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Demonstrating Reflection: A Content Analysis of Reflection that English Teacher Candidates Demonstrate in Writing

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DEMONSTRATING REFLECTION: A CONTENT ANALYSIS OF REFLECTION

THAT ENGLISH TEACHER CANDIDATES DEMONSTRATE IN WRITING

AFTER CONDUCTING CLASSROOM INQUIRY

A Dissertation

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Accepted by:

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ABSTRACT

This study is an analysis of the depth of reflection exhibited in written documents produced by English teacher candidates. Description and insights were drawn into the reflective thinking of the undergraduate teacher candidates in the context of teacher research essays that they produced. Reflection is widely viewed as enabling teacher candidates to make connections between actions and consequences as well as between theory and practice. Teacher education programs are encouraged by accreditation agencies to adopt a framework that helps teacher candidates to reflect on practice. However, there is no broadly accepted protocol in place for determining depth of reflection that is demonstrated by teacher candidates. Further, assessment of reflection is too often characterized by subjective rather than objective analysis.

A four-category protocol developed by David Kember and colleagues provided guidance toward an assessment of the depth of reflection. No published study in the field of English Education has analyzed depth of reflection in the written work of teacher candidates with guidance from this protocol. I rated the depth of reflection as one of four categories: non-reflection, understanding, reflection, or critical reflection. Judgment of the depth of reflection for a teacher research essay is based on the highest level of reflection observed in the whole essay. I also engaged in content analysis of the teacher research essays in order to make inferences about the broader context of the written work of the teacher candidates, and systematically investigate the content of the teacher research essays. I describe the depth of reflection of teacher candidates as they address strengths and deficiencies they identified in their own instruction.

Each of the eight teacher research essays in the study were coded either as reflective or as critically reflective, indicating that all student teachers made relationships between conceptual knowledge and the experience of student teaching. One teacher research essay showed evidence of critical reflection, or a change in a fundamental belief about teaching. An English teacher education program would be able to use the results of this analysis as evidence of reflective thinking demonstrated in the writing of teacher candidates. Kember's four category protocol provides guidance for teacher educators to assess the depth of reflection demonstrated in writing by teacher candidates through a protocol that has been reliably tested. Use of the protocol can help a teacher educator and a teacher education program to make more informed decisions about ways to improve instruction to foster candidates who will become reflective teachers. Kember's four category protocol can be useful as part of a goal of a teacher-education program to facilitate reflective thinking and reflective teaching among teacher candidates. The protocol can be useful as part of a goal of a teacher education program to facilitate reflective thinking and reflective teaching among candidates. When the aim of a teacher education program includes developing teachers who will be reflective practitioners, the use of a validated protocol to assess depth of reflection in the writing of teacher candidates is beneficial toward monitoring and reporting progress toward that goal.

DEDICATION

For my parents.

ACKNOWLEDGMENTS

I would like to acknowledge the members of my committee for all of their assistance, support and guidance that they provided throughout my graduate work. I fear that any attempt to express my debt of gratitude would be inadequate. Each one of the committee members has in their own individual ways played a crucial role in not only the development of this dissertation, but my growth as a professional. As methodologist and co-chair, Dr. Medford co-assessed the teacher research essays and provided invaluable guidance throughout the process of completing this dissertation. Co-chair Dr. Stegelin also provided trusted and crucial guidance, feedback, as well as patience. Dr. Bailey, who granted me the site research and provided me with access to all documents and information, has been a trusted and kind mentor and advisor. Any attempt to express the level of contribution that she has made to this dissertation and to my growth throughout the doctoral program would fall short. Her self-sacrifice and dedication has been inspiring, and I hope that I can also live up to being the dedicated mentor of teacher-educators and graduate students that she has been as I move forward in my career. Dr. Klar has provided wisdom throughout the process of my work on this dissertation with valuable feedback and advice. I look forward to working with each of the committee members hopefully in the future. I also look forward to ongoing friendships with my committee members.

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CHAPTER 1: INTRODUCTION

The purpose of this study is to discern the depth of reflection exhibited in teacher-research essays produced by English-teacher candidates following the conduct of classroom inquiry. A validated four-category protocol (Kember, McKay, Sinclair, & Wong, 2008) provided a guide to assess reflection in teacher-candidate writing. Reflection by teacher candidates is seen as a way to make connections between actions and consequences (Dewey, 1933/1986a) and to bridge a gap between theory and practice (Clark & Peterson, 1986). If teacher-education programs evaluate teacher-candidate writing intended to demonstrate reflective thinking, with guidance from a validated protocol that allows for objective analysis, then programs can use this data to take steps toward improved preparation of reflective teachers (Kember, 2001).

Reflective thinking, as understood by Dewey, involves systematically examining questions about practice (Elder & Paul, 2008). This study is grounded in a view of reflection as defined by Dewey in *How We Think* (1933/1986a), entailing "the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it leads" (p. 118). In addition, a literature review on reflection in professional practice by Kember (2001) found themes that define reflection. Reflective thinking involves the development of new perspectives on assessment of experiences, facts, and beliefs (p. 6). Reflection is often instigated by an attempt to solve a problem presented in an unusual case, or by an attempt to revisit past experiences. This study is an examination of the depth of reflection exhibited in teacher-research essays using a four-category protocol that ranges from

habitual, nonreflective thinking to critical reflection in which there is a fundamental

change in the way a candidate considers an idea or a concept (Kember et al., 2008).

Teachers can guide students through the development of increasingly more

nuanced reflective thinking, considering the social consequences of actions with

increasing attention to evidence-based inquiry (Dewey, 1916, 1933). Inquiry is viewed in

this study as "that part of reflection that is the active searching for evidence" (Rodgers,

2010, p. 47), involving observation and investigation of data that may result in the

support, modification, or overturning of beliefs. Teacher-education programs are

encouraged to adopt a framework that helps teacher candidates reflect on practice. The

Council for the Accreditation of Educator Preparation (CAEP) requires colleges of

education to document teacher candidates' skills using performance-based assessments.

Through the use of a teacher-work-sample (TWS) framework, systematic performance-

based documentation originally developed at Western Oregon State University (C. Perry,

Smith, &Woods-McConney, 1998), teacher-education programs can demonstrate that

teacher candidates impact student learning. Teacher candidates discuss possible reasons

for the progress or lack of progress made by students (Wise & Leibrand, 2001). Further

reflection is encouraged because teacher candidates describe new insights and learning

objectives that emerged based on their analysis (Henning et al., 2005).

However, assessment of reflection is too often characterized by lack of clarity in

definitions and criteria (Boud & Falchikov, 2007) as well as subjective rather than

objective analysis (Kember, 2001). Despite pressure for teacher-education programs to

document evidence of reflective thinking for accreditation purposes, scholars lack

agreement about how to define, operationalize, and document reflective thinking (Atkins & Murphy, 1993; Boud & Falchikov, 2007; Kember, 2001; Loughran, 2006; Lyons, 2010; Rodgers, 2002; Sparks-Langer, Simmons, Pasch, Colton, & Starko, 1990; Zeichner & Wray, 2001). This study addresses a need for further study of ways reflective thinking can be documented by a validated protocol to assess reflection in student writing.

Need for the Study

This is the first published study to utilize Kember's four-category protocol (Kember et al., 2008) for guidance in the documentation of depth of reflection in the written work of teacher candidates within an English teacher education program. I describe the depth of reflection of teacher candidates as they address strengths and deficiencies they identified in their own instruction. This is an area of growing emphasis in the field that is in need of further research.

Purpose of the Study

The purpose of this study is to illuminate the depth to which teacher candidates demonstrate reflection in documents they produce. Essays were produced following the conduct of classroom inquiry into the effectiveness of the design and implementation of units of instruction. This study demonstrates ways Kember's protocol can be used to analyze depth of reflection (Kember et al., 2008). Further, this study the protocol for guidance in the assessment of reflection of writing produced by teacher candidates during coursework in a secondary English program.

Research Question

To what extent did English-teacher candidates demonstrate depth of reflection in teacher-research essays?

Analyzing Depth of Reflection

I use a four-category scheme to assess reflection: (a) habitual and nonreflection, (b) understanding, (c) reflection, and (d) critical reflection (Kember et al., 2008). Kember's approach is a validated method to examine the depth of reflection of student writing, and has been used in multiple studies (Harland & Wondra, 2011; Kember, 1999; Kember et al., 2008; Spalding & Wilson, 2002; F. K. Wong, Kember, Chung, & Yan, 1995). Assessment is coded at the level of the paper as a whole. A paper is given an overall code for depth of reflection based on the highest level of reflection achieved. A paper is most likely to be reflective when a student discusses personal experiences and lessons learned from an experience (Kember et al., 2008). The analysis of texts produced by teacher candidates allowed me to make inferences about the broader context of their work. Content analysis was used in this study to examine the documents produced by teacher candidates. Content analysis takes advantage of the fact that texts of any sort exist in a larger context (Krippendorff, 2004).

Hypothesis of the Study

I predicted that teacher-research essays produced by teacher candidates would contain consistent evidence of reflection at the whole-paper level. This hypothesis draws on research (Cain, 1989) of ways planning models impact how teacher candidates think. Cain (1989) tested a planning model by fostering two planning cultures in a teacher-

preparation program. In one culture, a teacher candidate used a researcher-designed "creative planning model"; in the other culture, a teacher candidate used a "rational means-end" (Clark & Peterson, 1986) planning model advocated by Tyler (1950). Using content analysis, Cain found that the creative planner demonstrated reflection more frequently and in greater depth than the rational means–end planner. It is beyond the scope of this study to examine the extent to which a process of designing, implementing, and evaluating conceptual units of instruction (Cain, 1989; Smagorinsky, 2008) may influence the reflective thinking of teacher candidates. Yet, if a planning model affects the way teacher candidates think (Cain, 1989), I would have expected to find frequent indications of reflection by teacher candidates, because they were using a planning model with a principled approach to the design, implementation, and evaluation of instruction, which encourages reflective thinking. However, to undergo critical reflection, as understood in this study (Kember, 1999; Kember et al., 2008), teacher candidates would have to review their presuppositions about education and their consequences on teaching practices. I hypothesized that such critical reflection, which is often time-consuming and requires comprehensive reflection of one's beliefs, would not frequently be evidenced by teacher candidates in this study.

Significance of the Study

This study adds to an understanding of reflection described by Kember and colleagues (Kember, 2001; Kember et al., 2008). Furthermore, the study contributes to the research related to the use of Kember's four-category protocol to determine depth of reflection in student writing at the undergraduate level. This study details ways Kember's

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protocol provided guidance in assessing the depth of reflection in student written work, such as teacher-research essays. This guidance is intended to assist a teacher-education program toward use of the protocol as a validated framework to determine the level of reflection in the writing of teacher candidates in an objective manner.

Limitations

Teacher-research essays were written after teacher candidates conducted classroom inquiry into the effectiveness of their design and implementation of units of instruction. Each teacher candidate was a senior at a research university during the 2010–2011 school year. Teacher candidates spent the 2010 fall semester designing a draft of the unit (Cain, 1989; Smagorinsky, 2008). Classroom inquiry in the 2011 spring semester by teacher candidates, based on their implementation of instruction in high school English classes, provided the context for their subsequent teacher-research essays. The results were limited to a description of the depth of reflections exhibited by English-teacher candidates who participated in this study. It is beyond the scope of this study to make generalizations related to a wider population, to discern motivations of the teacher candidates, or to predict future behavior. The only participants in the study were English-teacher candidates enrolled in the fall methods course and the spring capstone seminar during the 2010–2011 school year. The sample size is relatively small: eight participants. Data for this study was limited to documents produced during the natural course of the 2010 fall methods course and the 2011 spring capstone seminar.

Assumptions

The following assumptions underlie this study. This study is grounded in the Deweyan assumption that it is the responsibility of a teacher-educator program to organize experiences that help future teachers develop a habit of reflective thinking through ongoing inquiry (e.g., Dewey, 1933/1986a). Fostering reflection is worthwhile, considering that teacher candidates engage in reflective thinking during field experiences to shape their view of what it means to be a teacher (Canning, 1991). Further, implicit in the study is the assumption that teacher candidates who adopt reflective practices will be better equipped to meet PK-12 students' individual needs (Kember et al., 2008). Teachers who adopt reflective practices make meaningful connections to what they are learning in a classroom (McBee, 2004). The data that can be gained through the use of a validated protocol to guide teacher educators through the assessment of the depth of reflection in writing can contribute toward improved preparation of teachers who are reflective practitioners.

Summary

Teacher candidates engaged in reflective thinking are systematically considering their beliefs or knowledge in the light of evidence. Kember's four category protocol (Kember et al., 2008) provides guidance toward analyzing the depth of reflection exhibited in written work. The protocol has not previously been used within a published study to guide the assessment of depth of reflection within teacher candidate writing that was produced as part of coursework in a secondary English teacher education program. The protocol can guide teacher educators and assessors toward an objective

determination of the depth of reflection in evidence in the writing of teacher candidates. This data can be used toward documentation of reflective thinking for accreditation purposes. In addition, the data can also be used toward informing future instruction with the aim of encouraging reflective thinking by teacher candidates.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

The second chapter provides a review of the relevant literature. I begin with a discussion from a Deweyan perspective related to professional growth as a teacher through reflective thinking and the conduct of inquiry. In this study, reflection was fostered in teacher-research essays after teacher candidates conducted classroom inquiry. Reflective thinking was encouraged in the context of efforts by teacher candidates to increase their skills as effective teachers who can gain certification and develop careers as teachers. Then, I discuss how the Kember et al. (2008) four-category protocol for assessment of reflection can be used by a teacher-education program to analyze depth of reflection in teacher-candidate writing. No literature exists for the use of the Kember et al. approach by a teacher-education program in English education. Next, I address the need to have a validated and useful framework to analyze teacher-candidate reflection to show evidence of reflection in CAEP reporting. Because teacher candidates produced essays after conducting classroom inquiry using teacher-research methods, this literature review concludes with a discussion of the benefits and possible ethical concerns of undergraduate teacher candidates as well as practicing teachers conducting classroom inquiry.

Use of the Kember et al. Protocol by a Teacher-Education Program

The Kember et al. (2001) protocol is used to examine the depth of reflection of student writing (Harland & Wondra, 2011; Kember, 1999; Kember et al., 2008; Spalding & Wilson 2002; F. K. Wong et al., 1995). Four categories were chosen by Kember (1999)

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because previous studies to validate earlier reflective frameworks showed that too many categories make it difficult for coders to reach agreements when coding text segments. Also, too few categories hinders the ability of coders to differentiate between types of reflection exhibited in a piece of writing. Intermediate categories are allowed to be used under the protocol. Writing coded as habitual or nonreflective does not show evidence that the student teacher had sufficient understanding of the material or concepts under discussion (Kember et al., 2008). Writing coded as demonstrating understanding shows evidence that the teacher candidate understood the material and concepts but did not relate this understanding to experience. Writing coded as reflection shows evidence that relationships are made between conceptual knowledge and the experience of student teaching. Kember and colleagues (2008) identified that the highest level of critical reflection requires a change to deep-seated beliefs and leads to the formation of new belief as well as, in the case of teachers, structures of how to practice teaching based on new beliefs. Critical reflection involves the development of new perspectives, likely to take place over an extended period of time.

Numerous approaches to understanding and assessing reflection are available to teacher-education programs (e.g., Hatton & D. Smith, 1995; Kember et al., 2008; King & Kitchener, 1994; Korthagen & Vasalos, 2010; Kreisburg, 1992; Mezirow, 1991; van Manen, 1977). A constructivist and pragmatic emphasis on change in fundamental beliefs, as the highest level of reflection in Kember's four-category protocol, differs from approaches drawn from critical theory. By contrast, when the identification of the highest level of reflective thinking is grounded in critical theory, the highest level is associated

with a critique of power in society, and toward an examination of a power such as that which exists between teacher and student (e.g., Freire, 1990; Habermas, 1971; Kreisburg, 1992; Mezirow, 1991; van Manen, 1977). The Kember et al. (2008) framework to analyze student writing differs from approaches that view critical reflection in terms of asking questions and solving problems related to social inequities (e.g., Brookfield, 1995; Mezirow, 1990). This study privileged an approach to critical reflection that stresses the integration of theory with practice and the open-mindedness involved in a reexamination of beliefs (Kember et al., 2008).

Kember et al. (2008) tested the reliability of the procedures for the four-category framework through a trial in an undergraduate-level radiography course that included clinical field placement. Four coders reviewed four written papers during the trial. Results shows that procedures were reliable in operation. On three of the assessment categories, three coders agreed whereas the fourth coder was in an adjacent assessment category, whereas on the fourth assessment category there was perfect agreement among the four coders. The written pieces examined were intended to promote critical thinking. Students produced critical-incident reports of experiences during their clinical placements. Choices for topics of clinical-incident reports included (a) a nonroutine incident that required a decision, (b) a situation that called for improvisation or innovation, (c) the changing of a procedure, or (d) an emotionally, physically, or mentally demanding situation. Written pieces selected during the trial had already been graded through a traditional marking procedure ranging from A–D. Four coders then graded each of four selected papers based on the Kember et al. scheme. For each of four critical

incident reports used in the trial, coders were unaware of the grade awarded or of information that might identify the student. Kember and colleagues recommend their four-category framework for use in studies related to the extent to which students engage in reflection. The framework can be used in conjunction with other criteria related to an assignment or a discipline, to examine more than one quality in an assignment.

Drawing on the Kember et al. four-category scheme, Harland and Wondra (2011) analyzed reflection in the writing of teacher candidates, following their completion of reflective papers and reflective blogs. The reflections were written for undergraduate education courses at Illinois State University associated with field experiences. Harland was a professor of mathematics, science, and technology, and Wondra was a graduate student at Illinois State University at the time of the study. During 2 terms, 67 teacher candidates participated in the study, of whom 24 teacher candidates wrote reflective papers and 43 wrote web log posts. Four coders read each piece of writing in the Harland and Wondra study. The writing was coded at the highest level of reflection exhibited at any point in the piece of writing, noting that coding this way, rather than by text segment, helped coders reach 100% interrater reliability.

Kember et al. (2008) recommended coding in this manner rather than coding at the level of text segment. However, in the Harland and Wondra (2011) study, coders did label text segments with categories and subcategories evidenced while they were reading each piece of writing. A reflection number and a letter was placed in the margin after a text segment to aid discussion in the event of lack of agreement among the four coders. Individual text segments were discussed if there was lack of agreement on the score for a

piece of writing. Higher levels of reflection were shown by teacher candidates who completed web logs than by those who completed reflection papers, and the web logs were also an average of 1,000 words shorter in length. No relationship was demonstrated between student–teacher interaction and the levels of reflection demonstrated in pieces of writing. Harland and Wondra (2011) argued that the opportunity to reflect systematically and publicly in web logs contributed to the increased depth of reflection demonstrated in the web logs.

