but were less concerned about the type of thinking generated during a discussion. More than half of the preservice teachers (67%) recognized the importance of ample student participation that focused on higher-level thinking, and for many this insight occurred in hindsight. For instance, only after her initial experience trying to lead a discussion did one preservice teacher realize how this unfamiliar pattern of interaction would require ample practice with her young students. Interestingly, another preservice teacher noted surprise at how well her students worked and the depth of their responses, suggesting that their level of thinking surpassed her expectations, while she was simultaneously caught off guard by their unfamiliarity with discussion practices of asking questions and adding onto others’ comments.

In their reflections upon what they learned about themselves as educators, one consistent theme for preservice teachers at the *mature* level was the challenge of leading interactive discussions. One reason for this challenge likely originated in unfamiliarity with an interactive discussion format in many classrooms; yet another possible reason centers more on personal tendencies than upon the classroom context. This preservice teacher’s commentary exemplifies the tendency to teach in the way others have taught (Lortie, 1975): “I often answered the questions that were meant for my students! ... I tend to feel the need to explain a lot of things, but my fourth graders are capable of thinking for themselves and answering hard questions on their own.” Finally, another preservice teacher captured an additional challenge that all teachers face in planning for and facilitating discussion: “I learned that no matter how prepared you think you are, you will still get questions that challenge you and you were not prepared to answer.” This comment highlights the risks teachers take in sharing control of discussions with their students and the uncertainty of where a discussion will lead.

Viewing children as capable thinkers. Only a few preservice teachers (8%) concluded that children in their classroom were not capable of learning to engage in interactive discussions or that they needed to develop basic understandings before they can

advance to higher-level goals. Almost all of them (71% *developing*, 20% *mature*) provided examples showing that students, even young ones in Kindergarten and first grade, are capable of participating in discussions that feature higher-level thinking. Some expressed surprise that many students wanted to participate, had interesting things to say about the text, and made comments the preservice teachers themselves had not considered. On a similar note, a preservice teacher at the *mature* level explained her surprise in describing her students' interpretations when they "came up with responses which I had not even considered, such as taking into account Charlie's environment when trying to figure out why he was sad," and another noted of her Kindergarten students: "Connections were being made that I thought I would have to force or simply give them." Yet another also expressed surprise at "the depth of answers given during [the] discussion," explaining that students surpassed her expectations with clear evidence of deep thinking and working toward the lesson goals.

Most of the preservice teachers (71% *developing*, 20% *mature*) came to realize that not all students will engage successfully in a fully interactive discussion without ample teacher modeling and practice, likely due to their experience with recitation throughout much of their schooling. One preservice teacher, who worked with first-grade students, wrote:

I just expected the students to sort of "catch on" to the "discussion" style lesson. Since they were only used to "recitation" style lessons, I realize now the students need to be explicitly taught how to carry out a discussion. This makes sense thinking back, teaching students how to have a discussion is just like teaching them any other new skills.

This response highlights her realization that learning to participate in interactive discussions has much in common with learning to use comprehension strategies or learning to write interesting leads; it requires guidance, practice, and direct instruction from the teacher.

Development in Professional Learning

The main expectation for the preservice teachers' written analysis was to analyze the interactions during the lesson and use evidence to learn from their experience (Hiebert et al., 2007; Schon, 1990) rather than to demonstrate that they successfully facilitated an interactive discussion in this initial attempt. The majority of the preservice teachers provided specific evidence describing teacher and student interactions and gave reasonable interpretations of the evidence to interpret how closely their discussion fit with a literature "discussion" or "recitation" (Table 4).

Description of enacting teacher moves and questioning. Twenty-three percent of the preservice teachers at the *beginning* level indicated that their students generated no or few questions and their facilitation resulted in no or few student-to-student exchanges. More than half of the preservice teachers (70%) at the *developing* level reported a mixture of attempts to probe student responses to encourage elaboration and linking, or encourage students to ask questions, or foster interactions. One preservice teacher noted that because her Kindergarteners were used to teacher-led discussions, she found it "very difficult to make sure that all children were allowed an opportunity to participate and respond or ask questions." Yet, 15 of 18 students participated in the discussion, and she explained, "... students had questions about the book and instead of answering the question myself and moving on [as her mentor teacher typically did], I would direct the question back towards the other students to see if any of the students could answer the question."

