Writing Across Campus: Using Authentic Writing Experiences to Help Pre-Service Teachers Learn to Teach Writing

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Introduction

Teaching requires a great deal of knowledge--knowledge of the content, knowledge of appropriate pedagogy to encourage and motivate students to learn, and knowledge of how to seamlessly manage a classroom of diverse students. Teaching also involves reflection--reflection on practice, reflection on student performance, and reflection on the effectiveness of the process (Bransford, Darling-Hammond, & LePage, 2005; Hayden & Chou, 2015; Milner, 2010). Much of this essential teacher knowledge and reflective disposition is acquired through support and assistance in and out of both teacher preparation programs and elementary classroom settings.

The knowledge preservice teachers gain in their teacher preparation program impacts their instructional practice. Grossman, Valencia, Evans, Thompson, Martin, & Place (2000) found that preservice teachers transitioning into the classroom do, in fact, use their teacher education preparation theories to support their practice as they prepare lessons and assume the role of teacher. Grossman and colleagues (2000) state, "theory becomes real only through practice" (p. 658) and teachers need that foundation to pull from in order to make their teaching practice stronger.

Furthermore, specifically related to literacy instruction, Harward et al., (2014) found that novice teachers who taught and prioritized writing daily attributed their success to their teacher preparation programs. These teachers felt well prepared to teach and reported positive attitudes and experiences with their classes. In the same study, novice teachers who did not teach or prioritize writing reported feeling ill-prepared by their university courses and had little success transitioning to the classroom. Thus, it is essential that our teacher education programs provide high quality experiences to support preservice teachers'

development. We can no longer waste time with ineffective and unmotivating practices that limit the learning students may experience during their teacher preparation.

Optimizing preservice teachers' deeper understanding of both content knowledge and pedagogical content knowledge is an important goal of teacher preparation programs and especially methods courses within those programs. One approach to achieving this goal for supporting preservice teachers' developing understanding of writing methods (while remaining mindful of effective pedagogy) may be to engage them in authentic writing experiences by providing them meaningful opportunities to collaborate with peers. As a part of these writing experiences, they can share teaching experiences and discuss instructional practices. In an online platform, this approach could be achieved best through participation in purposeful discussion boards in which there is a specific audience to whom preservice teachers are writing. Such boards mimic authentic writing experiences of educators and facilitate professional discussions similar to those that teachers experience in their practice.

Literature Review
Use of Discussion Boards in Teacher Education

Two common instructional methods generally used throughout the university setting for undergraduate students to demonstrate knowledge in their college courses are written assignments and group discussions. In online courses, the two methods are frequently combined, meaning the discussion happens through students' writing. As a requirement for online or hybrid courses, students are regularly asked to write responses to discussion boards in which they respond to a reading and offer a written reflection to their classmates. Typically, students are then required to read all responses and reply to a set number of them. Through informal conversations over time, we have become aware that many students find the common discussion board assignment to be tedious. Students also report that traditional discussion board tasks resemble busy work and thereby lack obvious or meaningful purpose (Birch & Volkov, 2007; Reonieri, 2006; Ringler et al, 2015). Most frequently, online students admit that the discussion board work is overwhelming because reading all of the posts requires a significant amount of time in addition to the required reading for the course. We believe that one significant reason that these discussion board responses feel purposeless is because such assignments usually neglect an important aspect of writing--attention to the audience and subsequently opportunities to address the needs of that audience.

Though students report being overwhelmed by the discussion board

activity; researchers have determined that discussion boards can be powerful instructional tools when used effectively (e.g., Ajayi, 2009, 2010; Bryce, 2014; Levin, 1999; Plesec Gasparic & Pecar, 2016). One reason that these boards might not be working for some students is because the traditional methods of discussion board participation creates writing experiences unlike those typically experienced outside of the classroom. Expert writers are mindful of their audience as they write (Alamargot et al., 2011); however, often during school-focused writing assignments, including those at the post-secondary level, there is little attention given to the audience. Evidence suggests that providing students with a real audience yields higher quality writing at all ages (e.g., Author 2, 2019; Cohen & Riel, 1989; Crowhurst & Piche, 1979; McGrail & Davis, 2011) and potentially a better understanding of the content (McVee, Dunsmore, & Gavelek, 2005).