Roux, Mora and Tamez (2012) from Universidad Autónoma de Tamaulipas in Mexico used the Kember et al. (2008) framework to investigate the depth of reflective writing produced by 15 practicing teachers of English as a foreign language who enrolled in a master's degree second-language-acquisition course. A second-language-acquisition course is different from an English-education course because second-language acquisition is viewed as a subfield of applied linguistics and focuses on studying what learners do in the process of acquiring a second language, rather than the practices of language teaching (Gass & Selinker, 2008). Roux et al. reported that their study represents the first study they could find of depth of reflection in essays written in English by native speakers of Spanish.

The final reflective essays were 3–4 single-spaced printed pages in length (Roux et al., 2012). The three researchers independently read 75 pieces of writing produced in the course including the 15 final reflective essays. They reached interrater reliability in 85% of the cases, then met to discuss their views until reaching a consensus on coding for all papers. Of the 75 coded pieces of writing none showed evidence of critical reflection,

two final essays were reflective, 44% demonstrated understanding of a concept or a theory, and 51% were nonreflective. The two essays coded as reflective (Level 3) described personal insights gained in relation to instructional strategies and theories based on teaching experiences.

After classifying all papers, the researchers contacted three participants to conduct semistructured interviews lasting 30–35 minutes each (Roux et al., 2012). One participant was chosen whose writing represented each of the three levels of reflection, based on the final essays. Researchers concluded that difficulties in reflective writing were the result of a lack of familiarity with reflective writing in the Mexican educational system, lack of English-language proficiency, and an inductive style of learning. The authors argued that their study demonstrated a need for a systematic focus on not only assessing reflection, but helping teachers learn to be reflective practitioners in a teacher-education program (Roux et al., 2012).

The Kember et al. (2008) protocol provided guidance toward the assessment of the depth of reflection shown in student writing. The four category protocol was validated in testing by three groups of researchers: Kember and colleagues (2008) used the protocol to analyze depth of reflection by mathematics teacher candidates at Chicago State University (Harland & Wondra, 2011). In addition, reflectiveness of graduate students in an English as a foreign language program at Universidad Autónoma de Tamaulipas in Mexico English was analyzed using the Kember et al. (2008) four-category protocol. The protocol can be used as a validated guide for assessing reflection in a teacher-education program. Next, I discuss ways that teacher-education programs are responding to the

pressure to document effectiveness for accreditation purposes, with emphasis on reflective practice as understood by Schön (Feistritzer, 2004; Foster, Kohn, McGuire, Miller, Miller, 2010).

The Need for a Validated Protocol to Assess Reflection in a Teacher Education Program

Teacher-education programs are responding to increased pressure to document reflective practice through the use of Teacher Work Samples (TWS; C. Perry et al., 1998). Evidence in a TWS framework is tracked in relation to the teacher candidate's design, implementation, and evaluation of instruction (Schmöker, 1999). The goal is to gain data on the performance of teacher candidates and their students that can be used to make instructional improvements (Schmöker, 1999). Other evidence can include ways a teacher candidate helps students build increasingly complex skills, and ways a teacher candidate differentiates instruction to meet diverse needs of students in the classroom (Glasgow & Hicks, 2003).

When the TWS framework is implemented with fidelity, researchers indicated the assessments were reliable and valid in evaluating teacher performance (Denner, Norman, Salzman, Pankratz, & Eyans, 2004; Devlin-Scherer, Burroughs, Daly, & McCartan, 2007). Common elements in the way the TWS framework is implemented include involving teacher candidates in (a) the gathering of data related to student learning, (b) the forming of hypotheses to explain trends in student learning, and (c) the use of inquiry through the TWS framework to purposely change instruction and assessment (Youngs & Bird, 2010). TWS allows for the systematic tracking of unit instruction by a

teacher candidate toward meeting standards-based learning outcomes (Schalock, 2002). This tracking of outcomes shows whether a teacher candidate meets mastery in the knowledge and skill domains in a teacher-education program. In addition, TWS allows tracking of student-learning gains in relation to instruction by a teacher candidate. Teacher candidates are held responsible for the learning gains of students based on performance, measured by the TWS framework (Brodsky, 2002; Cooner, Stevenson, & Frederiksen, 2011).

Teacher-education programs can use work samples as evidence of effective training of teachers toward becoming reflective practitioners. This is similar to the ability of practicing teachers to use work samples to meet standards in the National Board Certification assessment process. In the National Board process, evidence for certification in a portfolio includes videotapes of teaching performances, reflective commentary on the performances and teaching practices, lesson plans, and evidence that demonstrates student learning. Experts in the same subject area as the teacher who are trained as raters score the evidence using rubrics for critical dimensions of teaching (Darling-Hammond 2011). Participation in the National Board Certification assessment process is linked to the reexamination of teaching practices and to reported improvement in each area assessed, namely, the planning, design, and implementation of instruction, classroom management, diagnosis and evaluation of student learning, the use of subject matter knowledge, and participation in a learning community (Sato, Wei, & Darling-Hammond, 2008). Studies also link the process of National Board Certification assessment to the identification of teachers who effectively raise student achievement in comparison to

teachers who do not hold National Board Certification (Goldhaber & Anthony, 2005; T. Smith, Gordon, Colby, & Wang, 2005; Vandevoort, Amrein-Beardsley, & Berliner, 2004).

Research is lacking on the analysis of reflection using a validated framework in the field of English education. Zancanella and Alsup (2010) described the two strands of the history of standards in English-teacher education. Prior to the current standards movement, guidelines in English-teacher-education programs tended to follow the National Council of Teachers of English (NCTE) Guidelines for the Preparation of Teachers of English Language Arts (ELA). NCTE is a professional liaison between English educators and the CAEP. NCTE guidelines were recommendations rather than standards, but intended to have the force of standards. The second strand of the history of standards in English-teacher education involved Specialty Professional Association standards, developed to be used in accreditation. Through a program-review process, participating English-teacher-education programs need to demonstrate that teacher candidates possess content knowledge and professional and pedagogical knowledge and skills in accord with program standards. It is complex for English educators to identify assessments that demonstrate success in their programs through data from scoring rubrics (Zancanella & Alsup, 2011).

Berghoff, Blackwell, and Wisehart (2011) investigated ways new English teachers are prepared to engage in critical reflective practice. However, the researchers employed a social-justice approach to critical reflection, defining critical reflection as the questioning of one's own role in the maintenance of inequitable conditions in schooling.

The study, conducted in three urban teacher-education programs, explored instructional strategies for teaching critical reflection. The researchers highlighted the facilitation of critical reflection through working with dilemmas faced by new teachers, using structured protocols, and the use of collaborative inquiry (Berghoff et al., 2011).

TWS are used by teacher-education programs to document the effectiveness of the training of future teachers for accreditation purposes. By evaluating data related to teacher-candidate performance and the performance of students, TWS can help teacher educators improve instruction. Reflective practice is emphasized, yet there is little agreement on how to assess reflective practice. Next, I discuss the encouragement of reflective teaching through in inquiry. This is important to the study because teacher candidates engaged in classroom inquiry in order to evaluate the effectiveness of their instruction.

Toward Reflective Teaching through the Conduct of Inquiry

Teachers who are reflective engage in ongoing, self-initiated critical inquiry (Calderhead, 1992). Reflective teachers use intuition, initiative, personal and professional values, and personal judgment to choose instructional and research strategies to use in a given situation (Markham, 1999). Through a process of dialogue and collaboration, reflective teachers take responsibility for improvements in their abilities to adjust instruction during moments of teaching in the classroom (Day, 1999). Dewey viewed inquiry as valuable not just for the production of knowledge and ideas but also for its transformative impact on those who engage in inquiry. An interest in the conduct of inquiry enables growth that is characterized by a "constant expansion of horizons and

consequent formation of new purposes and new responses" (Dewey, 1916/1980, p. 182).

In the essay "The Development of American Pragmatism," Dewey (1981) emphasized

the democratic and transformative nature of reflective inquiry. As will be discussed in

this section, reflective thinking is cultivated through ongoing inquiry to reshape

knowledge and ideas.

Reflective teachers tend to pay close attention to affective aspects of instruction

(Zeichner & Liston, 1996, 2014). Further, to be a reflective teacher, one must

continuously question and reexamine "the goals and the values that guide his or her work,

the context in which he or she teaches … his or her assumptions" (Zeichner & Liston,

1996, p. 1). Through framing, reflective teachers recognize problem situations and take

reflective action to address those problem situations. A consciousness of subject matter

and of instructional standards also characterizes reflective teachers, because reflective

teachers identify and address their own deficiencies in instruction (Zeichner & Liston,

1996). Teachers are responsible for organizing experiences that help children develop a

habit of reflective thinking through inquiry (Dewey, 1987). Ongoing inquiry would

enable a child to meet the needs of life in a society that is continually evolving. Likewise,

for the purpose of this study, a teacher candidate who adopts a habit of conducting

ongoing inquiry will be better enabled to meet the changing needs of students while

adapting to the demands of teaching.

Dewey's (1933/1986a) approach to tools of inquiry provides a useful way to

discuss ways teacher candidates can take strides toward becoming reflective teachers.

Tools of inquiry include beliefs, meanings, and concepts and they can be viewed as

operating on a continuum from unfixed beliefs to fixed concepts (Nelson & Seaman, 2011). A teacher candidate may start out with a belief in the value of instruction that promotes the possibility for students to experience a psychological state of highly focused, purposeful concentration on an activity known as flow (Csikszentmihalyi, 1990). This belief could guide the inquiry, but the belief would be untested and held in doubt (Nelson & Seaman 2011, p. 565). In conducting inquiry, the belief can be transformed and given meaning. Nelson and Seaman compared the transactional process of the tool, person, and object of inquiry being transformed to "a hand conforming to the grip of a hammer to drive a nail" (p. 565). The belief in the value of instruction that sets a context for students to experience flow gains new meaning for teacher candidates through classroom inquiry.

In the process of classroom inquiry, teacher candidates' meaning making is shaped, as they construct, for example, a concept of how to promote the possibility for students to experience flow. The refinement of meanings through problem solving allows meanings to become concepts supported by evidence. Nelson and Seaman described epistemological dexterity, "the ability to hold even one's most dependable concepts tentatively, as if they were beliefs" (p. 567) as an important facet of Dewey's (1933/1986a) approach to tools of inquiry. This conforms to Dewey's understanding of an open-minded willingness to inquire into new ideas as a key aspect of reflective thinking. To engage in critical reflection as understood in the protocol used to determine level of reflection in this study (Kember et al., 2008), a teacher candidate would need to consider new ideas that may reshape prior understandings.

Dewey identified attitudes that are involved in the development of a habit of inquiry. Open-mindedness entails a willingness to rethink fundamental ideas through ongoing reflection and inquiry. Often doubts arise when a teacher candidate is faced with a problematic situation without knowing of a ready solution. Reflective thinking in a moment of doubt is then "occasioned by an unsettlement and it aims at overcoming a disturbance" (Dewey, 1916/1980, p. 336). Even strongly held beliefs about educational philosophy or teaching methods may come into doubt, laying open the possibility for a change in these beliefs. To solve the problem, according to Dewey's (1933/1986a) approach to reflective thinking, a teacher candidate should exhibit wholeheartedness, or an in-depth commitment with full devotion to personal and emotional resources. Dewey viewed the development of a habit of pursuing inquiry in the face of doubt as an essential aspect of reflective thinking. When the encouragement of reflective thinking by teacher candidates is informed by Dewey's understanding of reflection, it becomes imperative to stress commitment to an investigation by guiding a teacher candidate "to sustain and protract that state of doubt which is the stimulus to thorough inquiry" (1933/1986a/ p. 124). However, commitment should also involve responsibility. A sense of responsibility entails taking seriously the moral choices faced in life and in the classroom setting by habitually evaluating, through inquiry, how actions may bring about desired or undesired consequences. Teacher education grounded in Dewey's (1933/1986a) understanding of reflection stresses the fostering of an ethical sense of responsibility among teacher candidates. Finally, Dewey (1916/1980) urged an attitude of directness, or faith that actions grounded in in the attitudes of open-mindedness, wholeheartedness, and

responsibility in the conduct of inquiry are worth taking for the benefit of a democratic and just society.

A reflective teacher engages in inquiry as a habit, with reflection and inquiry becoming "energetic and dominating ways of acting" (Dewey, 1922/2002, p. 22). Adopting a habit makes the habit an integral aspect of oneself: a habit of reflection becomes part of the teacher candidate's sense of self (Dewey, 1922/2002). In turn, inquiry into the consequences of actions contributes to the development of "reflective morality" (Dewey & Tufts, 1932/2008, p. 162). The demands of reflective morality include ongoing inquiry into social conditions and a careful analysis into the way one's individual actions impact others. This inquiry can mean revising prior ideas according to new evidence and changing conditions. Difficult choices between actions that may represent competing goods makes it imperative to base those actions on careful consideration of consequences based on inquiry and reflection on available evidence.

Because inquiry is a way to further knowledge that can be put to beneficial and to harmful uses (Dewey, 1931/1986b), a sense of reflective morality is key to ensuring that a teacher candidate will bear in mind whether actions taken are beneficial for the life opportunities of students. A disposition toward reflective thinking and inquiry should also include a disposition toward taking moral responsibility for the way one's actions have consequences on the wider society (Dewey, 1931/1986b). Even though a teacher-education program might recognize the importance of fostering reflective thinking that is open-minded, wholehearted, and responsible, an obstacle that is potentially faced by

teacher candidates is struggle in the instruction of the subject matter, leaving little time for reflective thinking (Dewey, 1933/1986a).

> Unless the teacher's mind has mastered the subject matter in advance, unless it is thoroughly at home in it, using it unconsciously without need of express thought, he will not be free to give full time and attention to observation and interpretation of the pupils' intellectual reactions. (Dewey, 1933/1986a, p. 275)

Given that teacher candidates are still learning the teaching methods they apply in field experiences under the guidance of a cooperating teacher, it may often be unrealistic to expect the teacher candidate to master the subject matter in advance. It must also be stressed that Dewey understood inquiry and reflection as sources of learning and of personal and professional growth (as cited in Johnston, 2006). As will be discussed next, when reflection is seen as integral to a process of growth, the reflective process is worth promoting to foster growth by the teacher candidate even if the candidate may indeed struggle to find time for reflection.

Reflection Fosters Growth as a Teacher

Dewey (1938/1988) contended that reflection is at the heart of worthwhile educational experiences that provide learners the opportunity to "do something to prepare a person for later experiences of deeper and more expansive quality" (p. 47). People are prepared for these later experiences through a commitment to ongoing reflection and inquiry, which fosters learning and growth. Open-mindedness is an important characteristic of teachers' goals. To maintain change, teachers are self-driven to pursue learning to improve their teaching practices (Hashweh, 2003). Internal motivation to

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learn drives teachers who embrace changes in their own practices to accommodate the needs of their students. Such teachers are motivated by an awareness of conditions that help them maintain common guidelines tailored to the teaching context, including (a) open-mindedness to new pedagogical possibilities while recognizing their own limitations as teachers; (b) construction of new knowledge and beliefs that are tested in practice; (c) synthesis of new ideas with prior ideas; and (d) collaboration with colleagues and possibly university educators to maintain a support system (Hashweh, 2003). An open-minded willingness to inquire into new ideas enables the countering of "the dogmatic habit of mind, the belief that some principles and ideas have such a final value and authority that they are accepted without question and without revision" (Dewey, 1908/1977, p. 188).

Reflection is developmental and students can be guided to become increasingly reflective (Kember, 2001). W. G. Perry (1999) understood reflective thinking as changing over time across nine positions that progress toward increasing ability to construct knowledge through inquiry and evaluation. Similarly, King and Kitchener's (1994) seven-stage model of reflective judgment is based on the premise that a person's conception of knowledge can change over time through guidance and assistance toward an increasingly active view of knowledge construction rather than a view of knowledge as absolute and passively received from authority figures. Drawing on Dewey, King and Kitchener characterized reflective judgment as involving inquiry and the evaluation of evidence.

Growth is at the heart of King and Kitchener's (1994) reflective-judgment model because learners progress through increasingly more complex stages of reflection. Drawing on Dewey's understanding of openness, wholeheartedness, responsibility, and directness, King and Kitchener described how various ways of thinking and assumptions about the nature of knowledge characterize each stage: prereflective, quasireflective, and reflective thinking. In the prereflective stage, knowledge consists of concrete observations a person thinks are true. Growth is evidenced as a person progresses to the quasireflective stage in which knowledge becomes viewed as uncertain. Key to the consideration of inquiry, in the quasireflective stage a person accepts that some problems may not be easily solved. A person in this stage can use evidence to justify a claim. However, it is difficult for people in the quasireflective stage to justify their beliefs and conclusions based on examination of their beliefs or their process of reasoning. In the reflective stage, knowledge is no longer an absolute or specified, but is linked to inquiry and problem solving. Inquiry and evidence are used to solve problems and reach conclusions. The reflective stage is characterized by a person developing an open-minded willingness to draw on evidence to reevaluate conclusions or even to reevaluate fundamental ideas. In the context of this study, it is hoped that teacher candidates will draw on reflective thinking in order to grow as professional teachers so that reflection will inform practice.

Toward Reflection-In-Action

Schön differentiated between reflective thinking performed while a professional is engaged in an activity, reflection-in-action, and reflection-on-action involving the review

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and examination of past action. Teacher candidates in this study are engaging in reflection-on-action by looking back on their past actions in the classroom and striving to address research questions they investigated using teacher-research methods toward the conduct of classroom inquiry. Ultimately, it is hoped that teacher candidates develop the skills to effectively also use reflection-in-action. For example, a teacher candidate might reflect on possible consequences of actions based on evidence while in the act of making a decision in a problematic situation in the classroom. Schön held that early-career practitioners who lack the skills of more experienced practitioners are less likely to engage in reflection-in-practice (as cited in Kember, 2001).