Only 7% of the preservice teachers' reports of their facilitation represented a

mature level of the practice. Although one student acknowledged that about 60% of the discussion involved teacher questioning and talking, she provided several examples of Kindergarteners' higher-level thinking during their discussion of *The Foolish Tortoise*, some of which stemmed from student-generated questions. She concluded that, "The discussion moved the children past quoting the story and remembering specific events, to prediction, hypothesizing, and synthesizing prior knowledge with evidence from the story," illustrating that even if students did not generate specific questions, there was important movement toward developing the types of thinking and participation she planned for. Interestingly, many noted that participation was increased due to the use of dialogic tools such as think-pair-share, toss toys, and small-group or partner structuring of the class.

Learning from the reflective process. Only 7% of the preservice teachers were at the *beginning* level of learning from the reflective process through the use of evidence. For example, one preservice teacher focused primarily on his own actions during the discussion and did not acknowledge that there were no student-generated questions and no student-to-student interactions. A larger percentage (41%, *developing*) provided general evidence to support their claims. For example, one preservice teacher explained, "My discussion fit more closely with a literature recitation because I was the one asking questions, the students responded, and then I evaluated their responses. Two people never talked in sequence with each other..."

About half of the preservice teachers (51%, *mature*) offered concrete evidence to examine their discussion, explained how students worked toward their lesson objective, and used evidence to identify a follow-up lesson. For example one preservice teacher reflected,

I think my students still need further work making explicit text to self connections. While students made connections, they often neglected describing the connection between their own experience and the text. They just described their own experiences. For example, when one student wrote, "I thought broccoli was gross but then I thought it was yummy," he did not describe *how* his experience connects to that of the tortoise. I think the next part of scaffolding students to be able to make text to self connections is having them describe why their experience connects to the text."

Content goals identified by others included reteaching the same content of the lesson with a different text, extending the content of the lesson to more independent or challenging contexts, or addressing student misconceptions.

Preservice teachers within the *mature* category also established discussion-based goals, or future steps they might take to promote better opportunities for student participation and learning through discussion. Some preservice teachers discussed explicitly teaching students roles, helping students generate questions, and using different participation strategies to involve more students, such as drawing names to find the next discussion participant or partner sharing.

Valuing the professional learning process. Of the 21 preservice teachers who rated and commented on the course assignment, 14% of the comments fell into the *beginning* category. That is, they valued the experience of planning and teaching but did not think close analysis of a lesson is necessary for promoting their professional learning.

More than half of the preservice teachers (62%, *developing*) valued the opportunity to plan and teach their lesson, but several stated that the reflection was too time consuming

and/or not realistic. One preservice teacher gave the highest rating of 4 to the assignment but qualified her rating: "...I do not think I will have this luxury as a teacher," indicating that she valued planning and teaching the lesson more than the reflective process. On the other end of the spectrum, 24% of the preservice teachers' comments fell into the *mature* category, indicating that they valued the reflective process along with their planning and teaching experience. For example, one preservice teacher said, "Planning and teaching the language arts lesson was really difficult for me but I think that I learned a lot...Through the reflection process I see where the lesson could have used some work in order to get a more meaningful discussion from the students. The reflection was the most helpful."

Discussion and Implications

Based on the research literature on which our analysis was based and the results from this study, we propose that the three areas of development that emerged—Lesson Design, Knowledge and Beliefs, and Professional Learning (see Tables 1, 2, and 3)—describe a developmental learning trajectory that may suggest how we might provide further support to help preservice teachers improve in specific areas (Moss, 2011). This trajectory provides a framework for decomposing the learning process and the goals toward which preservice teachers need to progress, which are important aspects of learning to enact high-leverage practices (Grossman, Compton et al., 2009). The three levels of proficiency—*beginning*, *developing*, and *mature*—provide a more nuanced view of the progress preservice teachers might make in each area of development as they work toward these goals, and they indicate specific areas for improvement (Moss, 2011). Following, we discuss insights gained from the study for revising the support we provide for preservice teacher learning.