As today's technology continues to improve the ways by which people can communicate, universities are increasing the number of online courses they offer; as a result, methods of participation in such courses are evolving. One approach used extensively at the university level for many courses, including education courses, is discussion boards. More and more, the discussion board seems to be a widely-used approach for adding discourse to both face-to-face and online classes. Typically, students are asked to write a reflection or response, post it online, and then read other students' posts on the same topic. It seems reasonable to expect that this read-post-and-respond-to-others approach would lead to extensive discussion and discourse among students. In general, the requirement seems authentic in nature and in name; yet, students complain about the inauthenticity of the task and the lack of engagement they experience. In fact, many students in education courses comment on the limited active participation of their peers. Some state that often one person dominates the conversation and few people contribute. Others comment on the lack of substantive writing from their classmates, leading to difficulty in extending ideas and conversation. Furthermore, they view participation in these discussion boards as tedious and unrelated to the writing practices they will engage in as teachers. Thus, the discourse is limited to those that actively participate in the discussions, and even then, the discourse feels contrived and inauthentic.

Face-to-face courses contend with similar issues of domination or lack of participation from students. The significant difference is that a face-to-face course discussion is typically synchronous, meaning discussions occur in real time with simultaneous cooperation from teacher and students. Students and instructors meet together as a large group online or in person to discuss topics and ideas. The instructor is traditionally viewed as the expert, providing information to the students. Interestingly, though the activity is called a discussion, often, there is little collaboration and few opportunities for interactions between students (Rovani,

2002). Researchers found that during these larger group discussions, many students are less engaged in higher-order thinking, produce fewer dialogues, and ask fewer questions; discussions are repetitive, and some members may disproportionately dominate the discussions leaving little opportunities for others to contribute (Hamann, Pollock, & Wilson, 2012). However, an authentic audience is inherently present because students are able to see and interact with the audience as they physically share a space.

Though synchronous discussions do have benefits, as courses evolve to an online format, many course instructors are implementing asynchronous opportunities for discussion, meaning students and teachers can interact with one another without the constraints of time or location; however, in these situations, the audience presence is not as obvious as in face-to-face and requires students to attend to the audience and its needs as they compose a post. Asynchronous discussion requires the use of more decontextualized--and arguably more refined and precise--language. This format is potentially beneficial as it allows students to be flexible in location and time, increases social interactions and provides a meaningful space for exchange of knowledge and reflection (Bryce, 2014; Plesec Gasparic & Pecar, 2016).

Asynchronous discussion has many advantages that differ from the advantages of synchronous discussion. It promotes complex and interactive socialization as participants have more time to process ideas and craft detailed responses focusing on audience needs (Schellens & Valcke, 2006). In fact, there is evidence to suggest that participation in smaller asynchronous groups yields strong benefits. Akcaoglu & Lee (2016) found that students who work in small asynchronous groups successfully create a community of learners. Thus, students are more social than in larger asynchronous discussions and the discussions allow for deeper understanding of the content and participation from members compared to whole-group discussions. Ajayi (2009; 2010) found that literacy education students' use of asynchronous discussions increased their intertextual connections with the various texts, experiences (their own and others), and course discussions, thus mediating their learning of literacy methods. The asynchronous discussions allowed students to take ownership of their learning instead of waiting for the instructor to give them that knowledge, as a traditional lecture approach. Kear (2004) found that asynchronous discussions were most effective when the instructor adopted a passive role and only monitored the dialogue, allowing students to take on the role of moderator and lead the discussions. Regardless, the presence of an authentic audience seems to be an important and beneficial aspect of successful discussions and discussion boards. Yet, the mere presence of such an audience might not be enough; perhaps the tasks learners are expected to complete

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and the ways in which they communicate through the discussion board needs to emulate tasks that teachers engage in during their practice.

Writing Instruction

Writing instruction is gaining more attention in the elementary classroom, and the role of audience and purpose is becoming an important consideration, especially with the introduction of the Common Core State Standards' emphasis on writing a variety of genres for differing purposes and audiences (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010). Based on our observations, many teachers report feeling inadequate to tackle this in their classrooms. They often feel that they are not prepared enough nor do they feel confident enough in their own writing to spend adequate time teaching their students the finer points necessary to develop into proficient writers (Knight & Block, 2014).