Drawing on Schön's approach to reflective practice means that teacher candidates are encouraged to reflect on their decisions, not only by looking back and critiquing those decisions from a distance, but also in the implementation of their instruction. However, a teacher educator who is striving to foster reflective teaching could also bear in mind that because of inexperience, it might be difficult for teacher candidates to engage in reflective practice, and guidance could be helpful. Schön (1987) stressed the value of reflection in the context of practice. Ongoing reflection is informed by what the teacher candidate learns from the inquiry by weighing the merits of redirecting activity against time constraints and need for curriculum coverage. Schön (1987) promoted the importance of providing preparation for professionals in university programs to develop the ability of reflective thinking skills. A reflective practitioner gains self-knowledge while engaged in theorizing by taking control and responsibility for knowledge (Schön,

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1991). Further, Schön (1995) urged that the research of reflective practitioners be promoted, even at the expense of some degree of rigor in validity and reliability.

Rodgers and Raider-Roth (2006) explored the concept of reflection-in-action as presence by a teacher, or

> a state of alert awareness, receptivity, and connectedness to the mental, emotional, and physical iterations of the individual and the group with the world and each other, and the ability to respond with a considered and compassionate best next step. (p. 266)

A teacher with presence can observe students as they engage in activities, gathering information used as data, and make instructional choices based on an analysis of this data. Further, a teacher who is present to students builds a caring, trustworthy relationship through a wholehearted (Dewey, 1933/1986a) commitment to learning with and responding to students. Presence is characterized by awareness on the part of the teacher to the affective and the intellectual needs of students. The teacher accepts students for who they are as capable people, ever striving to forge authentic relationships. The type of authentic relationship that teachers with presence seek to build can be described as a I–Thou relationship (Buber, 1958) in which the teacher values the full humanity of students, seeking to help students achieve at their fullest possible capability, in a dialogue in which the student becomes an essential part of the development of the teacher's sense of self.

Rodgers (2010) explored descriptive inquiry (e.g., Carini, 2001) as a process integral to the development of presence, based on research conducted with graduate-level

teacher candidates. Rodgers emphasized the importance of deliberation and discipline in taking the time to carefully describe complex details, observed through descriptive inquiry (e.g., Carini, 2001). Descriptive inquiry involves actively seeking information and gathering evidence that can be used to support conclusions and beliefs leading toward action. Both descriptive review, an analysis of details observed in student work, and descriptive feedback are involved in descriptive inquiry. In descriptive feedback, through structured questioning, teacher candidates strived to learn from students what helped or hindered the learning process. In addition to contributing to the growth of a sense of presence, Rodgers argued that descriptive inquiry contributes to an enhanced civic capacity in a teacher candidate. Civic capacity, as understood by Rodgers, is similar to Dewey's understanding of reflective morality, in which a teacher candidate or a teacher would experience personal growth and an enhanced sense of ethical responsibility to contribute to a Democratic society (e.g., Dewey, 1916/1980, 1933/1986a; Dewey & Tufts, 1932/2008).

Research on reflective thinking tends to stem from Dewey, and Dewey's conception of reflective thinking has remained influential in the research literature (Kember, 2001). The fostering of reflective teaching is likely to include promotion of the dispositions of open-mindedness to new experiences and ideas, wholeheartedness in the pursuit of inquiry, and responsibility for carefully considering the consequences of actions. Reflective thinking is widely recognized as developmental. A teacher candidate is capable of exhibiting increased reflective thinking over time, with more experience and guidance in the conduct of inquiry, and with changing perceptions on knowledge and

ideas. Accepting Dewey's approach to reflective thinking demands the researcher wrestle with the binary logic of Aristotle. Aristotle differentiated between (A) *episteme*, thought directed toward understanding the workings of the world traditionally associated with philosophy, and (not-A) *phronesis*, thought directed toward action (as cited in Atkin, 2007). *Phronesis* relates to how one reacts and acts in a given situation, or how a teacher reacts to a student's particular behavior on a particular day, for example, based on reasoning about "what is prudent, what is obligatory, what is moral and what is appropriate" (Atkin, 2007, p. 69). Aristotle's binary logic can lead to a division between (A) the university-based researcher who pursues philosophical inquiry to understand the workings of educational theories and (not-A) the K-12 classroom practitioner who directs attention to the day-to-day actions of teaching. This division is not neatly maintained in today's research community. For example, in a study of the theoretical conventions of science education research, thought directed toward taking action has a dialogical relationship with philosophical thought, because ''not only is action sometimes derived from thought, but practical thought is generated through action'' (Atkin, 2007, p. 69).

Similar to Dewey, Schön (1983) opposed a strict division between those who develop theory, such as university researchers, and practitioners, including classroom teachers. By arguing against divisions between those who produce theory and practitioners, Schön was aligned with Dewey's (1916/1980, 1981) contention that inquiry should not be seen as limited to the privileged few. Schön contended that teachers are active problem solvers in a context where values and ends of the inquiry are open for exploration.

Next, I discuss literature that supports the use of research by English-teacher candidates through the conduct of classroom inquiry. Specifically, I discuss how performing classroom inquiry can help teachers and teacher candidates interrogate their own instruction to improve their practices. I look into classroom inquiry by undergraduate teacher candidates as well as concerns raised about teachers conducting research. This investigation leads into consideration of classroom inquiry by English teachers and by teacher candidates.

Teachers Conducting Classroom Inquiry

Research by teachers is often characterized by studies that involve reflection on the part of the teacher in the context of systemic inquiry in the classroom setting, with the research performed either independently or collaboratively (Furlong & Salisbury, 2005; Zeichner 2005). Teachers conducting classroom inquiry engage in systematic, intentional study of professional practice through a planning process of gathering and recording information, documenting experiences inside and possibly outside of classrooms, and creating a written record (Cochran-Smith & Lytle, 2009). The goal is generally to address questions and make sense of experiences through a reflective stance toward classroom instruction and classroom learning (Cochran-Smith & Lytle, 1999, 2009). Debates over what counts as teacher research can become divisive. Hopkins (2008) argued that the generating of hypotheses through rigorous methodology, with inquiry grounded in data, makes classroom research by teachers a form of research that meets contemporary criteria for research. Hopkins viewed the publication of research by teachers as a valuable way to

share knowledge and experiences, but did not believe that lack of publication should disqualify a classroom inquiry from being called teacher research.

Inquiry communities are becoming an increasingly popular way to develop knowledge of practice in a local context (Lytle, 2008). Collaborative inquiry typically involves teachers working with other teachers and often with university-based teacher educators (Richardson, 1990) to investigate theoretical and practice-related problems. Such collaboration involves teachers in a learning community (Schwab, 1976) where knowledge and meaning making is negotiated among group members. Dialogue in the group is based on a search for understanding and improvement of practice (Swales, 1990). Collaborating on classroom-based research opens new opportunities for communication among teachers and university faculty, while it increases awareness and reflection of issues related to learning and participation in the teaching profession (Friesen, 1994; McLaughlin, Watts, & Beard, 2000; Rock & Levin, 2002).

It is important for teacher candidates to reflectively examine and question the theories that ground their practices. In the next section, I turn to the promotion of classroom inquiry through teacher-research methods among teacher candidates at the undergraduate level in education programs.

Undergraduates Conducting Classroom Inquiry

It is critical to provide teacher candidates with resources, time, modeling and mentoring, a supportive environment, and understanding of challenges faced by teacher candidates who conduct classroom inquiry (Berger et al., 2005; Hahs-Vaughn & Yanowitz, 2009; Zeichner, 2003). However, teacher-education programs tend to focus

instruction on subject matter, pedagogy, curriculum, and students (Darling-Hammond, 2005), with often limited time to train on the conduct of classroom inquiry. Despite this obstacle, approximately one-half, 46.8% of teacher-education programs in the American Association of Colleges for Teacher Education that were surveyed by Henderson, Hunt, and Wester (1999) required an action-research project by teacher candidates. Surveying 245 institutions, Henderson and colleagues defined action research as a systematic method of inquiry in a collaborative effort for the purpose of reflecting on and improving classroom teaching and outcomes. Most responding institutions, 85.2%, addressed action research in the curriculum. About 46% included information about action research in required courses. In this section I discuss published studies that bring into relief ways teacher-preparation programs can help undergraduate teacher candidates engage in research in the classroom that promotes reflective practice (Schön, 1983).

Modeling is supported by participation in collaborative inquiry. When teacher candidates engage in collaborative classroom research they are taking part in a cognitive apprenticeship (Kardash, 2000) that fosters the development of knowledge and ways of thinking necessary for teaching (J. R. Anderson, Reder, & Simon, 1996; Brown, Collins, & Duguid, 1989; Lave, 1997). Based on the cognitive-apprenticeship approach, teacher candidates learn in a community of practice while guided by an expert. Learning is an active and constructive process in which teacher candidates take on the practices, tools, and identities required for participation in classroom inquiry (Brown et al., 1989; Garrison, 1995; Greeno, Collins, & Resnick, 1996; Rogoff, 1990). Such a cognitive apprenticeship involves an active shaping and reshaping of new knowledge through

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participation and discourse (Cochran-Smith & Lytle, 1999). Establishing an environment that supports classroom inquiry and reflective thinking by undergraduate teacher candidates takes careful planning. The University of Connecticut's efforts to focus teacher education on preparing reflective practitioners has been well documented (Goodlad, 1990; Norlander-Case, Reagan, & Case, 1999). Comparable to the partnerships that take place in Professional Development Schools, teacher educators collaborate with local teachers in professional-development centers. Students at the university take courses as part of a module related to reflective teaching, maintain narrative journals, and participate in inquiry projects during an internship in their final year of study. Goodlad's (1984) call for education to be driven by reflective thinking and by moral dimensions led to partnerships with other schools affiliated with the National Network for Educational Renewal. The Network's emphasis includes preparing students to participate in a democratic society, access to knowledge for children, responsibility in stewardship of schools, and an approach to pedagogy that is nurturing (Norlander-Case et al., 1999).

Studies related to teacher learning (Feiman-Nemser, 2001; Feiman-Nemser & Remillard, 1996) showed that the beliefs and perceptions of teacher candidates serve as filters that can distort the knowledge gained in a university program. Undergraduate teacher candidates often find themselves in less than ideal field experiences, with cooperating teachers and mentors who may not support the practices teacher candidates learned at the university (Borko & Putnam, 2000). Classroom inquiry builds teacher knowledge and improves classroom practice by bridging the gap between classroom practice and university-based researchers (McBee, 2004). Classroom inquiry is a way for

teacher candidates to "examine their own beliefs, explore their own understandings of practice, foster critical reflection, and develop decision making capabilities that would enhance their teaching, and help them assume control over their respective situation" (Ginns, Heirdsfield, Atweh, & Watters, 2001, p. 129). In the process, teacher candidates build their abilities to engage in reflective thinking through inquiry.

Trust in the process and acceptance of the possibility of being wrong is an important aspect of reflective thinking as understood by Dewey (1933/1986a, 1938/1988). Journaling is the most common technique for assisting teacher candidates in the development of reflective thinking (Bain, Mills, Ballantyne, & Packer, 2002; Boud, 2001; Pedro, 2005; Risko et al., 2002). Teacher candidates use writing to create their own concepts of teaching, unravel the confusion they encounter during their field experiences and student teaching, and process experiences that contribute to their professional development (Pedro, 2005). Risko and colleagues (2002) argued,

> Requesting future teachers to engage in reflective thought within the context of their course work provides them with an opportunity to generate connections between theory and practice, come to deeper understandings about their personal beliefs while adopting new perspectives, and learn how to use reflective inquiry to inform their instructional decisions. (p. 149)

In promoting reflective thought by teacher candidates, Risko and colleagues (2002) turned to Deweyan principles connecting theory to practice, using evidence gathered through systematic inquiry to inform actions, and the open-minded willingness

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to explore new ways of thinking. Further, a guide is important in helping students become increasingly skillful in reflective inquiry (Dewey, 1933/1986a).

Four beginning English teachers discussed the importance of being reflective in their instruction during their first years as teachers (Shoffner, Brown, Platt, Long, & Salyer, 2010). Each teacher focused their reflections on a specific challenge faced in the first year, including social, cultural, political, and technological challenges. The teachers described how they used reflection to overcome the surprises and challenges of their first year as teachers. Brown, a beginning English teacher, discussed the challenge of working with fellow teachers, and nervousness while going into the classroom. Reflections related to these challenges consisted of conversation with other people and including reexamining the teacher's educational philosophy. Shoffner, a teacher educator who worked with the beginning teachers, said that reflections provided a valuable tool to address these difficult areas with the beginning teachers, and that likewise these reflections are valuable in the instruction of teacher candidates. Guiding teacher candidates as they make sense of their experiences through reflective consideration provided them a way to interrogate their teaching once they entered the classroom, according to Shoffner. Reflections used included notes in the margins of lesson plans, journals about thoughts at the end of a week, and discussions of ideas with colleagues.

In a second study showing how inquiry can foster reflective thinking, research conducted by teacher candidates was consistent with the principles of inquiry and reflection promoted by Dewey (Kretschmer, Wang, & Hartman, 2010). The research was conducted through Teacher's College of Columbia University and its Program in the

Education of the Deaf and Hard of Hearing. The program offers a course on teacher-as-researcher. Six articles published in a special issue of the *American Annals of the Deaf* formed a methods section, a discussion section, and a conclusion to six previous articles compared to a two-tier metastudy with a literature review and a data set related to an inquiry using the teacher-as-inquirer research framework. Teacher candidates used a reflective study to investigate and modify their practices and to contribute to the theoretical knowledge base for classroom inquiry.

In an analysis of the six-article study, classroom inquiry reflected on Dewey's notions of pragmatism, functionalism, constructivism, and social advocacy (Kretschmer et al., 2010). Teacher candidates demonstrated the pragmatic belief that their actions were judged based on practical consequences and social or personal relevance. In addition, teacher candidates were acting under the functionalist notion that their activities gave special status to the human social world, or, in other words, that their instruction and classroom inquiry served to better the life chances of students and to further theoretical knowledge in the field.

Finally, a study conducted at Utah State University (Fox, 2010) indicated the benefits of inquiry for teacher candidates and students. The study involved secondary English-education student teachers who were also enrolled in the university's honors program in research. Completion of the research was tied to an honors thesis. Data-collection methods included participant observations and interviews. In 1999, a student teacher shadowed four English language learners (ELLs) in combination with library research and data collected from school and school district resources. The student teacher

found that students with higher levels of formal schooling prior to entering the United States, and who were increasingly integrated with nonsecond-language learners, were more likely to become fluent in learning English. In 2007, another student teacher who was working with ELLs created a lesson plan that replaced pronunciation drills with using short poems to teach pronunciation. Students became increasingly engaged, though the student teacher also found that poetry worked better when introduced for limited periods of time each day rather than for a full day. The increased motivation of the students was linked to improved academic performance.

It is hoped that English teacher candidates within the teacher education program who participated in this study may continue to conduct classroom inquiry during their careers as teachers. In light of this contextual goal within the program, next I discuss possible ethical concerns that are raised when teachers conduct research into the effectiveness into their own instruction in the classroom.

Concerns About Teachers Conducting Classroom Inquiry

Critics of classroom inquiry by teachers view the research as unscientific and thus only relevant to the particular place and time in which the inquiry was set (Wilson, Floden, & Ferrini-Mundy, 2002). Fine's (1994) understanding of *teacher-research* as involving "working the hyphen" between the contradictory roles of being a researcher and being a teacher presented a concern that needs to be considered. Fine viewed a teacher as a person and research as a process. Working the hyphen by combining "teacher" with "research" creates a teacher involved in the process of research, which differs from the process of teaching. This redefines what it means to be a teacher and

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redefines both processes of research and teaching by that teacher. The spanning of boundaries between research and teaching brings potential benefits in the form of agency and voice for the teacher in the field. But working the hyphen also brings potential risk as the teacher spans the boundary between two fundamentally different roles. Kiddler and Fine (1997) contended that researchers who stand outside of the context of the teaching practice hold a responsibility for interpreting the actions of the teacher and students in a theoretical perspective. Multiple lenses or "kaleidoscopic" lenses aid in making interpretations in research studies. This concern is consistent with the contention that because of limitations that stem from the teacher's insider perspective, although classroom inquiry can produce localized wisdom from experience, it does not produce new objective knowledge (Fenstermacher, 1994; Richardson, 1996).

Building on concerns expressed by Fine (1994; Kiddler & Fine, 1997), Hammersley (2004) argued that the responsibilities of research and the responsibilities of teaching hold the likelihood of tensions between them. A typology is needed that acknowledges the value of teaching and of research. Such a typology would recognize the distinctiveness of either conducting inquiry that is subordinated to instruction, or research as a specialized occupation. The majority of proponents of action research would seek to use research as a model for social or political transformation, and thus would not be satisfied with subordinating research to instruction. The contradictory requirements of conducting research that leads to social or political transformation and the responsibilities of classroom instruction makes action research in a classroom unstable (Hamersley, 2004).

Further, ethical issues involved in classroom inquiry can be complex because teachers work with school administrators, district leaders, university faculty, school staff, parents, and students in ways that can blur traditional boundaries (Zeni, 2001). Classroom inquiry can have unintended consequences for vulnerable student participants as the researcher balances competing interests of teaching and research (Campbell & Groundwater, 2007). It can be difficult to accurately gauge whether students who participate in classroom inquiry are free from coercion, giving rise to difficulty in navigating related ethical issues (Nolen & Putten, 2007) that can cause friction between teacher conducting research and institutional review boards (Pritchard, 2002).

Summary

In this literature review I discussed research related to ways that the Kember et al. (2008) framework for assessment reflection can be used by a teacher-education program to analyze depth of reflection in teacher candidate writing. Reflection is seen as enabling teacher candidates to make connections between actions and consequences. Additionally, teacher candidates can grow as professionals as they developed increasingly reflective thinking about the connections between theory and practice. Although there is a need to document reflective thinking for accreditation purposes, there is no standard way of defining and assessing reflection. Kember's four category protocol represents a validated tool that can guide assessors and teacher educators toward an objective determination of the depth of reflection of student writing. Teacher candidates engaged in classroom inquiry into the effectiveness of their instruction. Attitudes involved in the conduct of inquiry, as identified by Dewey, include open-mindedness to the consideration of new

ideas based on evidence, whole-heartedness in commitment to the pursuit of inquiry, and responsibility in the consideration of ethical considerations (Dewey, 1933/1986a). Additionally, Dewey (1916/1980) identified the attitude of directness, or faith that whole-hearted and rigorous pursuit of inquiry is worthwhile. Reflection and inquiry are sources of professional growth for teachers. As a teacher candidate considers new ideas and approaches to instruction based on systematic inquiry, the reflection can have a transformative impact.