Supporting the Planning Process

Results from this study indicate that learning to attend fully to five key aspects of planning for an interactive text-based discussion (Table 1) was quite challenging for the preservice teachers, particularly when existing classroom norms promoted a recitation format. Some mentor teachers required a specific text that was not compatible with the preservice teachers' goals for their lessons. This happened more often in early grade classrooms where mentors suggested texts with simple messages. In other cases, mentor teachers and/or the preservice teachers chose objectives that were skill focused (e.g., developing phonemic awareness, vocabulary) or emphasized basic comprehension (e.g., retelling, describing), which took attention away from leading a more open-ended discussion of the text. One possible explanation for these mixed results could be the strong influence of existing classroom norms in their field placement classroom and lack of opportunity to see first-hand examples of interactive discussions (Clift & Brady, 2005). The preservice teachers' own apprenticeship of observation (Lortie, 1975) may also have been at play. This apprenticeship suggests the strong influence of context in helping novices learn to plan for a complex high-leverage practice. Additionally, these findings highlight the complexity of learning to attend to multiple elements of planning simultaneously.

It is also important to note a potential challenge with the K–5 *Common Core State Standards*, which focus on promoting basic understanding of literary texts through retelling, summarizing, and labeling of story elements, and lack an emphasis on interpretation, analysis and critique. Engaging preservice teachers in a close analysis of potential openings for developing higher-level thinking, such as the *Anchor Standards for Speaking and Listening* that focus on collaborative conversations and questioning the speaker's reasons and evidence, may help them discuss potential objectives and appropriate text choices with their mentors.

Consistent with others' findings (Hadjioannou & Loizou, 2011; Kucan & Palincsar, 2011), almost all of the preservice teachers grasped the importance of text selection. In some cases, this insight occurred only after reflecting on how the text choice influenced student participation, illustrating the importance of reflecting on their experience (Hiebert et al., 2007; Schon, 1990). We could focus more specifically on the fit between the preservice teachers' chosen objectives and the chosen text and engage them in a more nuanced analysis of text features and possible directions for the discussion (Kucan & Palincsar, 2013). We also could require revision when either the objective or the text selection is incompatible with working toward an interactive discussion.

To further support the planning process, we also could decompose more explicitly how to build classroom norms that enable students to take on the roles required for active participation in knowledge construction. For instance, although we shared strategies for helping students generate ideas about texts (e.g., think-pair-share, quick-write, story map), we could work further to help the preservice teachers understand how the activities not only help students generate ideas but also demonstrate what active participation and sharing look like. More work with representing and decomposing the various activities (Grossman et al., 2009) would fit well with the support we provide to help preservice teachers carefully choose and analyze the texts they are using to generate open-ended questions that invite higher-level thinking and student-to-student interaction.

Another possible way to structure representation and decomposition is to place even more emphasis on the gradual release of responsibility model of instruction (Pearson & Gallagher, 1983) by requiring preservice teachers to plan for explicit modeling of higher-level thinking during read-alouds and partner or small-group work prior to bringing the whole class together. Preservice teachers could try out approximations of the practice with peers to help them develop language and comfort with the process. In addition, the planning format could require them to attend explicitly to discussing the norms for interaction that they want their students to work toward.

Developing Knowledge and Beliefs

Hadjioannou and Loizou (2011) found that it was difficult to change preservice teachers' beliefs about whether young children are capable of having interactive discussions. However, even when their goals for class discussion were not fully realized, many of our preservice teachers concluded that young students are capable of participating in discussions. They hypothesized that with further support over time, their students could learn to engage in such discussions. Yet, some mentor teachers tended to assume that their students were not ready or capable of having open-ended discussions where students respond, interpret, analyze, and critique texts. This assumption created challenges for those preservice teachers as they worked to envision what might be possible in their classroom when their mentor teachers argued against the possibility.