Graham, Bollinger, et al. (2012) provide four recommendations for elementary teachers to help elementary-aged students become effective writers. In their guide, they recommend students get daily time to write and not just writing for writing, but writing strategically for a variety of purposes. Students should be taught to use the writing process and appropriate writing strategies. Graham et al. also suggest students learn to be fluent writers and actively practice all skills related to writing fluency, including handwriting, spelling, sentence construction, and using technology. The final recommendation suggests that teachers provide a community of writers.

Nelson (2001) suggests that when students are provided the authority and ownership over their writing through the writing-to-learn process instead of simply writing for a course grade, they become more engaged in the learning process. They begin to apply a deeper understanding of the content (McVee, Dunsmore, & Gavelek, 2005) and can easily articulate that understanding through various means of communication. One goal of a teacher preparation program is for preservice teachers to acquire a deep understanding of content knowledge and pedagogical content knowledge; an effective approach to achieving this goal may be to engage preservice teachers with meaningful opportunities to write to learn.

Writing for a Variety of Purposes and Audiences

According to the *What Works Clearinghouse Practice Guide for Teaching Elementary School Students to be Effective Writers* (Graham et al., 2012), there is strong evidence to support engaging elementary children in writing for a variety of

purposes and to determine the genre based on the purpose for the paper and the needs of the intended audience. An important consideration of expert writers is their audience and their purpose for their writing (Alamargot et al., 2011); however, often in school-focused writing assignments, it seems that there is little attention given to the audience; in fact, in our experience, children are rarely given a specific audience for whom to compose their piece. Typically, from elementary school on, students are asked to write predominantly for their teacher or their classmates. Evidence suggests that providing students with a real audience, one who might be interested in the writing and provides feedback, yields higher quality writing (e.g., Block & Strachan, 2019; Cohen & Riel, 1989; Crowhurst & Piche, 1979; McGrail & Davis, 2011). It stands to reason that if elementary students writing for a specific purpose and audience yields higher quality writing, then preservice teachers being provided the opportunity to write for a real audience and specific purpose will not only likely make them stronger writers themselves, but may in fact help them better understand both the importance and benefits of providing a variety of purposes and audiences for their own students in the future.

Theoretical Framework

Learning is not only a cognitive process, but also related to cultural, institutional, and historical context. Learning is also a social experience--one that can take place either orally or through written communication. Vygotsky (1979) suggests that what and how we learn is tightly connected to our interactions with others. Through their social experiences in a discussion board, students assume a variety of roles including that of the reader, that of the poster, and that of the responder to their peers. Wertsch (1991) suggests that as we interact and learn socially, we acquire and internalize new strategies and knowledge of our culture and the world that we can then apply to new learning situation through a variety of meaning making tools. As they participate, students are using their own experiences to build their knowledge as they connect to the text and to one another.

One important tool people use to interact with one another is language (Wertsch, 1991); written language requires the writer to express ideas, and to anticipate the reactions of others both in the past and in the future (Bakhtin, 1981). The discussion board format underscores both the importance of language as an interactive tool and the function of written language. Not only is it important to think about how to express ideas in a way that addresses the needs of the audience, writers also need to respond to what others have said in the past while simultaneously anticipating how readers might respond (Brandt, 1990). Through this back and forth exchange of ideas, writers are also connecting to the social

aspect of learning that Vygotsky (1979) suggests is paramount to learning. By carefully selecting a topic and an appropriate genre to convey the necessary information to communicate effectively to the intended audience, writers draw on their knowledge of the topic while simultaneously attending to their interaction with the intended audience (Freedman & Medway, 1994). Thus, the writers in this study who participated in the discussion board posts had to attend to the social aspects of the writing while also remaining mindful of the dialogic nature of the writing. This back and forth interaction allowed participants to simultaneously build both community among one another and their understanding of content.

Research Questions

This study is a qualitative study of university students' discussion posts on a student-generated discussion board. In this study, we provided undergraduate, preservice teachers with a real, external audience to address in their discussion post writing. We believed providing this external, real audience fostered higher quality posts and responses by the preservice teachers. We specifically looked at the depths of knowledge level questions preservice teachers asked each other to determine whether or not their understanding of effective writing instruction in the elementary classroom changed and evolved throughout the semester.

The following are our specific research questions:

1. What can we discover about preservice teachers' evolving understanding of elementary writing instruction through their written coursework in cross-campus discussion groups?
   a. What is the nature and variability (e.g., evidence of depth of knowledge, topics) of the questions?
   b. What is the nature and variability (e.g., evidence of depth of knowledge, topics) of the responses?