CHAPTER 3: METHODS AND PROCEDURES

Research Design

The study is intended to describe and draw insight into the reflections of teacher candidates who conducted classroom inquiry. Holistic account of the reflections of teacher candidates include ways candidates addressed their research questions in classroom inquiry. Included in the study is a discussion of ways artifacts and documents were used by teacher candidates to support their arguments. This study's research design is consistent with the steps of educational research described by Gay, Mills, and Airasian (2006, p. 5):

☐ Selection and definition of a problem

☐ Execution of research procedures

☐ Analysis of data

☐ Drawing and stating conclusions.

Content analysis was used in this study to examine the documents produced by teacher candidates. Content analysis takes advantage of the fact that texts of any sort exist in a larger context (Krippendorff, 2004). The analysis of texts produced by teacher candidates allowed me to make inferences about the broader context of their work. Appendix A contains Krippendorff's (2004) symbolic representation of content analysis, adapted to this study. In reporting content-analysis results, I provide both description and interpretation. The description provides background, context, and personal and theoretical interpretations. In addition, the report also includes typical quotations from the writings of teacher candidates to justify my conclusions (Schilling, 2006). I was guided by

Patton's approach (2002, p. 503–504) that the report should provide "sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to allow the reader to understand the description."

A second English-educator read the essays to address reliability. The protocol that guided this analysis has been validated as measuring what it was intended to measure, depth of reflection (Kember et al., 2008). Care was taken to ensure the protocol is explicitly limited to this purpose, to address validity. The idea of trustworthiness is also applied as a means to address validity, by presenting concrete examples of practices in sufficient detail to be judged trustworthy by the research community (Denzin & Lincoln, 2008; Mishler, 1990). To be trustworthy, interpretive research should meet criteria for credibility, transferability, dependability, and confirmability. For this report to be credible based on the criteria of Lincoln and Guba (1990), I include negative case analysis while evaluating the data, and iteratively check interpretations against the data. To achieve transferability, I strove for my work to be capable of being applied to another context. I strove for my analysis and reporting to be detailed enough so other researchers could judge the findings transferable to different settings or contexts. To make my report dependable, I ensured a coherent internal process, accounting for my understanding of the depth of reflection demonstrated by teacher candidates. Finally, to achieve confirmability I strove for the characteristics of the data to be capable of being confirmed by others who assess the research results. I maintained an audit trail of my analytical process to achieve dependability and confirmability. The audit trail included raw data, theoretical notes, and memoranda I made when coding manuals, and process notes. Finally, Eisenhart and

Howe (1992, 157-163) identified the following indicators of trustworthiness that were used in this study:

- The research questions drive the data collection and analysis.

- Data collection and analysis are consistently applied according to the technical, intended understanding of the methods used.

- The researcher should explicitly provide a detailed description of assumptions.

- The study should use clear theoretical explanations and discuss disconfirmed explanations.

- The study should inform practice and meet ethical considerations such as protecting the privacy of the participants.

Context of Research

Teacher candidates in this study participated in a year-long ELA-unit design project. Teacher candidates spent the 2010 fall semester in an English methods course focused on designing a draft of a unit design that was evaluated in incremental stages. These stages included development of a resource palette, a rationale, the philosophy, the objectives and assessments, the gateway activity, and alliance of the unit design with NCTE/CAEP standards. All teacher candidates continued to enhance unit designs (Cain, 1989; Smagorinsky, 2008) as they worked with a cooperating teacher in a field experience to develop detailed day-by-day procedures for the integrated ELA unit. Furthermore, teacher candidates evaluated the units they taught and made changes as necessary. The purpose of designing a conceptual unit is for the teacher candidate to identify a set of objectives that students work toward. In developing a conceptual unit,

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teacher candidates should keep their overarching theme and thus, whole-course objectives in mind. A conceptual unit should involve students in a conversation that deepens as they participate in readings of selected texts, class activities, and discussions. Appendix B shows the assignments in the methods course. The written version of this final implemented unit along with focused daily reflections on unit implementation were submitted at the end of the student-teaching experience to a cooperating teacher and a professor in a capstone seminar in teaching secondary English. Teacher candidates developed detailed daily procedures for their 6-week field experience. The written version of the implemented and submitted ELA unit is the plan for the unit that was taught. Thus, the unit reflected the improvisational changes made by teacher candidates in the unit as it was adjusted to better meet student needs and as teacher candidates tried to show how they were meeting NCTE/CAEP professional standards.

Due to the research interests of the instructor of record in the English methods class, the idea of flow was stressed in candidate reflections. Flow, which involves intense concentration through the use of high personal skill (Csikszentmihalyi, 1990), was emphasized as part of an effort to guide candidates through an approach to instruction that would be highly engaging to high school students. Because of the limited capacity for attention, people who experience flow often lose track of time. Candidates strived to promote the attributes of concentration, enjoyment, and interest among high school students in their English classes, and these attributes are characteristic of engagement, according to research on flow (Nakamura & Csikszentmihalyi, 2002; Shernoff et al., 2003). Concentration and focus are central attributes of a flow experience (Nakamura &

Csikszentmihalyi, 2002). Candidates studied M. W. Smith and Wilhelm (2006) as one of two primary course texts. Studies by Csikszentmihalyi (1990; Csikszentmihalyi & Csikszentmihalyi, 1988; Nakamura & Csikszentmihalyi, 2002) indicated the following elements that are typical of flow experiences: (a) clear goals, (b) immediate feedback, (c) a balance between the challenge and personal skill level, (d) the merger of action and awareness into a highly focused state, (e) concentration without distractions, (f) lack of worry about failure, (g) the disappearance of self-consciousness because one is so involved in the activity, (h) a loss or distortion of time during the experience, and (i) reward that is found in the experience for its own sake.

Instruction by candidates was intended to foster the five dimensions of flow identified by M. W. Smith and Wilhelm by (a) providing students with a sense of control and competence, (b) providing students with a challenge that requires use of appropriate skill level, (c) providing students with clear goals and feedback, (d) employing activities that focus on the immediate experience, and (e) scaffolding instructional activities with social interaction (pp. 3–16). The promotion of flow was also seen as in accord with the goals of the overall instructional goals of the year-long unit design project because flow is associated with the stretching of skills (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi & Rochberg-Halton, 1981/1989; Nakamura & Csikszentmihalyi, 2002; Rathunde & Csikszentmihalyi, 1993) and with the production of high-quality, interesting, and engaging written texts by high school students (Larson, 1988; Shernoff et al., 2003).

A student is predicted to experience a state of flow only when there is a balance between the challenge posed by a task and the skill possessed. If a student finds a task too

challenging, the student can experience less optimal states of arousal, anxiety, worry, and

potentially, apathy. A student who finds a task unchallenging enough can experience less

optimal states of control, relaxation, boredom, and again there is a potential for apathy

(Nakamura & Csikszentmihalyi, 2002). So, instruction that encourages the possibility for

students to experience flow was seen in this study as also encouraging teacher candidates

to focus on seeking to balance the level of challenge of a task with the level of skill

possessed by students.

The predicted context for a flow experience is similar to the concept of the zone

of proximal development (ZPD, Vygotsky, 1978) in research related to flow among high

school students (Shernoff et al., 2003). The ZPD is often defined as "the distance

between the actual development level as determined by independent problem-solving and

the level of potential development as determined through problem solving under adult

guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86).

The ZPD concept helps focus attention on the difference between a student's

demonstrated performance and the student's learning potential, since emerging

psychological functions can become more fully developed with assistance (Kozulin,

2003). Candidates were encouraged to strive for their classroom instruction to be within

the student's ZPD by drawing on the students' existing knowledge and skill to provide

assistance so students could stretch their skills beyond what could be done without

assistance (Lee & Smagorinsky, 2000; Smagorinsky, 2008). Wertsch (1984) identified

three minimal constraints of the ZPD that are contextually important for understanding

the instruction engaged in by teacher candidates in this study. In *situation definition*, the

first constraint defining the ZPD according to Wertsch, a candidate would assist students to develop meaning making that is increasingly similar to that of the candidate. Second, *intersubjectivity* relates to the extent of agreement between the candidate and students. Finally, Wertsch identified that, through a process of *semiotic mediation,* the teacher candidate would temporarily relinquish understanding of a task to accommodate the student's understanding and to assist the student to come increasingly closer to the candidate's more expert understanding (Lee, 2000, p. 194).) Candidates used various modes of representation including multigenre writing and drama to encourage high school students in their effort to develop and communicate their knowledge from one mode to another (Smagorinsky, 1995, 2001; Smagorinsky & Coppock 1994).

Instruction in this study was intended to take place in a Vygotskian creative workshop that Smagorinsky (2008), drawing on Newman, Griffin, and Cole (1989), called a construction zone. The metaphor of a construction zone stresses that both the classroom teacher and the students are "builders" (Smagorinsky, 2008, p. xi). As teachers build curriculum and conceptual units, they also are building classroom communities and helping students build their own understandings of concepts and ideas. Construction zones enable students to make meaning in texts in multiple modes and multiple genres. A ZPD mediates between the thinking of the teacher candidate and students who share each other's understandings of concepts and ideas. The candidate guides students toward new understandings of a concept. One way to do this is by monitoring the type and extent of assistance needed by students as they engage in an activity within the ZPD (Newman, Griffin & Cole, 1989), striving toward increasing levels of independent skill and

competence. This exploration allows for new meaning-making to be shaped through negotiation as each student as well as the candidate has the opportunity to appropriate (Leont'ev, 1981) one another's meaning-making. A candidate for example can appropriate the meaning-making of students by assimilating the students' understandings into his or her own understanding (Newman, Griffin & Cole, 1989) of a concept. Tasks in a construction zone as described by Newman, Griffin and Cole (1989) are viewed as useful in organizing work that is done together by teachers and students toward negotiating understandings. Different understandings that will exist in a classroom among various students represent multiple possible access points within a ZPD, and a "basis for possible appropriation" (Newman, Griffin & Cole, 1989, p. 136) of one another's understandings.

Teacher candidates were encouraged to approach teaching as "the art or science of arranging cultivated knowledge so that it may more easily be grasped and more easily used in thought" (Bruner, 2006a, p. 175). Culture and education operate in tension with one another, shaping and transforming each other. Culture is understood to serve as a mediating device between the student and teacher in a classroom, a "forum for negotiating and renegotiating meaning" (Bruner, 2006b, p. 82). Teaching also mediates between the student and the culture (Bruner, 1986). The emphasis that Bruner placed on "joint culture creating" is a fundamental characteristic of curriculum design in the context of the present study in which learning is situational, shaped by activity, context, and sociocultural-historical factors in which the learning occurs (Lave & Wenger, 1991).

Drawing on Applebee (1996), the curriculum designed by teacher candidates was organized around encouraging participation in literary life as a way students enter into story-worlds and learn to think about literature, themselves, and society. Through structured planning and design work (Cain, 1989; Smagorinsky, 2008) teacher candidates encourage students to enter makeshift literary communities in English classrooms. Dialogue from one activity to the next is connected through the dynamic of the overall conversation about what it means to lead a literary life and to take on literary roles (Applebee, Langer, Nystrand, & Gamoran, 2003).

Teacher candidates worked toward welcoming students into a literary community. The candidates fostered ways to help students take on real-life roles in the literary community including directors, actors, playwrights, short-story writers, film critics, cartoonists, poets, and pamphleteers. The literary community that teacher candidates strove to help students enter is a community of practice (Lave & Wenger, 1991) in which members share a common interest or, hopefully, a passion for an enterprise as they interact to improve what they are doing. Teacher candidates help students learn social practices that are valued ways of participating in this literary community of practice. Students interact in the knowing and what Applebee (1996) would call knowledge in action, participating in a living literary tradition that is continuously reshaped by society and culture. Students participating in a living literary tradition can gain knowledge that matters individually and to society.

Candidates are likewise viewed as being guided by teacher educators and mentor teachers from peripheral participation to increasing expertise as part of a community of

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practice themselves as educators. This guidance is important because as Newman, Griffin and Cole (1989) point out, expertise is needed on the part of a teacher to make adjustments in the midst of instruction. These adjustments should be based on monitoring the type and amount of assistance needed by students to demonstrate "performance before competence" (Cazden, 1981), participating in a classroom activity that is beyond their independent level of skill and understanding.

Qualitative methods of inquiry engaged in by teacher candidates included participant observations, informal surveys of student interests, reflection on the results of formal and informal assessments, daily-lesson-plan reflections and weekly research-journal reflections on the application of materials and resources they used in their instruction, and the analysis of documents, such as student artifacts from a selected high school class. Meanwhile, classroom inquiry performed by teacher candidates included (a) reflections related to the crafting and implementation of unit designs; (b) weekly research journal reflections; (c) dialogue with university course instructors, classmates, the cooperating teacher, and the university supervisor; and (d) a teacher-research essay. Appendix B shows the standards for evaluating the teacher-research essay to contribute to a course grade in the spring semester capstone seminar. In the teacher-research essay, teacher candidates responded to the following research questions, which they investigated in collaboration with each other:

- ☐ To what extent did your students produce high-quality texts? (Texts were understood in a global sense as including, for example, reproduction of envisionments of literary texts)

☐ Did your students ever, on occasion, become engaged in their learning as understood by M. W. Smith and Wilhelm (2002, 2006)? Did they ever get into a flow? Why or why not?

Prior to student teaching, candidates had opportunities to observe in public school settings. Candidates received continuous support and feedback from university and high school faculty throughout the student-teaching semester. In field experiences, candidates were required to apply their unit designs while teaching, analyze student learning, and reflect on their practice. Two schools served as field experience sites. In School Site A, 7 teacher candidates had their field experience. It is a brick, one-story high school that serves a rural community. The site had an enrollment of 1,467 during the 2010–2011 school year of which 93.6% of students were White, 4%, were Black; 1.1% were Hispanic, and 1.2% of students were from other backgrounds. A total of 35.4% of students were eligible for free and reduced-price lunch, according to the school's website. Of 91 certified faculty members, 63% held advanced degrees, and 11 teachers were certified by the National Board of Professional Teaching Standards. School Site B, a brick, two-story building that also is located in a rural community, hosted one teacher candidate. It had an enrollment of 1,600 students, of which 82% were White, 11% were Black, 4% were Hispanic, 1% were Asian, and 2% were from other backgrounds. A total of 30% of students received free or reduced-price lunch. Of 89 certified faculty, 65.2% held advanced degrees.

A minimum of eight evaluations of each candidate's teaching were conducted by the university professor (four evaluations) and by the high school cooperating teacher

(four evaluations). The cooperating teacher and the lead instructor each conducted a minimum of two teaching evaluations before midterm and two teaching evaluations after midterm. The lead instructor and the cooperating teacher discussed these assessments with the candidate and required the candidate to reflect on their teaching and their impact on student learning. The candidate conducted used classroom inquiry to determine impact on student learning and achievement. The candidate was also required to reflect on teaching of the unit and to discuss changes the candidate would make to instruction to improve student learning. The lead instructor was responsible for evaluating the candidate's ability to write, teach, and assess the unit of instruction.

Participants

Participants were purposely chosen based on my wish to study the depth of reflection exhibited by English-teacher candidates in written documents produced after classroom inquiry. The names of all participants in this study are pseudonyms. I wanted to draws insights into the reflections of English-teacher candidates in the context of classroom inquiry into the design and implementation of instruction that is intended to foster the production of high-quality texts by students and to be so engaging that students might experience flow. The eight teacher candidates in the present study were enrolled in a fall semester English-education-methods course and a spring semester English-education capstone seminar during the 2010–2011 school year. Seven candidates were female, one was a male, and each teacher candidate was White. The candidates ranged in age from their early- to middle 20s. To participate in student-teaching field experiences, each candidate passed the Praxis I Pre-Professional Skills Test and the Praxis II content

area test, successfully complete 95 hours of coursework and attained a minimum of a 2.5 grade-point average. Six candidates are currently teaching English full-time, whereas two are now full-time graduate students.

Methods and Procedures

Data Collection

This study is an exploration of the reflections engaged in by teacher candidates after they conducted classroom inquiry. Teacher candidates designed units of instruction during the 2010 fall semester while taking an English-education-methods course. They implemented these units of instruction during the spring semester of 2011 while involved in student-teaching field experiences in local high schools and simultaneously taking the English-education capstone seminar. Therefore, all documents collected during the natural context of both courses were collected for this study. Institutional Review Board aproval (2010-014 Going for the Flow in Teacher Education) was granted for the conduct of this study. Sources of data included long range plans, unit plans, daily lesson plans, reflections on lessons, and essays. Data collection began at the beginning of the Fall 2010 methods course and concluded after the completion of the Spring 2011 capstone seminar. The teacher research essays that were assessed for depth of reflection were written and collected at the end of the Spring 2011 capstone seminar. Materials teacher candidates normally submit for evaluation during their student-teaching experience were collected as a natural part of the coursework.

Research Question

To what extent did English-teacher candidates demonstrate depth of reflection in teacher-research essays?

Data Analysis

I make use of content analysis to make visible the realm of eight English-teacher candidates' reflectiveness after they conducted classroom inquiry using teacher-research methods. Documents were used as data. The context of teacher candidates' classroom inquiry involves their design and implementation of instruction. Teacher candidates designed units of instruction during the 2010 fall semester while taking the English methods course. They implemented these units of instruction during the spring semester of 2011 while involved in student-teaching field experiences in local high schools and simultaneously taking the capstone seminar. Therefore, all documents collected during the natural context of both courses were collected for this study. In finding a thematic progression based on the data, the study is intended to be rich with detail and highly descriptive. I began analyzing the data from the time that data was collection. However, the two co-assessors did not begin to use the method of analyzing the teacher research essays as described in this study until the spring of 2013, and the iterative process of analysis was completed in the winter of 2013. Teacher candidates did not know that their teacher research essays would be analyzed for depth of reflection as guided by the Kember et al. (2008) protocol at the time that the essays were written.

I used a four-category coding scheme for assessing reflection: (a) nonreflection, (b) understanding, (c) reflection, and (d) critical reflection (Kember et al., 2008).

Teacher-candidate writing coded as nonreflective did not show evidence that the student teacher had a sufficient understanding of the material or concepts about which they wrote (Kember et al., 2008). There may have been a description of the experiences involved in student teaching, but there was little or no attempt to connect theoretical knowledge with teaching methods employed while student teaching. Because writing that simply presents supporting material in the introduction of a concept is unlikely to demonstrate evidence of reflection (p. 372), I particularly looked for evidence of an insufficient understanding of a concept, and created a code for non-reflection based on the misunderstanding of a concept or an idea.