These realities suggest that although we do communicate with mentor teachers about expectations for this project, we could work more closely with them regarding the purpose of leading an interactive discussion and the importance of objectives, text selection, and building classroom norms that are compatible with promoting interpretation, analysis, and critique. For example, we could share articles and links to videos that illustrate the work we are doing with preservice teachers. Moreover, if mentors understood the notion of a learning trajectory where preservice teachers are working toward the *mature* level and if they engaged preservice teachers in reflecting on their learning progress along the trajectory, this might create an educative context for drawing the mentors into the learning

process in more explicit ways.

Analyzing Instruction to Improve It

Preservice teachers used the reflective process to examine and interpret evidence of classroom interactions and understand how existing classroom norms created challenges for working toward their lesson goals. They also provided evidence of student learning, and many used that information to identify next steps for building norms for discussion, for working toward content goals, or both. Given that this was their first attempt at facilitating and analyzing a whole-class text-based discussion, these results are promising.

Although we have ratings from only 21 preservice teachers regarding how well they think this project supported their professional learning, there was a strong trend that they valued the planning and teaching portion of the project more than the guided analysis. These results are consistent with others' research that preservice teachers value teaching experience above other learning opportunities (Calderhead, 1991). Yet highly scaffolded tasks serve pedagogical purposes because they make explicit a complex thinking process and provide opportunities for targeted feedback and self-reflection (Grossman et al., 2009). Nevertheless, the preservice teachers' feedback suggests a need to streamline the analysis. We also realized that although we built in many opportunities for social interaction among preservice teachers during the planning process (e.g., sharing resources, ideas for plans, written plans), they completed their analysis of their lessons independently. Providing opportunities to share their insights throughout the analysis process could generate interest not only in their own experiences, but also help them gain insights from others' experiences.

Limitations and Implications for Further Research

We acknowledge this study's limitations and suggest areas for further research. First, the written work that served as the main data source for the study was a graded assignment and based on self-report. Although we emphasized the importance of analyzing their instruction for the purpose of improving it, it is possible that the preservice teachers' lesson plans and written responses were simply what they thought we, as their instructors, wanted to see. Although we required preservice teachers to provide sample quotes to document and analyze the nature of teacher and student questions and levels of student thinking, we did not have access to the preservice teachers' audiotapes as a means to verify their self-report. Second, the lesson planning process and analysis of instruction was highly scaffolded with specific prompts. This structure was intentional because we saw this project as an occasion to support the preservice teachers in learning something new, but it does not tell us what they are capable of doing independently. Third, this study and proposed trajectory focused on helping preservice teachers develop the practice of leading interactive discussions with literary texts. Additional studies that focus on developing this practice with informational texts (a strong emphasis in the *Common Core State Standards*) are needed to determine the extent to which the learning trajectory is applicable. Fourth, our analysis revealed what a portion of all preservice teachers in the program may have learned from the project. A study following a larger group of preservice teachers into their intern year to examine how they plan for, enact, and reflect on whole-class discussions throughout the year could provide a view of whether and how they progress from the scaffolded work on these practices as preservice teachers to independent classroom application when they have more time and opportunity to develop them. Further research is also needed to investigate the potential of the proposed learning trajectory (Tables 1, 2, and 3) for its applicability to other populations and for whether it is a useful tool for indicating specific areas of development and improvement.

Conclusion

This study illustrates the stark realities of helping preservice teachers reach the ideal of facilitating interactive discussions within classrooms where little, if any, discussions of this type take place. It adds to findings from prior studies (Hadjioannou & Loizou, 2011; Haroutunian-Gordon, 2009; Kucan & Palinscar, 2011; Mariage, 1995) and portrays the range of challenges preservice teachers faced as they worked to develop three interrelated high-leverage practices: leading discussions, developing classroom norms, and analysis of practice. Although further research is needed to investigate the proposed learning trajectory's applicability to other groups of preservice teachers, the three broad areas of development and three levels of proficiency identified offer a framework for providing support to enhance preservice teacher learning.

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