Methods

This study was part of a larger study that focused on the entire discussion board experience–a key assignment of the course.

Participants

Forty-five preservice teachers enrolled in an elementary writing methods course at one of two universities in two different regions of the United States were offered and consented to participation in the study. Each course was designed to

cover effective writing instruction. At both universities, students participated in lectures, in-class activities, field time in an elementary classroom, and class assignments that focused on effective writing instruction for elementary students. The demographic distribution of each university's groups were similar to one another and typical of the pattern found in elementary education programs at the universities and in the US (i.e., 82% white, 98% female; Taylor & Sorbel, 2001).

All students enrolled in the courses were randomly placed into one of nine groups. Each group had a total of five members (2 from one university and 3 from the other), and groups had their own wiki page for their blog conversations. Each week, one student from the group was charged with composing an initial post that included a summary of the readings, reflection of his or her understanding, and at least three substantial open-ended questions for the audience to address. The remaining members of the group (the audience) responded by composing and posting their reactions to the readings and answers to the initial poster's questions. In the end, each student composed four initial posts and four response posts over the 8-week period.

Discussion Boards

The discussion boards were key course assignments for all students. The discussion boards were specifically designed to provide students with a platform to synthesize readings and share field observations with peers across the country. In both courses, we, the instructors, were deliberate in explaining our participation in the discussions as minimal. Neither instructor actively participated in the groups, except to monitor student activity; nor did the instructors post initial questions or responses for the groups. All discussion and interactions were student-to-student. Again, this was purposeful on the part of the instructors, as we wanted our students to build a community and center their discussions around their own emerging thoughts and ideas versus our ideas. Our intent was to extend students' understanding through social interactions (Baktin, 1981; Wertsch, 1991) and make the discussions more student-focused, rather than instructor-focused, and firmly grounded in social learning (Vygotsky, 1979).

Students posted nine different times throughout the 16-week semester on topics related to writing. Topics included writing development, genre knowledge, writing process, narrative genre, informational genre, procedural genre, writing conferences, and assessments.

The weekly discussion board assignment included directions for the initial poster and the responder. The students were responsible for all discussion board content. The university instructors monitored and were prepared to moderate if

necessary; however, there were no instances in which instructors needed to insert themselves into any of the discussions. Initial posters were to provide readers with the main points of the reading as well as a short reaction to the main points. The reaction section required students to make claims and provide evidence from the text, their field or classroom experiences, and views as a writing teacher. The initial poster also provided at least three open-ended questions for the other group members to respond to in their posts. The students who responded were asked to provide thoroughly address the initial poster's questions, and in their responses, they were also required to provide evidence and reactions to the text, classroom experiences, and their personal views on becoming a writing teacher.

Data Analysis

We were interested in understanding the impact the authentic writing experience paired with the presence of an external audience had on students' deeper understanding of literacy development, specifically writing instruction. We used a qualitative lens to analyze and code each student's initial discussion board post, the questions they posed, and the subsequent responses they provided with a thematic analysis (Boyatzis, 1998; Guest, MacQueen, & Namey, 2012) through seeking patterns (Saldana, 2016). First, to familiarize ourselves with the data, each group's discussion posts were read. Our initial coding was descriptive and eclectic (Saldana, 2016) in nature as we began to see patterns or themes within our students' writing. We describe it as descriptive and eclectic because we did not have any predetermined themes before we started reviewing. Initial codes were determined based on those discovered themes, and data was organized around each code. Our second coding cycle provided a more focused coding that allowed even more patterns and subcategories to emerge. As we read and reread, we started to see general themes across each week, such as what the student would do in their future classrooms, teaching/instruction focused ideas, and experiences. We also noticed themes specific to each weekly course topic and discussion post focus. Each discussion post was then reread looking at those specific themes. Student responses were grouped according to the themes (See figure 1 for themes and frequencies).

After coding themes in the students' responses, we next looked specifically at the types of questions students asked when posting as the initial responder. Using the Depth of Knowledge (DOK) questions (Webb, Wixson, Hess, Center for Assessment/NCIEA, 2004; Webb, 2002), we again read all of the questions students posted looking specifically at the degree to which each question mapped onto the four levels of the Depth of Knowledge questions (see figure 2 for DOK question totals). Initially we coded one-fourth of the students' questions together to

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become familiar and consistent with the ways in which we categorized questions, using key DOK wording and ideas to help us determine the levels. Through our side-by-side initial coding, we came to a consensus on levels and completed coding the remaining questions independently according to how they related to the DOK questioning levels and grouped by levels (see table 1 for examples).