Writing coded as demonstrating understanding showed evidence that the teacher candidate understood the material and concepts but did not relate this understanding to experience (Kember et al., 2008). Experiences may be described in light of theoretical knowledge and course content. The teacher candidate may also have identified relationships between methods and theoretical knowledge or course content. However, writing that demonstrated understanding, short of being coded as reflection, lacked an analysis of how an experience could shed light on the teacher candidate's future educational practice.

Writing coded as reflection showed evidence that relationships were made between conceptual knowledge and the experience of student teaching. Reflective writing demonstrates that field experiences are being used to shape the student teacher's educational philosophy and practice (Kember et al., 2008). Direct application is made between field experience observations and future practices as a teacher. For example, the

teacher candidate would analyze the methods used in a lesson and list or describe ways the lesson could be improved. A teacher candidate might also connect classroom experience to a personal philosophical approach to teaching or to intended future practice as a teacher.

The highest level of critical reflection requires a change to deep-seated beliefs and leads to the formation of new belief as well as, in the case of teachers, structures of how to practice teaching based on new beliefs. Critical reflection involves the following attributes: it leads to new perspectives, and, involving a transformation in a person's perspective, is more likely to take place over an extended period of time (Kember et al., 2008, p. 174). Critical reflection involves evidence in the writing of a change in perspective or a change in the behavior of the student teacher. Only writing by a student teacher that demonstrates evidence of a change—or a shift—in basic philosophical assumptions or conceptual frameworks about teaching would be coded as critical reflection. Evidence would be present that a teacher candidate makes a shift in thinking that includes a philosophical explanation of a new belief (Kember et al., 2008). It is possible that some written work may be coded in an intermediate category, for example a work could be coded somewhere between Level 2 for understanding and Level 3 for reflection.

Content analysis was used in this study to examine documents produced by teacher candidates. Content analysis takes advantage of the fact that texts of any sort exist in a larger context (Krippendorff, 2004). The analysis of texts produced by teacher candidates allowed me to make inferences about the broader context of their work. In

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reporting the content analysis results, I provided both description and interpretation. The description provided background, context, and personal and theoretical interpretations. In addition, the report also includes typical quotations from the writings of teacher candidates to justify my conclusions (Schilling, 2006).

I used themes related to reflection (non-reflection for a routine or procedural expression; non-reflection based on misunderstanding of a concept or an idea; understanding; reflection; critical reflection) for coding, so I primarily looked for the expression of an idea. I assigned a code to a meaning unit of any size, as long as that meaning unit represented a single theme or issue of relevance to my research question (Patton, 2002). Each meaning unit consisted of a combination of words that related to the same central meaning (Baxter, 1991; Graneheim & Lundman, 2004). The process was guided by the Kember et al. (2008) protocol, so it was driven by theory and deduction. As the meaning units emerged in the texts, different codes were assigned according to the Kember et al. (2008) protocol. Segments of texts, rather than single words or single sentences, were treated as meaning units (Graneheim & Lundman, 2004). The codes served as heuristic devices enabling me to understand the text in new ways (Coffee & Atkinson, 1996).

Data analysis was an ongoing and iterative process between the two co-coders. Each of the two coders had familiarity with the theoretical basis behind the Kember et al. (2008) protocol and with the theoretical basis behind the context of the work of the teacher candidates within the field of English Education. The results made inferences about the level of reflectiveness in the texts in terms of seeking to analyze an underlying

meaning, or latent content (Kondracki et al., 2002) of a text. During the coding process, especially given my bias as an advocate for teacher research and reflective practice, I checked the coding to prevent "drifting into an idiosyncratic sense of what the codes mean" (Schilling, 2006). My use of content analysis in this study began with identifying research questions and choosing a sample. The texts analyzed as part of this study were coded into content categories using selective reduction. Texts were partitioned into relevant units of information and key representative characteristics were analyzed and interpreted. I was guided by the following questions established by Krippendorff (2004) to conduct a content analysis:

- Which data are analyzed?

- How are data defined?

- What is the population from which the data are drawn?

- What is the context relative to which the data are analyzed?

- What are the boundaries of the analysis?

- What is the target of the inferences?

To draw conclusions from the coded data, I made inferences and reconstructed meanings based on the data. This process involved exploring the properties of codes and themes, identifying relationships between codes and themes, uncovering patterns, and testing my inferences against the data. My coding of the level of reflection drew on extensive studies that employed Kember's approach to assessing reflection from student writing (Gulwadi, 2009; Harland & Wondra, 2011; Kember, 1999; Kember et al., 2008; Spalding & Wilson 2002; F. K. Wong et al., 1995). Consistent with this body of

literature, I used a four-category scheme for assessing reflection: (a) nonreflection based on routine expression of an idea or based on misunderstanding of a concept, (b) understanding, (c) reflection, and (d) critical reflection. A whole teacher research essay was coded at the highest level of reflection exhibited at any point in the piece of writing (Kember et al., 2008). Drawing on Harland and Wondra (2011), I labeled meaning units with codes evidenced while reading each piece of writing. A reflection number and letter were placed in the margin after a meaning to aid discussion, in the event of a lack of agreement among coders. Individual meaning units were discussed if there was a lack of agreement on the score for a piece of writing.

Limitations

Conclusions are limited to a description of the depth of reflection exhibited by English-teacher candidates who specifically participated in this study. It is beyond the scope of this study to make generalizations related to a wider population or to determine the motivations of teacher candidates. Therefore, the following limitations were imposed in this study: (a) the only participants in the study were English-teacher candidates who were enrolled in the fall methods course and the spring capstone seminar during the 2010–2011 school year; (b) the sample size was relatively small, with eight participants; (c) data for this study were limited to documents produced during the natural course of 2009–2010 fall English methods course and the spring capstone seminar; (d) the results were limited to a description of the reflections, and it is beyond the scope of this study to predict future behavior (Stake, 2005).

Assumptions

This study was grounded in the Deweyan assumption that it is the responsibility of teacher educators to organize experiences that help future teachers develop a habit of reflective thinking through ongoing inquiry. Further, implicit in the study is the assumption that teacher candidates who adopt reflective practices will be better equipped to meet students' individual needs (Kember et al., 2008).

Conclusion

The methods outlined in this chapter enabled me to shed light on the depth to which English-teacher candidates demonstrated reflection. This dissertation is based on a stance that reflection is a deliberate process carried out in the context of ongoing inquiry. I expected to find strong evidence of reflection, though it would have surprised me to find much evidence of critical reflection. In Chapter 4, the data analysis and results are aligned with the research question. Therefore, the following details will be analyzed in Chapter 4:

- An analysis of the depth to which teacher candidates demonstrated reflection.
  - Ways teacher candidates tended to analyze evidence or ideas at the nonreflection level.
  - Ways teacher candidates tended to analyze evidence or ideas at the understanding level.
  - What teacher candidates tended to analyze evidence or ideas at the level of reflection.

o   Ways teacher candidates tended to analyze evidence or ideas at the level

of critical reflection.

I conclude the dissertation in Chapter 5. This chapter includes a discussion of findings as

well as an interpretation of the results, limitations to the study, and implications of the

study.

CHAPTER 4: FINDINGS

Introduction

The purpose of this study is to add to the current literature that focuses on the assessment of the depth of reflection in student writing in an English-teacher-education program. It adds to this literature through the use of a validated framework of assessing depth of reflection occurring in English-teacher candidates' writing. The four-category framework of Kember and colleagues (2008) applied in this study has not previously been used in the English-education literature to assess depth of reflection. There is a lack of research related to the assessment of reflection, despite widespread acceptance of the importance of reflection in learning from experience (Plack, Driscoll, Blissett, McKenna, & Plack, 2005). Drawing on Kember (2001; Kember et al., 2008) this study views reflection as involving an evaluation and rethinking of the experience, beliefs, and knowledge of a teacher candidate, leading to new perspectives. Reflections in this study look back at past actions during student-teaching field experiences to write a teacher-research essay.

The Kember et al. (2008) protocol provided an assessment of the depth of reflection I used to evaluate the written work of teacher candidates. I rated the depth of reflection as one of four categories: nonreflection, understanding, reflection, or critical reflection. Judgment of the depth of reflection for a teacher-research essay is based on the highest level of reflection observed in the whole essay. I also engaged in line-by-line analysis of the teacher-research essays. Content analysis allowed me to make visible the depth of English-teacher candidates' reflectiveness in the writings they produced after

conducting classroom inquiry. As demonstrated by the following analysis of reflective qualities in Susan's teacher-research essay, the Kember et al. (2008) four-category scheme for assessing the depth of reflection of student writing allowed for the development of a descriptive narrative while finding a thematic progression based on the data. In each section I analyze the depth of reflection of an individual English-teacher candidate. My research question for this study follows:

◻ To what extent did English-teacher candidates demonstrate depth of reflection in teacher-research essays?

Table 1: Frequencies of English-Teacher Candidates who Received Depth-of-Reflection Codes

Teacher candidate name*	Nonreflection misunderstanding	Nonreflection routine	Understanding	Reflection	Critical reflection
Tina	0 (0.0%)	98 (69.0%)	35 (24.6%)	7 (4.9%)	2 (1.4%)
Susan	7 (5.7%)	33 (27.0%)	63 (51.6%)	19 (15.6%)	0 (0.0%)
Thomas	0 (0.0%)	78 (73.6%)	21 (19.8%)	7 (6.6%)	0 (0.0%)
Jennifer	7 (5.2%)	43 (32.1%)	80 (59.7%)	4 (3.0%)	0 (0.0%)
Sam	0 (0.0%)	81 (82.7%)	14 (14.3%)	3 (3.1%)	0 (0.0%)
Michelle	0 (0.0%)	66 (66.6%)	31 (31.0%)	3 (3.0%)	0 (0.0%)
Beth	1 (0.7%)	112 (74.2%)	36 (23.8%)	2 (1.3%)	0 (0.0%)
Paula	0 (0.0%)	45 (64.3%)	24 (34.3%)	1 (1.4%)	0 (0.0%)

* All names are pseudonyms

<center>**Results**</center>

Tina

   Tina conducted classroom inquiry into her design and implementation of a 20-day unit on the tragedy of *Macbeth*. Her unit was designed for English IV honors and technical-preparation high school students at Site A, described in Chapter 3. She emphasized helping students relate to themes in *Macbeth* in ways that would be socially and personally meaningful. Tina was skeptical of the strategy of implementing instruction intended to help students become so engaged in activities that they might enter a state of flow (Csikszentmihalyi, 1990). However, while reflecting on her student-teaching experiences, she found that the strategy was effective in helping students become engaged and helping students learn. Tina's teacher-research essay is the only essay coded as critically reflective out of the eight essays in this study.

   Nonreflection. Meaning units were coded as nonreflective if they communicated routine, procedural matters or simply described classroom experiences. Of 142 meaning units in Tina's teacher-research essay, 98 (69%) were coded as nonreflective based on a description of a the routine or procedural steps she took during field experiences, such as the following description of classes taught: "I was given five English IV classes, which consisted of three tech-prep, and two college-prep classes." Another basis for a code of nonreflection is when there was a description of the experiences involved in student teaching, but there was little or no attempt to connect theoretical knowledge with teaching methods employed while student teaching. For example, Tina expressed she had doubts prior to student teaching that the approach described by M. W. Smith and

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Wilhelm (2006) and Smagorinsky (2008) would be effective. Specifically, she expressed in her essay that she had asked the following three questions prior to student teaching:

☐ What happens when students are invited into the literary community?

☐ What would students do if they were able to step out of their normal roles as students and put on the roles of film critics, actors, directors, poets, journalist, illustrators, and other such roles?

☐ Could students really engage in the difficult language of Shakespeare to an extent that they lost track of time?

Through these questions, Tina introduced questions she considered about the effectiveness of striving to invite students into a literary community, inviting students to take on literary roles in that literary community, and whether students could become so engaged with a challenging text that they might lose track of time. Tina did not expound on an understanding of the conceptual ideas in these meaning units, which is why they are coded as a nonreflective. There were additional meaning units coded as nonreflective in which Tina admitted to doubts about whether the unit she had designed would be engaging, as described by M. W. Smith and Wilhelm (2006). She expressed concern that because of inexperience, she may struggle to implement the unit in the way it was intended. She described her concern about inexperience clear in the following meaning unit in the teacher-research essay: "Even with all the planning, I was unsure how successful my unit would be because this was my first time teaching." Further, in a separate meaning unit in the same sentence, Tina viewed the approach to instruction that she would be implementing as one for which there is a lack of evidence of success in the

classroom, stating "and I had no evidence that this would work." Tina does not expound on an understanding of concepts that underlie her concerns in these meaning units, so they are coded as nonreflective.

Nonreflection: Misunderstanding of a concept or an idea. An additional basis for coding a meaning unit as nonreflective is if it does not show evidence that teacher candidates had sufficient understanding of the material or concepts about which they are writing. No meaning units were coded as nonreflective on this basis in Tina's essay.

Understanding. Writing coded as demonstrating understanding shows evidence that that the teacher candidate understood the material and concepts but did not relate this understanding to experience. Experiences may be described in light of theoretical knowledge and course content. The teacher candidate may also identify relationships between methods and theoretical knowledge or course content. However, writing that demonstrates understanding, short of being coded as reflection, lacks analysis of how an experience could shed light on the teacher candidate's future educational practice. A total of 35 meaning units (24.6%) in Tina's teacher-research essay were coded as understanding.

Tina understood that the unit she had carefully designed met content-area standards and encouraged student engagement, as noted in the following meaning unit: "I had spent months planning and envisioning the unit with enterprises that met many of the SC state standards and of which I believed would encourage student engagement." Further, Tina understood the goal of inducting students into a literary community. Through structured planning and design work (Cain, 1989; Smagorinsky, 2008), teacher

candidates involved in this study encouraged students to enter makeshift literary communities in classrooms as they gain understanding of literary life. The literary community that teacher candidates strove to help students enter is a community of practice (Lave & Wenger, 1991) in which members share a common interest or, hopefully, a passion for an enterprise as they interact to improve in what they are doing. Tina demonstrated an understanding of this concept in the following meaning unit:

> My unit on Macbeth was a twenty-day unit that analyzed the tragedy of Macbeth while inviting students to enter the literary community. Meaning that they were to step out of the student role and enter the classroom as writers, directors, actors, illustrators, film critics, poets, and other such roles. The goal was for them to encounter the language and themes of Shakespeare in a meaningful way.

Drawing on Applebee (1996), the curriculum is organized around encouraging participation in literary life as a way students enter into story worlds and learn to think about literature, themselves, and society. Through structured planning and design work (Cain, 1989; Smagorinsky, 2008) teacher candidates encourage students to enter makeshift literary communities in English classrooms. Dialogue from one activity to the next is connected through the dynamic of the overall conversation about what it means to lead a literary life and to take on literary roles (Applebee & Langer, 2003). Students interacted in what Applebee (1996) would call knowledge in action, participating in a living literary tradition that is continuously reshaped by society and culture. Students participating in a living literary tradition can gain knowledge that matters individually and to society. Further, Tina understood that this approach is aligned with her

constructivist philosophy as a teacher. She described her understanding of this philosophy as follows: "I am a constructivist in my educational philosophy, I believe that the student should be the center of the classroom. They are not to only absorb information, but to bring meaning to the text."

Tina understood that a constructivist teacher believes in encouraging students to engage in their own meaning making with texts. She also understood that a constructivist teacher believes in learner-centered instruction. The constructivist instruction of teacher candidates in this study was intended to take place in a Vygotskian workshop called a construction zone (Smagorinsky, 2008). Construction zones enable students to make meaning in texts in multiple modes and multiple genres. In this way creative, in-depth exploration of an idea that fosters student exploration and inquiry (Smagorinsky, 2008, pp. 157–172, 184–223) is encouraged. An exploration of thematic ideas leads to opportunities for students to explore open-ended questions that lead to increased motivation and higher quality writing and reading. Tina demonstrated reflection as she endeavored to describe instructional strategies that helped students take risks and to gain pride in their creations.

Reflection. Writing coded as reflection shows evidence that relationships are made between conceptual knowledge and the experience of student teaching. Reflective writing demonstrates that field experiences are being used to shape student teachers' educational philosophy and practice. Direct application is made between field experience observations and future practices as a teacher. A total of 7 (4.9%) meaning units in the teacher-research essay were given this code. For example, the teacher candidate would

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analyze the methods used in a lesson and list or describe ways the lesson could be improved. A teacher candidate might also connect classroom experience to a philosophical approach to teaching or to intended future practice as a teacher. Tina reflected during her teacher-research essay about learning that instructional strategies that stress activity and engagement are appreciated by students. This is because, according to Tina's reflection below, students recognize that the strategies encouraged by M. W. Smith and Wilhelm (2006) and Smagorinsky (2008) help them to learn.

> I overheard one student talking to another student from a different class, which was also studying Macbeth, "I would hate to be in your class because I hear it's really hard," and my student responded, "You don't know what you're talking about. We learn stuff. Yes, it is hard work, but it is fun because we get to move around a lot. We are a better class than yours because we actually do stuff." Students know that these "fun" activities are actually helping them to learn. They know that there could be a less engaging way for them to learn, and they appreciate teachers taking the time to make the lesson engaging.

Tina was striving to set a context for students to experience the flow described by M. W. Smith and Wilhelm (2006). Note the emphasis in the above meaning unit on students valuing their learning because it is active and fun. This is in line with findings of M. W. Smith and Wilhelm that Tina had studied in which students were more likely to engage in classroom activities when they felt engaged and competent. Curricula that the teenage male students indicated helped them gain a sense of competence used high-level inquiry on real-world tasks, while personally and honestly connecting to course content.

The instruction described by M. W. Smith and Wilhelm emphasized helping students commit to their own learning through exercises that engage students in inquiry and dialogue while preparing them for increasingly complex activities. Tina reflected on the value a student places on participation in activities that involve physical movement and exploration of ideas in ways that are personally meaningful.

However, Tina also reflected about a need to ensure adequate structure for the activities to be well organized. This is consistent with the emphasis that Smagorinsky (2008) placed on structured unit design. It is also in line with the emphasis by M. W. Smith and Wilhelm (2006) on clear goals and expectations to be built into design work. The following unit shows Tina reflected on lessons learned from her classroom inquiry about the value of well-structured instructional planning:

> Although student appreciated being able to work together in groups, and given responsibility, and a sense of control, they still needed structure. The thing I noticed about the first couple of activities was that there needed to be more structure put in place. I am idealistic, and I thought that I would not have behavior issues if the expectations were clear, they were challenged, and if they were able to work together. What I learned was that I was naive in that thinking. Although students will work, they needed clear structure in order to produce meaningful texts. I changed my activities so that I would always have structure at the beginning of class, so students would be in the mindset to work. I found this was important in order to make the most of class time. Students can be given input, but it needs to be within the obvious confines that the teacher.