Results/Interpretations

Overall, students were very thoughtful in the types of questions they asked their peers. This approach not only allowed for authentic, meaningful discussions, but it also illuminated the importance of audience and purpose in writing. Once students saw purpose and recognized the true audience, they looked forward to the discussion boards as a way to get to know others and learn from each other. The once mundane task became an integral task in students' learning. Many times, students would include personal comments in their posts such as "I love your idea!" "This is amazing, you were so lucky." These personal comments made the community of writers more cohesive and thereby supported them to take more risks in their own writing and responses. Over the semester, the students were much more willing to share personal successes and failures with each other as compared to what we have noticed previously on more traditional discussion boards.

Students also took ownership of their discussion posts, meaning they did not rely on the instructors to impart knowledge or information, rather they autonomously engaged themselves in the learning process (Nelson, 2001). Through this ownership and engagement, students began to develop both a deeper content knowledge and demonstrated emerging pedagogical knowledge of writing instruction--a main objective for the course and for our preservice teachers. In general, we found our preservice teachers were also more reflective on their practices and their emerging understandings of writing pedagogy--a goal for all teachers but especially novice teachers (Bransford, Darling-Hammond, & LePage, 2005; Hayden & Chou, 2015; Milner, 2010).

The emerging themes from the weekly topics and questions provided a pattern of reflection and application to teaching that allowed for deeper connections to be made within the courses and field experiences (See figure 1 for themes and frequencies).

For many of the weekly topics, questions were highly connected to the content and course readings. In previous courses we have taught during which students only wrote responses to faculty-generated questions, student responses lacked personal connections with regards to teaching, experiences, and instruction. It almost seemed as though the students were composing responses guessing what

we would want them to say rather than responding organically. However, in this semester, we began to notice that our students often asked meaningful questions and provided very thorough and in-depth responses to questions focused on their future classrooms, their teaching and instruction, and their experiences as both students and observers in their field placements. In many of the posts, the preservice teachers would reference both course texts and lectures as well as practicum experiences to demonstrate what they planned to do as teachers in their own classrooms. Often they would use the course texts, lectures, and even previous discussion posts to provide evidence as to why these practices were important-- something we hadn't seen in previous semesters. Below are several student examples that highlight the connections students made to teaching through the texts, experiences, and observations.

> Example 1: I would want to create an informational text using a student survey to determine interest and ideas. I would help the students find a place in the community or the school where their informational text could be used as a resource which would give them an audience to prepare for (Duke, pg. 86).

> Example 2: "A classroom can so easily become a self-contained world" Duke pg 142. This quote is so meaningful when teaching persuasive writing. We need to as principle 1 says; design compelling, communicatively meaningful environments. As teachers we need to be making our classroom environments into these rooms where students become interested in making changes and become fascinated with the world around them. Challenges our students with topics that are real to them and are happening in their world to turn their attention to it. Bringing these meaningful topics to our classrooms will intrigue our students to want to make a change and that is where you help guide them to use persuasive genres.

> Example 3: I really liked the quote at the beginning of the chapter, "If assessments of learning provide evidence of achievement for public reporting, then assessments for learning serve to help students learn more" (Richard J. Stiggins). This quote made me think about the assessments that I want to give in my own classroom. I valued the "Assessments for Learning: Some Possibilities" box on page 251 that gave ideas on how to assess students writing daily. I have seen many of these ideas being used in my practicum classroom which

helps me to understand how I could implement them in my classroom. One idea that I have found to be beneficial in teaching writing is to have whole class conversations about the writing process regularly and before it begins. This seems to get students thinking about
what they want to write while understanding what is expected of them.

Example 4: When I was in the 6th grade my teacher made us write A LOT! I remember being stumped on what to write about even though she gave us freedom within a genre. She was very positive and always found good things to say about your writing. I loved to write by the end of her class and I still consider her one of my favorite teachers.

Example 5: Connecting the lessons to real life for students is always so important. A lot of them go to school thinking it's just our way of torturing them and the whole time is pointless. However, if we are able to relate to real life, they are much more willing to learn and participate. One way we can do this, something I learned from my host teacher, is to have them write about and draw a picture of what they want to do as a career when they grow up. Then, the teacher hangs them up where everyone can see them. As they go into a new lesson or there is something the students aren't as willing to learn about, she points to their pictures and reminds them: all of these jobs require
the ability to correctly capitalize! It can be a stretch but it really is effective for students to see that and be reminded that what they are learning isn't a waste of time.

Example 1, demonstrates how the preservice teacher connects to the text and how she is using that information to think about ways to support her future students in focusing on audience in their writing. She is not just stating what the text says, but synthesizing the text to describe her approach to authentic audience for writing.

Example 2 demonstrates how the preservice teacher pulls from the text to make a stance about the importance of providing a classroom that fosters change. You can see from her post that she is dedicated to a classroom environment that supports student writers being change agents. Her example not only states her

stance, but provides ways to support her students in making those changes. At the same time, this student lacks some sophistication in how to accomplish this task, she is beginning to take a stance and develop a philosophy for teaching writing.

Example 3 demonstrates how the preservice teacher not only pulled from the text to connect to future teaching, but also how the text supported what her practicum host teacher did in the classroom. There is also evidence to show how she will incorporate or "implement" classroom discussion into her writing process activities. This approach is supported in depth by both her new learning and experiences connecting together.

Example 4 provides evidence for the preservice teacher's own elementary experiences molding her perceptions of herself as a writer. This perception helped her frame many of her discussion posts and approaches to teaching. It also allowed her to begin to see how she too would instill the love of writing in her classroom.

Example 5 utilizes the experiences in the classroom to show how students perceive writing. In this post, the preservice teacher is discussing ways in which teachers make writing authentic and real for students. Her example of her host teacher connecting student work to life goals is one way the university student saw to make writing real in the classroom.

These examples demonstrate how our students, through their participation in the discussion boards, moved from simply reciting specific information from the text to providing specific philosophies and goals of their future writing instruction by connecting and extending the information in the course text, their personal educational experiences, and their practicum experiences. This reflective practice (Bransford, Darling-Hammond, & LePage, 2005; Hayden & Chou, 2015; Milner, 2010) was something missing in more traditional discussion boards and classroom discussions.

Our analysis of the students' discussion posts showed that students engaged more deeply with the content and provided sufficient evidence of critical thinking as they wrote back and forth to one another. In contrast to previous semesters in which students were required to blog internally, during this study, we noticed that students were questioning the author, stating claims and supporting the claims using evidence from the text, comparing and contrasting information they are reading across a variety of texts, and making meaningful connections between in-class discussions, field experiences, and the required texts. During class discussions, students referred to conversations they had in their discussion groups and posed many more higher-level questions during the course discussions than we have noticed in past semesters.

For example, one group question focused on building a community of trust and developing a classroom of readers and writers. Students responded with similar

ideas grounded in the text readings. One student pulled a statement directly from the text to support her ideas of connecting reading and writing by stating, "The book states that growth in reading positively impacts writing and growth in writing positively impacts readings so it makes sense to me that they should be taught hand in hand." She goes on to provide different types of instructional approaches she would use that incorporate both reading and writing. Another student built upon the initial student's summary and question by using her name and pulling directly from her own elementary experiences as a writer. She states, "As I was thinking about Lindsay's question about recalling reading and writing strategies that I was taught in elementary school, I realized that my teachers integrated so many different subjects into writing...Whenever I wrote something it was usually for a purpose and not just a meaningless waste of time". Both of these responses show depth of understanding and not just regurgitation of facts and information but connecting those to multiple experiences and understandings. Over and over again, students connected big ideas from class (purpose and audience) with multiple teaching and writing experiences (e.g., their own childhood, practicums experiences).

To address to our research question about the nature and variability of DOK questions being asked by students, we noticed that overall, these preservice teachers were very thoughtful in the types of questions they asked their peers. They did not merely ask simple recall questions; rather, they included questions that required critically thinking and analysis of course materials. Across the entire semester of posting, students asked questions that can be classified across all four levels of depth of knowledge (see table 1). DOK level 1 questions were most often asked in the first week and mid semester weeks. We hypothesize that this was due to the new approach to discussion boards for students in the first week and the dedicated practicum experiences for each university during mid-semester. Students during weeks 4-6 were spending more time in their practicum classrooms and therefore asking more literal and surface level questions. Yet at the same time, the nature of those questions was focused on what was happening in the practicum classrooms instead of hypothetical questions about what they would do in the future. These concrete practicum focused questions also allowed for extended conversation and learning from each other as students compared experiences and asked for suggestions or support. For example, students asked their peers to "share one approach your practicum teacher uses that you love" or "what is one way you will use writing during your practicum?" as DOK 1 questions.