Tina reflected on a need for increased structure in her instruction. Experiences from student teaching have helped Tina stress the important aspect of helping students produce meaningful texts in a well-structured manner. She intended to incorporate increased structure in her future teaching practices.

Critical reflection. Critical reflection involves evidence in the writing of a change in perspective or a change in the behavior of the student teacher. Only writing by a student teacher that demonstrates evidence of a change—or a shift—in his or her basic philosophical assumptions or conceptual frameworks about teaching would be coded as critical reflection. Evidence would be present that a teacher candidate makes a shift in thinking that includes a philosophical explanation of a new belief. Tina's teacher-research essay is the only one of the eight essays that demonstrated evidence of critical reflection. As described earlier in this analysis, Tina had doubts prior to student teaching about the approach to instruction she was being asked to implement. Specifically, she questioned whether students would be able to lose track of time, which is a key aspect of the flow experience (Csikszentmihalyi, 1990). In addition, Tina questioned whether she would be successful at encouraging students to take on literary roles in the literary community she would strive to establish in her English class. Finally, a lack of evidence of the effectiveness of this approach to instruction troubled her. Tina described how her philosophy of education changed in the course of student teaching. M. W. Smith and Wilhelm (2006) were pivotal in this transformation in her teaching philosophy, described in the following meaning unit:

Another book I read which I believe had the greatest change on my teaching

philosophy, as well as my practice, was Michael Smith, and Jeffrey Wilhelm's

book entitled Going with the Flow. In their book they explain flow theory, "flow

experiences occur when [activities] provide a sense of control and competence, a

challenge that requires an appropriate level of skill, clear goals and feedback, and

a focus on the immediate experience … plus one … the importance of the social"

(Smith). The hoped for result of these elements, is a classroom that students are

completely engrossed in their tasks. My goal within this unit was to not only try

some different methods of teaching, but to also attempt to have students enter a

state of flow where they no longer noticed time.

Tina set out to use instructional strategies described by M. W. Smith and Wilhelm

(2006) to help students experience a sense of flow. She described the approach of M. W.

Smith and Wilhelm as having a transformative effect on her philosophy of teaching. Tina

reflected on various aspects of the approach she considered to have been effective in

student teaching, described earlier in the section analyzing Tina's meaning units that

were coded as reflection. The following meaning unit describes the transformation in her

approach to teaching as she reflected on her experiences in student teaching:

As a result of my time at (Site A), I learned that students make meaningful

connections to literature when they are placed in carefully constructed

environments that encourage flow. Students lose track of time when they are

given appropriate tasks, adequate scaffolding, the purpose is clear, the experience

is immediate, and they get to work together towards a goal. Teachers must make

the initial connections and explain purposes, but students will rise to occasion when their teachers expect and believe in them. When students are invited to be experts, and encourages, they rise to meet the expectations.

Prior to student teaching, Tina expressed doubts about whether she would be able to successfully implement instruction intended to foster the ability of students to experience flow. She found that this could be accomplished during student teaching. Influenced by M. W. Smith and Wilhelm (2006), Tina stated that she experienced a change in her teaching philosophy and practices so she now privileged instruction that was active, engaging, and intended to help students become so absorbed in their tasks that they might experience flow.

Susan

Susan designed a unit to teach Shakespeare's *Romeo and Juliet* and conducted classroom inquiry based on her implementation of the unit with ninth-grade English I college-preparatory classes at Site A. Because the whole teacher-research essay is assessed according to the highest coded level of reflection, Susan's writing is assessed as reflective.

Nonreflection. Out of 122 meaning units in Susan's teacher-research essay, 33 (27%) were coded as nonreflective, based on a description of a routine or procedural matter. For example, the following meaning unit was coded as nonreflective: "I applied this teaching philosophy to a class of thirty ninth grade students." In addition, the following meaning unit is an example of one assigned a code of nonreflection based on its description of classroom routine: "While teaching this class William Shakespeare's

Romeo and Juliet, I had students complete a number of playful literary enterprises within a classroom 'construction zone.'" Susan designed and implemented units that were intended to establish what Smagorinsky (2008) called a construction zone in a classroom, a workshop in which students are supported through instruction in the ZPD to explore understandings of unit concepts. Once instruction was implemented, Susan examined the strengths and weaknesses through classroom inquiry.

Nonreflection: Misunderstanding of a concept or an idea. Seven meaning units (6%) were coded as nonreflective, lacking understanding of a concept. All seven related to a misunderstanding of how to assess whether high school students may have been experiencing flow (Csikszentmihalyi, 1990; M. W. Smith & Wilhelm 2006). For example, Susan suggested that she could tell students experience flow in a manner that is inconsistent with flow theory: "I was able to determine whether or not students entered into a state of flow through analysis of student artifacts and participant observations."

Flow is a mental state of intense, focused concentration (Csikszentmihalyi, 1990). A researcher could make claims that link student flow experiences to student learning or that link flow to the quality of artifacts produced (Csikszentmihalyi et al., 1993; Shernoff et al., 2003). However, no research supports the use of a student artifact itself to determine whether a student experienced flow while producing that artifact.

Understanding. Writing coded as demonstrating understanding shows evidence that the teacher candidate understood the material and concepts but did not relate this understanding to experience. Experiences may be described in light of theoretical knowledge and course content. The teacher candidate may also identify relationships

between methods and theoretical knowledge or course content. However, writing that demonstrates understanding, short of being coded as reflection, lacks an analysis of how an experience could possibly shed light on the teacher candidate's future educational practice. A total of 63 (52%) of Susan's meaning units were assigned this code. In the teacher-research essay, Susan demonstrated an understanding of the importance of building on the background knowledge of students and understanding their diverse interests:

> Because my objectives required students to connect the content to their lives, it was necessary for me to understand the makeup of my classroom. While I taught two classes of academy English 1, two classes of college-prep English 1, and two classes of college-prep English 4, I focused my research on my 4A class of 9th grade CP English 1. I was teaching in a rural community where the majority of my class was Caucasian. Within the class I researched, two students were Hispanic; this was the extent of the diversity. Of the class, 13 were boys and 14 were girls, made of ages fourteen to fifteen. While there may not have been much apparent diversity, it was important for me to keep in mind that no two students are the same, and that each student had different experiences that would shape their education and ability to learn and appreciate Shakespeare.

Susan showed that she understands the value of drawing on diverse backgrounds and interests of students. However, this discussion does not include consideration of related educational strategies that can inform her experience or her future instruction.

Therefore, I code Susan's discussion of considering diversity as demonstrating understanding rather than reflection.

The following meaning unit demonstrates the understanding that Susan possesses of M. W. Smith and Wilhelm's (2006) approach to instruction, which encourages the possibility for students to experience flow (Csikszentmihalyi, 1990):

> Smith and Wilhelm (2006) refer to flow as a state of being where students are so focused on their work that they are not distracted, even by friends or outside-of-school hobbies. Certain activities encourage flow when the students feel competent and in control, they have appropriate challenges as everything is scaffolded, they are provided with clear goals and immediate feedback in the form of comments and grades, and their assignments focus on the immediate experience and incorporate social elements. Students are more likely to enter flow when they are working on engaging literary enterprises because they have the opportunity to connect their experiences and ideas to the texts they read. They do not have to fear one "correct" response as every student's response to the text is different and equivalent. This enforces their feelings of control and competence.

As I discuss below, Susan demonstrated reflection as she endeavored to describe instructional strategies that helped students to take risk and to gain pride in their creations.

Reflection. A total of 19 (16%) of meaning units in the teacher-research essay were given a code of reflection. Susan's opening paragraph of her teacher-research essay

is an example of reflectively using her field experience to make connections between theory and practice:

> Mark Twain once said "If you hold a cat by the tail, you learn things you cannot learn any other way." At first glance, this quotation seems like a strange one for a high school English teacher to choose as her teaching motto. There is no teacher involved in this quotation to educate the child about felines and their behavior, but this quotation is still appropriate for the high school classroom. As a teacher, I want to provide my students with learning opportunities, but make the students active participants in their own learning. I want to provide real-world activities and have students apply their knowledge to something innovative yet practical. That is just what I have done in my unit "An Engaging Literary Enterprise for William Shakespeare's Romeo and Juliet: Modernizing the Renaissance: Feuds, Love, and Sorrow in Romeo and Juliet and the 2011 Classroom." After carefully scaffolding the necessary background information for my students, I left it up to them to create their own meaning. The student is the only one who knows every detail of their life, and therefore, it is up to him or her to connect the material to that life. Just as the student holding the cat by the tail learned a valuable lesson, the students need to be free to make mistakes in order to learn from them. If the teacher is ever-present this learning opportunity cannot occur.

Susan used the metaphor of learning by holding a cat by the tail to illustrate the importance of helping students engage in active, participatory learning. She reflected about her own structured planning and design work (Cain, 1989; Smagorinsky, 2008; M.

W. Smith & Wilhelm, 2006), which provides scaffolds for students to gain background information needed for the students to "create their own meaning." Susan believed her approach to an inquiry-based unit design that provides activities focused around a unifying theme to help students develop further expertise needed to create meaningful responses (Smagorinsky, 2008) helps students connect the material of their lives to the material of the unit on Shakespeare. She reflected about how her metaphor of holding a cat by the tail illustrates the pedagogical importance of allowing students the freedom to take risks as they construct their own meaning making. A similar reflection of how establishing a construction zone in the environment of her classroom helped students gain the freedom to take risks in their own meaning making, found later in Susan's teacher research essay:

> Within this construction zone, my freshmen students took their knowledge and applied it to something new to leave the students with something tangible they could be proud of. Because it was a construction zone, there was room for error and correction.

In addition to valuing freedom for error and correction as students create their own meanings, Susan also valued the promotion of students gaining "something tangible they could be proud of." She does not want to reduce instruction to skill-and-drill exercises or recitation of lines. Susan wants students to gain a sense of pride in creations that are personally meaningful to the students themselves. Her goal is to support student participation in what Smagorinsky (2008) called construction zones. But Susan takes a reflective step beyond simply demonstrating an understanding of the concept of a

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construction zone. In the next meaning unit I discuss below, Susan demonstrates

reflection related to her implementation of a backwards design in a constructivist

framework.

>The end result of the unit would be the final literary enterprise, the Facebook page
>
>project. For the Facebook Page, the students pick a character from Romeo and
>
>Juliet and make a Facebook for that character. For every decision they made on
>
>the page, they had to include a rationale. This forced students to focus specifically
>
>on the characterization developed throughout the play and to practice making
>
>inferences. It forced students to think deeper about the characters and how these
>
>characters would act outside of the context of the play. They then applied this
>
>information by creating a Facebook page where they used their imaginations to
>
>decide what songs their character would listen to or Facebook friends would be.
>
>The students had a number of in-process enterprises that lead up to this project.
>
>Two of the many in-process enterprises included the Figurative Language
>
>Valentines and the Romeo Versus Tybalt Debate. These enterprises carefully
>
>scaffolded the information and skills necessary to complete the Facebook page.

Susan reflected on how students can prepare for the culminating unit enterprise of

creating a Facebook page that draws on their study of *Romeo and Juliet*. Activities such

as the inclusion of a rationale for decisions that are made on the Facebook page help

students prepare for the final enterprise of the unit. Activities are sequenced to help

students develop the additional expertise needed to create meaningful responses, and this

has a positive impact on student-learning activities; according to Susan, "It forced

students to think deeper about the characters and how these characters would act outside of the context of the play."

Susan demonstrated reflection while presenting student-completed opinionnaires as artifacts. On the first day of introducing *Romeo and Juliet* to students, Susan introduced the story through an opinionnaire that invited discussion of themes relevant to the story. At the time the opinionnaires were passed out, students did not yet know that themes such as love at first sight, revenge, and a parent's right to decide who a child marries were part of the play. The activity involved discussion of themes followed by students each choosing one thematic statement for a free-write paragraph that drew on their own prior knowledge related to their lives, to Shakespeare, and to the play *Romeo and Juliet*. Susan said that the opinionnaire activity "got students eager to read the play because it activated their prior knowledge and connected the play to their schema." This observation on the part of Susan is consistent with her emphasis throughout the essay on scaffolding activities to draw on student background knowledge and helping students make their own meaning of texts. Susan further reflected about how the activity involved aspects of instruction that encouraged the possibility for students to experience flow:

> Students enjoyed sharing their opinions and felt a sense of control because they
> are the experts on their own opinions. They began a challenging play with a
> feeling of competence. They were able to share their opinions in pairs and then
> with the class, which got students engaged because of the social element involved
> in discussion. Moreover, they got immediate feedback when they saw which of
> their classmates agreed or disagreed with their opinion.

Here Susan demonstrated not only that she understood M. W. Smith and Wilhelm's (2006) approach to encouraging flow in an English classroom, but that she uses the approach to shape her own practice. By thus tying together instruction that sets the context for flow with encouragement of students to build on prior knowledge, Susan's presentation of student-generated artifacts represents a reflective discussion of why the artifacts "show that students were able to make predictions about a play they had never read before and were able to activate prior knowledge that would make reading the play easier."

Critical reflection. There is no evidence of critical reflection in Susan's teacher-research essay.

Thomas

Thomas designed a unit for teaching Hawthorne's *The Scarlet Letter* and conducted classroom inquiry based on his implementation of the unit with English III Honors American Literature college-preparatory classes at Site A. Thomas's writing is assessed as reflective because it was the highest level of reflection demonstrated in the teacher-research essay. Students worked together in groups to explore the story while preparing for culminating exercises of writing for a newspaper and participating in a mock trial in an exploration of the story's themes. The class in which Thomas conducted classroom inquiry consisted of 13 10th-grade honors-level students, nine women and four men. No student had an individual education plan.

Nonreflection. Of 106 meaning units in Thomas's teacher-research essay, 78 (73.6%) were coded as nonreflective based on a description of a routine or procedural

matter. The following meaning unit is also coded as nonreflective: "Unit designs, preparation, and class environments were set and I began my teaching." Thomas stated he had taken the necessary steps to make sure he had established unit designs, preparation for instruction, and preparation of the classroom environment prior to teaching. Procedural statements such as these statements that introduced topics of discussion were not expected to be reflective, and they more commonly are likely to be nonreflective (Kember et al., 2008).

Another basis for a code of nonreflection was when Thomas described his experiences as a student teacher without attempting to connect experiences to theoretical knowledge related to the teaching methods he used. In the following meaning unit, Thomas conveyed his emotions related to student teaching without connecting the experience of those emotions to theoretical knowledge: "I was prepared, nervous, and excited to see the results of my studies and hard work." This shows Thomas's emotional state in preparation for student teaching, but there is no attempt to forge a connection between the descriptions of these emotions with themes related to aesthetic aspects of teaching methods. Finally, Thomas made claims about observing students achieve flow without adequately connecting those claims to a theoretical understanding. In the following meaning unit, which is representative of a claim that students experienced flow without adequate demonstration of understanding, Thomas said he found that he successfully encouraged flow through the environment established in the classroom: "Through my research I discovered that students were fully submerged within FLOW Theory while maintaining my goals and objectives throughout the unit and daily lesson

plans." Thomas recognized the desirability of encouraging the potential for students to experience flow in the context of seeking to achieve the learning gains expressed in his goals and objectives. However, in the context of these meaning units, he did not provide adequate support for his claim that students achieved flow with evidence that either showed an understanding or a misunderstanding of the psychological state of flow. Later in his teacher-research essay, Thomas did demonstrate understanding of aspects of the observation of a person who is experiencing flow.

Nonreflection: Misunderstanding of a concept or an idea. No meaning units were coded as nonreflection for lack of demonstrating understanding of a concept.

Understanding. Writing coded as demonstrating understanding shows evidence that the teacher candidate understood the material and concepts but did not relate this understanding to experience. Experiences may be described in light of theoretical knowledge and course content. The teacher candidate may also identify relationships between methods and theoretical knowledge or course content. However, writing that demonstrates understanding, short of being coded as reflection, lacks an analysis of how an experience could possibly shed light on the teacher candidate's future educational practice. A total of 21 (19.8%) of Thomas's meaning units were assigned this code. A theme that emerged included Thomas's understanding of the importance of taking student interests into account while striving to involve students in activities in which they might experience flow. This theme is expressed in the following meaning unit in which Thomas described lessons he learned from the conduct of an inventory into student interests.

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Before teaching the designed conceptual unit I conducted a Student Inventory to determine the relevance of what I would be teaching. From what I gathered most students wanted to be creative and read fiction, both of which fit within my conceptual unit.

This meaning unit shows that Thomas understood the reason for conducting a student inventory, and how the information gained from the inventory can inform future instruction. Thomas strove to tap into student interests in being creative in their roles as writers, journalists, and participants in a mock trial, as they read the fictional story, *The Scarlett Letter*. M. W. Smith and Wilhelm (2006) described the importance of taking student interests into account in their discussion of instruction that fosters the potential for students to experience flow. The teenage boys participating in research by M. W. Smith and Wilhelm (2002, 2006) were more likely to become engaged in classroom activities if the activities showed the teacher cared about their expressed interests and passions, as revealed to M. W. Smith and Wilhelm during interviews. Thomas described the importance of flow or engagement to student learning adequately for a Level 2 code of understanding the concept. In a representative meaning unit, Thomas stated, "As I progressed through the unit I quickly discovered that doubts of teaching Nathaniel Hawthorne's The Scarlet Letter were not warranted if students were properly engaged."

Engagement in the English classroom, in this study, was viewed as flow (M. W. Smith & Wilhelm, 2006). Thomas understood that instruction that engages students, as described by M. W. Smith and Wilhelm (2006), can help students understand a challenging text. Further, Thomas understood aspects of flow described by M. W. Smith

and Wilhelm to engage students, demonstrated in the following two meaning units: "In planning I focused on five important aspects: Control and Competence, Clear Goals and Immediate Feedback, An Appropriate Challenge, Importance of the Social, Immediate Experience (Smith and Wilhelm)" and "FLOW Theory enabled all goals and objectives to be met with ease and without negative repercussions by students." These meaning units showed that Thomas understood that strategies to plan engaging instruction, described by M. W. Smith and Wilhelm, are intended to enable students to meet and exceed learning objectives in ways that help students stretch their abilities while minimizing a sense of risk of negative outcome in the case of failure.

Evidenced by these two meaning units, Thomas also included a meaning unit coded as nonreflection based on a claim to have observed students in flow that was not supported with an adequate description of the observation to demonstrate understanding of the concept of identifying a student who is in the highly focused state of deep concentration known as flow: "By focusing on each aspect in preparation and implementation, I was able to see students within a state of flow." Thomas may actually have seen students in a state of flow, but he does not provide an adequate discussion of what he saw for the claim to be coded at a Level 2 for understanding of the concept. Thomas does not demonstrate an understanding of ways of describing the observation of students experiencing flow, which would be characterized by students having a sense of losing track of time and even losing track of a sense of self, finding the activity rewarding for its own sake, while deeply focused and concentrated on the activity (Csikszentmihalyi, 1990; M. W. Smith & Wilhelm, 2006). Later in the teacher-research

essay, however, Thomas does demonstrate a Level 2 understanding of the concept of the importance of the social as an aspect of flow identified by M. W. Smith and Wilhelm: "It was evident that their enjoyment and engagment was high as students could not hold back their participation and thoughts after each student group finished presenting their work and explaining their reasoning of selecting certain ideas to the class." This meaning unit demonstrates that Thomas understood participation and the sharing of thoughts in relation to class presentations as indicators of the flow discussed by M. W. Smith and Wilhelm.

Next I discuss ways that Thomas demonstrated reflection as he endeavored to describe instructional strategies that helped students make meaning of Hawthorne in engaging ways.

Reflection. A total of 7 (6.6%) of meaning units in the teacher-research essay were given a code of reflection, based on a connection between pedagogical theory and practices and experiences in Thomas's field experience. Thomas was particularly reflective about ways he strove to use his knowledge of Smagorinsky's (2008) approach to a creating a construction zone in the English classroom in an effort to help students make meaningful connections with the challenging text. In striving to turn his English classroom into a construction zone, Thomas drew on Smagorinsky description of a construction zone as if the classroom was a carpenter's workshop. In a construction zone, similar to the way carpenters use various tools in the production of their work, students are able to produce texts, shaping and reshaping their growing understandings of concepts. Planning structured discussions and activities that promote this exploration of ideas is a key aspect of fostering a construction zone. The teacher endeavors to provide

instruction in the student's ZPD. Thomas reflected about how he used Smagorinsky's (2008) construction zone approach to encourage engagement and meaning making by students in the following meaning unit:

Building the unit I tried to use Smagorinsky's thoughts and guidance through carpentry, "The carpenter might use a variety of methods to teach the skills of cabinet making: providing information verbally, modeling, and showing how to find resources, and so on." (Smagorinsky 19). When I was finished, my goal was to discover if my students would be embedded within FLOW Theory while successfully maintaining my goals and objectives for students. In order to properly find the answers to this question I had to keep a detailed account of each day, student progress, and daily goals and objectives met and not met within my classes.

Thomas strove to use multiple modes of textual production and multiple genres to help students become actively involved in constructing deeper, richer meanings as they produced texts in the classroom. He forged a connection between Smagorinsky's (2008) approach of establishing a construction zone in a classroom to his own goals of helping students meet learning goals and instructional objectives while achieving flow. Similar to a carpenter, Thomas made sure to keep records that would be rich in detail. He used the methods of teacher research to inquire into ways students met goals and objectives while also experiencing flow. In the following meaning unit Thomas continued to grapple with a connection between his theoretical understanding of Smagorinsky's approach to

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establishing a construction zone and his experiences while planning and implementing classroom instruction.

My unit's main text was Nathaniel Hawthorne's *The Scarlet Letter*. Many teachers criticize the text because of its difficultly, archaic language, and hard-to-relate themes. I, myself, questioned whether this text was best suited for my classroom; however, I continued with my preparation and taught the conceptual unit containing *The Scarlet Letter.* In order to combat the challenges brought up by other teachers I included a unique way of teaching *The Scarlet Letter*. Going away from the traditional methods of teaching a novel, I would not have students read the entire romance novel. Instead, each student would be required to read only four predetermined chapters. After each chapter was completed students would meet with other students who were chosen to read the same chapters and discuss specific details of the readings. Concluding student reading the class would unite as a whole and discuss the book as one text. Over the course of the readings and unit students would be engaged in numerous texts, enterprises, and creative opportunities while still gaining the themes and purposes Hawthorne set forth.

This shows Thomas reflecting about how to use social-learning activities and engagement in a construction zone to address the difficulties of teaching a challenging text in ways that better equip him to meet the needs of his students. Specifically, Thomas reflected about the use of group collaboration and social activity to foster meaning making in a challenging text. The enterprises referenced by Thomas encouraged students

to explore different roles, including the roles of journalists for a newspaper and the roles of participants in a mock trial. Thomas strove to foster an environment in which students together took on the roles of readers and writers in a classroom community as the students helped each other shape and reshape their understanding of *The Scarlett Letter*. The following unit is representative of instances in which Thomas took the next step of connecting his theoretical understanding of attributes of flow, as identified by M. W. Smith and Wilhelm (2006), to his inquiry into the effectiveness of an activity. In this case, Thomas described an activity in which students explored themes raised by *The Scarlett Letter* from the lens of feminist criticism.

> In order to make sure they understood and were capable of implementing the information, (Control and Competence) I reiterated the idea by having them read "Declaration of Rights and Sentiments" by Elizabeth Stanton (Immediate Experience). As they read independently they used their annotating skills, taught in a previous class period. I then explained they would be divided into groups and in order to write out their intereptation of thoughts and ideas the author described (Importance of the Social). When creating this intereptation they were asking one another, including msyelf, questions as well as discussing their ideas for approval or clarification (Clear Goals and Immediate Feedback). When each group was finished with analyzing the text we began breaking it down as a class. The class discussion was rich and frutiful as each group contributed and helped decipher the ideas. Knowing the text and discussion helped build upon their ideas of Feminist Criticism. I had students relate it to their reading. I did not immeedietly ask

students how it related to The Scarlet Letter. Instead, I had students question why and how they could use the Literary Criticism (Appropriate Challenge).

This meaning unit showed Thomas reflecting on teaching practices intended to help students relate their meaning making to prior learning through an appropriate challenge, as encouraged by M. W. Smith and Wilhelm (2006). Working in a framework of feminist literary criticism, students produced texts that comparatively examined themes from *The Scarlett Letter* and problems that exist in present-day American culture. Next, Thomas reflected about pedagogy that helped students further their meaning making through collaborative learning. Students produced a document called "Hester's Bill of Rights," modeled after the Declaration of Rights and Sentiments, primarily written by Stanton, which was signed in 1848 at the Seneca Falls Convention.

> Students were to make their own "Declaration of Rights and Sentiments" through the persepective of Hester Prynne in Puritan Boston. Students were required to work in their literary groups and connect their new criticism to The Scarlet Letter by drawing out Hester Prynne's ideal Bill of Rights. In doing so each group within the class created detailed visuals.

Thomas drew connections between his teaching practices and his theoretical knowledge of approaches that helped students further their meaning making through the visual mode of representation and through collaborative production of texts. Thomas's discussion remains consistent with creating a construction zone in the classroom. In the final representative example of Thomas connecting theoretical knowledge to his experiences as a student teacher in a reflective way, he described how an artifact

represented an example of work produced by students as the students were experiencing flow. The artifact was produced in the context of students working together to prepare persuasive essays that would be accompanied by group presentations. Students had the opportunity to produce artistic depictions of themes from *The Scarlett Letter* to go along with their group presentations. The students in the particular group described by Thomas below produced a puppet show for their group presentation. Thomas was not able to demonstrate whether the students were actually in a state of flow. However, he did reflectively discuss how the social aspect of flow, identified by M. W. Smith and Wilhelm (2006), contributed to feedback that students provided to one another that enhanced the quality of the texts the students produced.

> The students' visual was well thought out and obviously influenced by the social aspect as they reenacted their chapters through a puppet show. After each chapter they ensured that students were getting Clear Goals and Immediate Feedback as they guided students by giving a recap and asking questions. The acting of the students gave their peers an immediate experience that students could comprehend and understand. They also made sure students had control and were competent of the material as they gave handouts.

Thomas was able to make meaningful connections between his experiences as a student teacher and theoretical concepts, such as the creation of construction zones in an English classroom (Smagorinsky, 2008) and the fostering of the potential for students to experience flow in an English classroom (M. W. Smith & Wilhelm, 2006). In particular, Thomas learned to document that student learning and performance improved when he

included the attributes of flow as identified by M. W. Smith and Wilhelm (2006) in the process of planning and implementing instruction. This is in line with findings by M. W. Smith and Wilhelm that students are resistant to activities in school that do not meet conditions similar to a flow experience.

   Critical reflection. No meaning units received a code of Level 4 for critical reflection in Thomas's teacher-research essay.

Jennifer

   Jennifer designed a unit for English II honor students, which she taught at school Site B, described in Chapter 3. Prior to implementing the unit on William Shakespeare's *A Midsummer Night's Dream,* Jennifer had concerns that students may struggle with the overall text. She hoped to engage students through activities designed to help students connect with themes that were relevant to their own lives. These themes included overcoming obstacles and hardships in love and in friendships.

   Nonreflection. Meaning units were coded as nonreflective if they communicated routine, procedural matters, or simply described classroom experiences. Of 134 meaning units in Jennifer's teacher-research essay, 43 (32.1%) were coded as nonreflective, based on a description of a routine or procedural matter. For example, the following meaning unit was coded as nonreflective because it was a routine procedural statement of her assigned coursework: "When my cooperating teacher informed me that I would be teaching *A Midsummer Night's Dream* to four Honors English 2 classes filled with freshman." Another example of a routine procedural statement of a task assigned to

students follows: "I asked the student to choose to either plan the wedding of one of the couples in the play or draw a comic strip of one of the scenes from the play."

Nonreflection: Misunderstanding of a concept or an idea. Seven meaning units (5.2%) were coded as nonreflective based on a lack of evidence that Jennifer had sufficient understanding of the concepts she described.

Six meaning units were coded as nonreflective based on misunderstanding of the concept of flow. In one example, she wrote

> I think that students always enter into a state of flow when they are able to
> produce something based on their own interpretation because it provides them
> that sense that there is no wrong answer, and, therefore, it provides them with a
> sense of freedom and confidence.

There is no evidence in the literature on flow to support that the freedom to produce a text based on one's own interpretation necessarily, or "always" results in a flow experience. Flow is considered illusive, only occurring when there is an optimal balance between the challenge of the activity and a person's skill level (Nakamura & Csikszentmihalyi, 2002).

Jennifer additionally demonstrated a lack of understanding of flow theory by claiming that "These questions encouraged flow because it checked their understanding and gave the class an opportunity to help those who were struggling with the material." Asking a question to check for understanding is a type of formative assessment that is intertwined with instruction. However, checking for understanding is not understood by either Csikszentmihalyi (1990) or by M. w. Smith and Wilhelm (2006) as an aspect of

flow. Flow involves intense concentration through use of high personal skill (Csikszentmihalyi, 1990). M. W. Smith and Wilhelm (2006, pp. 3–16) identified five characteristics of instruction that encourage flow that were studied by preservice teachers: (a) providing a sense of control and competence, (b) providing a challenge that requires use of appropriate skill level, (c) providing clear goals and feedback, (d) employing activities that focus on the immediate experience, and (e) scaffolding with social interaction. Even though M. W. Smith and Wilhelm did identify social learning as a factor that encourages the possibility of flow, Jennifer did not provide sufficient discussion of how asking a question to check for understanding engages students in social learning that fosters the possibility of a flow experience.

Another example of a meaning unit that was coded as nonreflective was based on a misunderstanding of the purpose of an engaging literary enterprise as being that of assessment. Jennifer said that "As a means of checking their understanding, I incorporated various engaging literary enterprises in my unit." The emergent concept of an engaging literary enterprise was taught to teacher candidates as part of their capstone seminar coursework, and the concept is in need of further development. It was not taught to teacher candidates as an assessment tool that is applied to check for student understanding. Rather, it was taught as a real-life simulation in which students become absorbed in the use of the language arts (reading, writing, speaking, listening, enacting, and viewing) and literary and informational texts to produce texts and performances of personal or social worth.

Understanding. Writing coded as demonstrating understanding shows evidence that the teacher candidate understood the material and concepts but did not relate this understanding to experience. Experiences may be described in light of theoretical knowledge and course content. The teacher candidate may also identify relationships between methods and theoretical knowledge or course content. A total of 80 meaning units in Jennifer's essay, 59.7%, were coded as understanding.

Jennifer understood that many students can relate to issues raised in Shakespeare's plays, noting that "The issues that Shakespeare presents in his plays are issues that almost every student grapples with in high school or at some point in his or her life." For example, the nature of love is an important one in the play, something that Jennifer finds important to note:

> Shakespeare shows that true love will always face obstacles and that it can overcome those obstacles whether it is through death, which is the case with Romeo and Juliet, or with marriage, which is the case with Lysander and Hermia from *A Midsummer Night's Dream.*

This meaning unit demonstrated an understanding that students can relate to struggles involved in striving to overcome obstacles that stand in the way of love. Further, Jennifer understood that she can use themes to which students can relate in their individual lives as a way to activate students' prior knowledge, as demonstrated in the following meaning unit: "I knew that I would have no problem activating the students' prior knowledge because the play has so many relatable themes."

In this meaning unit, Jennifer did not elaborate on practices she might use to activate prior knowledge of students. For this reason, the meaning unit was coded as understanding rather than as reflection. Although she understood that she can activate prior knowledge, she did not understand the next step: to reflect on ways to activate the prior knowledge of students in her practices as a teacher. Jennifer also understood that students frequently struggle to find Shakespeare engaging to read because of the difficult use of language. She demonstrated this understanding in the following meaning unit: "The only problem was that I knew the students would still feel uneasy about the language and worry that they would not understand the events in the plot."

Here, Jennifer demonstrated an understanding that Shakespeare's use of language may be a hindrance in students' understanding of the play's plot. However, the meaning unit was not coded as a reflection because there was no analysis of how this understanding can shed light on Jennifer's future teaching practice. Jennifer understood that one way of helping students understand a difficult text is by reading the text with them and providing students with guidance, as expressed in the following meaning unit: "Because of the language difficulties in the play, my cooperating teacher and I decided that I would read the entire play in class with the students, guiding them as they read."

This meaning unit demonstrated an understanding that Jennifer's cooperating teacher advised her to read the play in class and to provide guidance to help students understand the text. However, it is unclear which strategies to guide students were used, and in what ways Jennifer's future teaching practices were informed by the experience. Next, I describe ways Jennifer did take the step of demonstrating reflection as she

endeavored to describe instructional strategies that helped students take risks and gain pride in their creations.

Reflection. Four (3%) meaning units in Jennifer's teacher-research essay were coded as reflective. Writing coded as reflection shows evidence that relationships are made between conceptual knowledge and the experience of student teaching. Reflective writing demonstrates that field experiences are being used to shape the student teacher's educational philosophy and practice. Direct application is made between field experience observations and future practices as a teacher. Teacher candidates might also connect classroom experience to their philosophical approach to teaching or to intended future practice as a teacher. In the following meaning unit, Jennifer demonstrated reflection while discussing teaching practices to make reading more engaging for students:

> To make the reading more engaging, I decided to paint a mural of a forest scene that would function as the backdrop of the play. Then, I bought costumes and props such as crowns, wings, donkey ears, and a purple flower. Each day, I would ask for volunteers to read the play and wear the costumes in front of the mural. In addition to wearing the costumes, I asked the students to perform the actions and events that unfolded in the play as they were reading. By doing so, the students were creating their own version or interpretation of the play, and, therefore, their own literary text.

Jennifer, in this meaning unit, reflected on her use of various ways of helping students construct meaning while engaging with a text. Key to this meaning unit being coded as a reflection, Jennifer related conceptual knowledge about multiple modes of

meaning making and her experience of activating those modes during student teaching. Consistent with Smagorinsky's (2008) approach to instruction, Jennifer made use of various modes of representation through the creation of a mural, costumes, and props, to encourage high school students in their effort to develop and communicate their knowledge. The pedagogy encouraged by Smagorinsky and by M. W. Smith and Wilhelm (2006) involved personally and socially engaging students in a supportive, socially active context. Jennifer viewed engaging varied modes of representation as beneficial to helping students construct their own understandings of the play. The use of a mural, costumes, and props are each ways of encouraging students to approach the play with what Rosenblatt (1978) would characterize as an aesthetic stance in which the students are able to experience an emotionally laden interaction with the text. Jennifer asserted that students gained a greater understanding of the play while evoking a variety of stances, consistent with Rosenblatt's contention that as readers interact with a text, the interaction can evoke a continuum of aesthetic and efferent stances. Efferent stances are understood as focused on constructing new knowledge through a more literal reading of a text. In another meaning unit that demonstrated reflection, Jennifer related conceptual knowledge about flow and her experiences during student teaching of employing strategies that encouraged the possibility of students experiencing flow (Csikszentmihalyi, 1990; M. W. Smith & Wilhelm, 2006).

> First, this activity encouraged flow because it gave the students a sense of control, meaning the students were creating their own literary text based on their own interpretation of the play, and a sense of competency, meaning the students felt

confident in their ability to read and understand a rather difficult play because
they were actually performing the events. Second, I provided the students with
clear goals, which were to basically read the play and perform the events to the
best of your ability. Also, I gave the students immediate feedback throughout the
reading since I would stop them periodically and ask questions that tested their
comprehension of the play thus far.

Jennifer not only demonstrated knowledge of dimensions of flow, as described by
M. W. Smith and Wilhelm (2006), but she took the next reflective step of describing
ways she connected this understanding to her educational decision making during student
teaching. Providing students with a chance to create their own literary text based on their
own interpretations is a way of fostering control. Competence is fostered as students
perform their creations and interpretations of the text. Through directions on how to read
the play and how to engage in the performance, she provided clear goals. By asking
questions and checking for understanding, Jennifer provided immediate feedback.

Jennifer was also reflective of her use of the teaching strategy of modeling. Some
students struggled with the task of creating dialogue based on their own personal
understanding of a character. Jennifer found that by modeling ways students could create
dialogue based on their interpretations, she helped students gain confidence in their
ability to create dialogue.

Initially, some of the students felt uneasy about the assignment because it asked
them to go beyond the text and to think about what the characters might want,
need, or fear. However, once I modeled a few possible answers for Puck, the

students began to feel more comfortable with the assignment and began to even have fun with the assignment.