Typically, students who asked DOK level 1 questions were asking peers to pull directly from the text, recall information, and provide one short answer. "What strategies did the text highlight that you would like to read more about?" "What was one helpful thing your teacher did to help you become a better writer when you

were in school?" are both examples of students providing a question that asked their peers to recall information and provide a short answer. In contrast, students who asked DOK level 4 questions were asking their peers to extend their reasoning. They used key phrases such as why or why not to elicit more information and analysis of the question being posed. Students asked such questions as "Do you think that reading and writing should be taught together or separate? Why or why not?" "Do you think it is important to have the students discuss what they have learned after a project is complete, why or why not?" to push their peers thinking past providing one short answer or idea and synthesizing and comparing ideas to come up with a critical stance.

The majority of the questions asked each week fell within the DOK levels 2 and 3 questions, meaning for the most part, the students were asking their peers to provide basic reasoning and more complex reasoning in their responses. For example, one student asked her peers to explain "What types of strategies did you find more important or beneficial listed in the readings? (Ch 7, Routman, 169-173)." This is an example of a DOK level 2 question that asks for the reader to use the information from the reading to help them decide about the types of strategies used for writing. "What is your view on ignoring spelling and grammar mistakes and "focusing on the big picture?" "How do you feel about possibly showing your own personal struggles with writing, while demonstrating it?" are both examples of a DOK level 3 question that asks the reader to make more complex reasoning that includes summarizing the text and connecting general ideas as well as drawing inferences and providing support of new ideas. These types of questions allowed students to respond with longer more detailed answers that often pulled and connected the text, personal experiences, and teaching. These types of questions provided students opportunities to talk about how they would connect to future teaching and instruction as well as making connections to their own classroom learning and practicum experiences.

While the students crafted thoughtful questions, they were often less complex and missed key phrases (e.g. why or why not, expand upon, share your thoughts on…) that would have potentially extended their peers thinking and responses. For many of the lower level questions if the phrase why or why not would have been added it would have made the question much more complex and allowed for an in-depth analysis and interpretation of the topic being addressed. As instructors, this is something we noticed could be bolstered in our own instruction to support students' development of higher order questioning. We learned we need to prioritize modeling asking and answering higher order questions for our students, so they can begin to develop that teaching skill as well.

Discussion boards allow preservice teachers the opportunity to interact with

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one another through authentic writing. In the case of this study, preservice teachers were able to interact with each other to discuss what it meant to be a writer and how to teach writing. As they composed their discussion board post, attention to purpose and consideration of audience were extremely important. Engaging in these discussion boards not only helped preservice teachers think more deeply about their practice and articulate their thoughts and ideas, it also required them to focus on an audience in their writing --a practice they were learning to model and implement in their writing instruction for elementary students. much like they were sitting in a room speaking to each other.

This type of approach allows students to be in charge of their own discussions and understandings allowed for greater growth and development of writing instruction (Nelson, 2001). Again, in the past, with traditional discussion boards we had used in our courses, this in-depth discussion and connection-making was lacking. Our students rarely commented on the effectiveness of the discussion boards to their learning and application of new skills. Instead they related the disconnect and feelings of busy work. In contrast, many of the students made positive comments during the semester and in their final evaluations about the effectiveness and experience of cross-college discussion posts. They admitted that when told that an important part of the course work would be discussion posts that they dreaded the assignment. As they conversed back and forth, they began to see it as a very meaningful experience that allowed them to see different perspectives and share ideas that in the normal discussion post potentially would not have happened. The students also tended to ask more questions within their discussions than during class time discussions. With the new format for discussion, many of the students anecdotally commented in their end-of-course evaluations how much they enjoyed this approach to discussion and how much they learned about writing instruction and the different activities and instructional strategies they would someday use in their own classrooms. They rated the experience as "highly effective."

Implications

Examining the way our students engaged in discussions with each other around writing instruction, it seems that the standard method of read, respond, and reply to two may no longer be the most effective practice to support preservice teachers' learning about writing. As we learned from our students, authentic writing is important and motivating for students. Without a real purpose and authentic reasons, writing becomes a task to complete compared to an avenue for discussion. For us as teacher educators, this indicates it may be time to reconsider how we ask

our preservice teachers to participate in discussion board forums.

These small groups experiences allowed students to learn about teaching writing while participating in authentic writing experiences where they attended to their audience--an important element of writing instruction that we hope, as they mentioned frequently, is fostered among the elementary students that they teach. When the discussion board mimicked the experiences more similar to the face-to-face discussions and resembled discussions that teachers actually have in their practice, our students appeared to develop a deeper understanding of the complexities of providing writing instruction as they wrote to learn across the two universities.

Thus far, consistent with research surrounding writing to learn (e.g., Nelson, 2001; Newell, 2006), our students appeared to construct a deeper understanding of the content of the course which built a strong foundation of critical aspects of writing instruction. Ideally, the knowledge students gained will result in highly effective writing instruction in their elementary classrooms.

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Table 1: Depth of Knowledge Question Types and Short Descriptors

| Depth of Knowledge Question Level Descriptors			
Level 1 Recall of Information	Level 2 Basic Reasoning	Level 3 Complex Reasoning	Level 4 Extended Reasoning
asking for writers to provide:			
● simple recall or location of facts ● shallow/literal understanding ● verbatim recall from text ● simple single word or phrase responses ● Brainstorm lists, concepts, or perspectives related to a topic	● basic inference or draw basic conclusions about information from the text ● short simple summary ● hypothesis based on observations or prior knowledge	● deep knowledge of ideas ● explain, generalize, or connect ideas using supporting evidence ● Compare information within and across texts or experiences ● Cite evidence and develop a logical argument ● Describe in details ● Justify conclusions	● complex reasoning, planning, developing, and thinking over time ● compare or analyze multiple ideas ● Gather, analyze, organize, and interpret information from multiple sources ● evaluate information for accuracy and relevancy

Figure 1: Overall Topic Discussion Board Themes
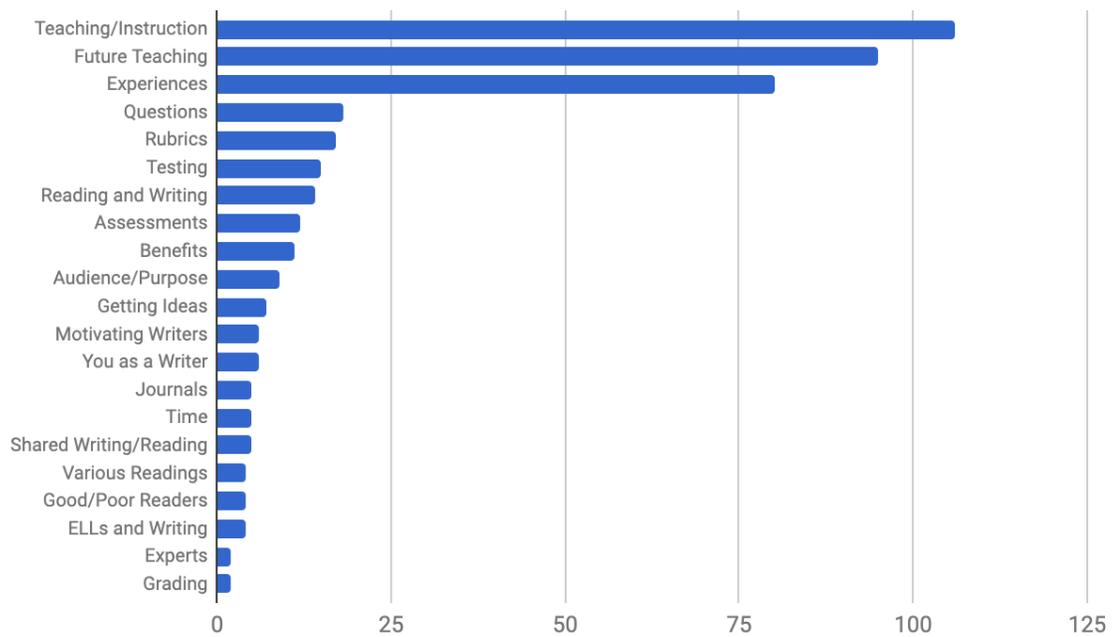
Figure 2: Student DOK Questions by Weeks