Smagorinsky (2008) advocated for the frequent use of modeling in which students are shown how a task can be done, frequently including thinking aloud as the teacher candidate demonstrates his or her own thought process in completing the task and engaging in behaviors of an expert and skilled reader or writer. Jennifer asserted that her use of modeling not only helped students gain the confidence to write dialogue, but also to even enjoy the activity.

Critical reflection. I did not find evidence of critical reflection in Jennifer's teacher-research essay.

Sam

Sam designed a unit for teaching Edgerton's *Walking Across Egypt* to 11th-grade students in an American literature technical-preparatory English III class at Site A. The story followed the struggles of the main character, Mattie, to adjust to aging. Mattie was increasingly unable to participate in activities that once were easy for her. Sam chose the book after reviewing student-interest survey results that showed an antipathy for reading boring books. *Walking Across Egypt* was one of Sam's favorite stories while in high school because of its exploration of the theme of seeking independence despite facing constraints and limitations. Through journal entries and memoirs, students explored the theme of looking after the "least of these my brethren." Additionally, the unit also

allowed students to investigate the theme of choosing between "needing to take care of others vs. needing others to take care of ones self."

Nonreflection. A total of 81 (82.7%) Sam's meaning units were nonreflective. Sam wanted students to improve their reading skills and to become engaged in reading *Walking Across Egypt*. Students analyzed the book through a variety of activities including a paper-pass activity in which students shared examples from the text showing details related to theme. Meanwhile, students also placed symbols and comments inside squares to create a quilt, and kept a quilt journal to further analyze characters they wrote about on the quilt. Sam discussed the text before and after the guided readings, then addressed questions on a worksheet and participated in class discussions. In addition, students wrote in journals at the beginning of each class, wrote memoirs for characters, as well as poetry based on events in the book. Sam expressed satisfaction with the results of these activities saying, "By implementing a variety of activities and also incorporated learning for all learners students were more engaged and created quality work." This was a nonreflective meaning unit. The claim of student engagement in the production of high-quality work was not yet supported with a discussion that showed understanding of theoretical concepts. Sam made additional claims related to student performance that were not supported by adequate demonstration of an understanding of a concept. These were coded as nonreflective. Although Sam did not show a misunderstanding of the psychological state of flow, she also claimed students experienced flow without demonstrating sufficient understanding of the concept when discussing her observations of students working together during the "glimpse of Southern life" activity. The activity

involved writing an article about southern life as if it would be read by someone from New York who had not been to the South.

I also allowed them to talk softly to their neighbors as they wrote which I find consistently gets students in a sense of flow because they often share their writing with one another and it helps make the task of writing a little more enjoyable.

This was a nonreflective meaning unit because there was insufficient basis to determine whether Sam demonstrated an understanding of flow. Sam drew on the findings of M. W. Smith and Wilhelm (2006) that socialness is a dimension of the flow experience. Enjoyment of an activity and the fostering of personal relationships through sharing of writing may contribute to this dimension of flow, and increase the likelihood students experienced flow. However, Sam did not include a description of whether students were deeply focused and concentrated on their work to such an extent that they may have lost track of time. There is no way to tell from this description whether students may have experienced a state of flow. Likewise, it is also not possible to tell from this description whether Sam had an understanding of what it might look like for a student to be so deeply engaged in an activity that they may be in flow. It is important to note that Sam grappled with the importance of the social in describing instructional steps taken to encourage flow experiences among students.

Finally, there was insufficient detail to determine Sam's level of understanding of how to use rubrics. She understood that a well-focused rubric can help students become engaged, as noted in the following meaning unit: "I then gave students clear goals and feedback through the rubric I gave each of them." A rubric that sets clear goals and

provides the basis for immediate feedback on success in activity can encourage the possibility of a flow experience. Yet, Sam did not discuss specific details of criteria in the rubric she used to set clear goals for students. As discussed later in this analysis, Sam's lack of clear criteria in rubrics posed a problem in the classroom that she needed to address by reconsidering her ideas about how to put together a rubric.

M. W. Smith and Wilhelm (2006) argued that lack of understanding of the criteria for successful writing contributes to an inability of students to experience flow (p. 122). They cautioned that rubrics by themselves rarely provide sufficiently clear criteria for success. Sam strove to address the possibility of student misunderstanding throughout the unit by also modeling how she wrote an article describing a glimpse of southern life, allowing students to see her progress from the conception of the topic through the production of the final draft. By observing Sam's writing process, students could gain a clearer understanding of goals than would be available from the rubric alone. As will be shown in the next section, Sam also reflected about how to improve her use of assessments to better inform her instructional practices. Sam's instructional steps taken to encourage flow during the "glimpse of Southern life" activity will be discussed in the Understanding section of this analysis.

Nonreflection: Misunderstanding of a concept or an idea. No meaning units demonstrated misunderstanding of a concept or an idea.

Understanding. Fourteen (14.3%) of Sam's meaning units demonstrated understanding by Sam of a concept or an idea. Sam demonstrated an understanding of the connection between clear expectations and instruction that fostered the possibility for

students to experience flow while discussing the "glimpse of Southern life" activity.

Describing the results of her gateway activity (Hillocks, 1995; Smagorinsky, 2008),

designed to build prior knowledge related to themes in the book, Sam claimed students

achieved the highly focused state of flow, without adequately supporting the claim.

However, she also reflected about a connection between her teaching practices and an

increased student interest she noticed. In the activity, students gave half-page written

responses to a pair of fictional Dear Abby letters from people expressing problems

related to themes in *Walking Across Egypt.* One letter was from a teenager and the other

was from an older person; students needed to make their advice appropriate for the needs

and interests of each person. Responses were shared in class. Sam reflected about student

interest in the activity as follows:

> Students got into a sense of flow because they had clear goals and feedback
>
> through the rubric I gave them, and when they shared their responses with the
>
> class I gave them oral feedback. They also had a social aspect within this lesson
>
> because they could talk softly with their neighbor as they wrote and also when
>
> they shared with the class students also gave feedback. Students had a sense of
>
> competency and control because they wrote the responses and could give their
>
> own advice. I was so surprised at how interested students were with this lesson
>
> and how they truly wrote from the heart what they would do if they were in the
>
> same situation as these people in the letters.

Instruction in the classroom was designed to meet dimensions of a flow

experience as identified by M. W. Smith and Wilhelm (2006). Clear goals and immediate

feedback were established through use of a rubric and through Sam's verbal responses to student work. Social interaction was fostered through peer feedback on the advice letters. Students gained control over what advice to give to their peers and to the fictional authors of the Dear Abby letters. Whether students experienced such highly focus concentration in their work that they lost track of time cannot be determined from this meaning unit. However, purposeful engagement and enjoyment of the activity are consistent with studies of adolescents in high school who experience flow (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi et al., 1993; Csikszentmihalyi & Rochberg-Halton, 1989; Larson, 1988; Shernoff et al., 2003). In this case, Sam did not take the reflective step of reconsidering ideas supporting her approach to instruction in light of her surprise about the high level of student engagement. In the next section, open-mindedness contributes to a theme of Sam learning difficult lessons after struggling in the classroom, and considering new ideas to improve the quality of her instruction.

Reflection. Three (3.1%) of Sam's meaning units demonstrated reflection. Admitting to numerous mistakes made as a student teacher, Sam reflected about how to improve her practices related to modeling the writing process for students, collecting and grading student work, and assessing student learning.

Sam modeled her thinking and writing processes extensively with each activity. Yet, as she reflected about the way she modeled her writing process, she discovered that she failed to give sufficiently specific guidance about how students could independently write a creative paper. Many papers written by students during the unit lacked originality.

Instead of placing the blame solely on students Sam reflected about a need to improve her

own teaching practices, as shown in the following meaning unit:

> I found that if I'm too general and do not go into detail with my expectations
>
> students will often take the easiest way possible or they do not do what I was
>
> hoping they would for the assignment. This I found is not because of them but
>
> because I was not specific enough for them in what I wanted them to accomplish
>
> within the activity.

Sam wrote a poem about her experiences while growing up in her hometown. It

was intended to model how students could likewise produce a "glimpse of Southern life."

In this activity, students wrote about their own experiences living in the South for an

audience of people who live in New York. Sam reflected that her modeling process had

the inadvertent impact of limiting rather than unleashing creativity. The following

meaning unit is nonreflective because it is an observation of a lack of originality in

student work, but it demonstrates the details that contributed to Sam's recognition of a

need to rethink her process of modeling how she writes:

> However, every paper except for maybe two or three of the assignments were
>
> about their town similar to mine. Several even began their stanzas with "I come
>
> from a town …" like the one found document 3. Because of this students were not
>
> nearly as original as I was hoping.

Modeling should not result in students mimicking the way that Sam wrote her article.

This caused Sam to reevaluate her technique of reflection, and to acknowledge that it

resulted in unoriginal writing. Her new perspective is that she needs to ensure that when

she does model writing for students, it does not result in students simply writing as she writes in a manner that is devoid of their own personal voice.

Similar to her willingness to reflect on ways to improve her techniques of modeling the writing process, Sam also reflected about how to improve the way she collected portfolios. Students selected their own work for the portfolio using manila envelopes as an aid in studying for the unit test. However, Sam struggled to transport a box of 45 portfolios among other student papers. Difficulty in carrying portfolios back and forth from school to her home resulted in Sam only taking the portfolios home to grade on weekends. She then felt overwhelmed during the weekends by copious amounts of papers she needed to grade. After conducting classroom inquiry, Sam reflected about how to improve her system of collecting portfolios:

> In the future I will collect papers from students, after they do the assignment, grade them during planning and then have them put it in the portfolio so they can keep track and monitor their work. This will make grading less cumbersome and help me stay on top of grading and reflect on students work more frequently.

Sam reflected about how to more effectively implement portfolios in the future. Importantly, she still does believe in the concept of collecting portfolios to provide feedback to guide students, despite her struggles during student teaching. A need to improve her feedback to students about their work also was behind her reflection on the way that she assessed student learning. She tended to grade work based on completion during student teaching under the assumption that student success would be encouraged by receiving good grades if they completed assignments. In a change of the underlying

basis of how she assessed students, Sam now thought of grading based on completion to be harmful to students. This choice to grade according to criteria instead of by completion led Sam to also discuss changes to make in her use of rubrics, after reflecting on the work she received during student teaching. She admitted to using vague criteria in her rubrics as a student teacher that left students unclear about expectations with her assignments. As shown in the following meaning unit, Sam determined a strategy for improving how she designs rubrics.

> I have now found that for me I create better rubrics when I literally sit down with a piece of paper and ask myself "what do I want the student to get out of this assignment and how do I want it to look?" While I come up with thoughts I now write them down in a list and then adapt this list into a rubric. For me this works best because I am given work from students exactly how I want it and they have clearer expectations now.

Clearly Sam struggled during student teaching by her own admission. However, she demonstrated the willingness to discuss mistakes and to open-mindedly rethink the basic ideas supporting her instructional choices. She considered new teaching practices and ideas, as described in her description of how she changed her approach to constructing rubrics, while recognizing her own need for growth as a teacher.

Critical reflection. No meaning units received a code of Level 4 for critical reflection.

Michelle

Michelle designed a unit for teaching Hawthorne's *The Scarlet Letter.* Students in her classroom investigated which of competing sides in the story were "right" or "wrong" in their actions. On a deeper level, students debated which side had a greater sense of truth. Michelle conducted classroom inquiry based on implementation of the unit with 11th-grade students in an American literature college-preparatory English III class at Site A. The unit focused on an investigation of notions of truth in a Puritan and in modern American society. Students explored questions such as whether there is truth to every side of a story while using themes present in modern American society to help students forge meaning from themes in *The Scarlett Letter.* While exploring these themes and preparing to debate, students maintained a journal containing discussion questions, vocabulary, and reflections about the text.

Nonreflection. Of 100 meaning units in Michelle's teacher-research essay, 66% coded as nonreflective. Introductory and procedural statements are not expected to be reflective (Kember et al., 2008). Meanwhile, another basis for coding a meaning unit as nonreflective was when Michelle made a claim but did not demonstrate an adequate effort to show understanding of a concept or an idea, as occurred in the following meaning unit: "Students were able to thrive in a supportive construction zone, and I truly believe that they would have been able to succeed no matter who the teacher was if these aspects were still in place."

Michelle asserted that students thrived in the construction zone, or a creative workshop in which instruction took place in the ZPD of students, involving multiple

genres and multiple modes of communication. However, the reason this was not coded as Level 2 for demonstrating understanding of the concept is because it was unclear how Michelle conceptualized what it means for students to thrive in the construction zone.

Nonreflection: Misunderstanding of a concept or an idea. No meaning units were coded as nonreflection for lack of demonstrating understanding of a concept.

Understanding. A total of 31 (31%) of Michelle's meaning units were assigned this code. A theme that emerged included Michelle's understanding of the importance of gradually releasing responsibility for learning to students while striving to involve students in activities in which they might experience flow. Michelle described helping students build knowledge and skills in preparation for taking on increasingly challenging tasks on their own. This theme is expressed in the meaning unit below.

> This research is my observations of a student teaching experience where I sought to make myself increasingly unnecessary, yet maintain engaged students who were producing high quality texts regularly. This sounds like a tall order, but with the progressive research of Smith and Wilhelm and scaffolded learning I was able to uncover hidden potential in many students. The majority of students were capable of producing high quality texts, which resulted in an effective and productive ELA unit within a supportive construction zone.

Michelle understood that she has geared instructional practice toward making herself "increasingly unnecessary." Michelle knew from studying Smagorinsky's (2008) approach to establishing a construction zone in an English classroom that it was important to model her own thought processes while figuring out problems addressing

themes and ideas in *The Scarlett Letter*. She knew to work on a problem together with students requiring skill that is just above what students can do on their own without her help. She strove to help students make sense of difficult themes and ideas on their own, meaning she becomes increasingly invisible in the process. Smagorinsky drew on Vygotsky's (1978) concept of the ZPD in saying that a teacher candidate would want to help students stretch beyond what can be done without assistance, while continuing to draw on existing knowledge and skills. Next I discuss ways Michelle demonstrated reflection as she endeavored to describe instructional strategies that helped students make meaning of Hawthorne in engaging ways.

Reflection. Three meaning units (3%) were given a code of reflection based on a connection between pedagogical theory and practices and experiences in Michelle's field experience. As previously discussed, Michelle demonstrated an understanding of the construction-zone approach encouraged by Smagorinsky (2008) and stressed the release of responsibility to students as they gain increasing knowledge. Building on this knowledge, Michelle then reflected about how modeling can help students understand increasingly complex tasks.

> Even the smallest assignments that I thought would need no explaining required modeling, such as "agree" and "disagree" cards that they held up on the first day when I read controversial statements that were connected to themes of the novel. I instructed the students to hold up the card that fits their opinion of the statement, yet they were all confused and 5 hands were raised. In this moment, I realized that I needed to rewind and ask a student who appeared to understand to model this

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activity with me. I chose one of the students that raised his hand when I asked if

anyone understood, and we did a few practice statements where he raised his

agree or disagree cards. This event serves as an example of the modeling and

instruction that was necessary, because students did not even create a text for this

activity. One can imagine the extensive amount of instruction and modeling for an

activity where students create meaningful and high quality texts, but I found that

this is possible with preparation.

She recognizes that modeling is a way to guide students as they create high

quality, meaningful texts. The holding up of "agree" or "disagree" cards is a simple task.

Yet, Michelle made the connection that if modeling is beneficial to help students

understand this task, it would also be beneficial in helping students successfully

understand and grapple with more complex tasks. Further, as demonstrated in the next

meaning unit discussed, Michelle reflected about how her use of modeling can be used in

instruction that is so engaging for students that they might potentially experience flow

(Csikszentmihalyi, 1990; M. W. Smith & Wilhelm, 2006). Michelle recognized that that

questions related to current issues can serve as a beginning point for future class

discussions. She helped students draw on personal experience to make personal

connections to lessons. As shown in the next meaning unit, Michelle also reflected about

how to help students become engaged in tasks in her instructional practices. She

recognized that students may not have completed a task for lack of finding the task

engaging or of personal importance:

As I reflect I see my need to explain to students why they are required to complete this work in my class. I should have reminded them more frequently that this class about more than just the grade. Instead, I should have inspired students more by taking more time to tell them why I find this activity valuable and worthy for this class.

Michelle used experiences from her student teaching to recognize the need to make changes in her instructional strategies that are geared toward helping students find a personal and social value in an activity. This is consistent with M. W. Smith and Wilhelm's (2006) identification that students hold teachers to a "contract to care in classrooms." In this contract, students tend to be more motivated when a teacher fulfills the responsibility of caring about students as individuals, addressing their interests, actively helping them learn, and displaying passion for the content and the subject. Open discussion of why a teacher finds topics being explored to be meaningful and important is encouraged by M. W. Smith and Wilhelm. Michelle reflected, in the next meaning unit, that her student-teaching experiences helped her learn the importance of helping students try out roles in a makeshift classroom literary community in her English classroom:

I also wish I could have inspired students to step into the roles of whatever high quality text they were being asked to create, and at the time I was worried I would overwhelm them. When I look back, I do not think this request would have overwhelmed them and I wish I had maintained higher standards for my students in this capacity.

Michelle learned that in the future she can have higher expectations for students to try out roles in the makeshift literary community of an English classroom as they create high-quality texts. As Michelle had been taught in coursework, students can take on the roles of readers and writers in a community of more experienced members in a classroom until they internalize the cognitive processes and requisite content of the more adult members (Lave & Wenger, 1991). This involves using structured planning and design work (Cain, 1989; Smagorinsky, 2008) to foster ways to help students take on real-life roles while participating in debates over issues raised by *The Scarlett Letter.* The literary community that teacher candidates strove to help students enter is a community of practice (Lave & Wenger, 1991) in which members share a common interest or, hopefully, a passion for an enterprise as they interact to improve in what they are doing.

Critical reflection. No meaning units received a code of Level 4 for critical reflection in Michelle's teacher-research essay.

Beth

Beth led high school students at Site A through a study of one of philosophy's most fundamental questions during a unit on Wiesel's *Night.* English I college-preparatory students explored the theme "what does it mean to be a human being?" *Night* is Wiesel's autobiographical account of life in the ghetto of Sighet followed by the Auschwitz and Buchenwald concentration camps. His parents and three sisters died in concentration camps. Yet Wiesel became an advocate for fostering the human rights and capabilities of suffering people around the world. Students used a reader-response

journal, personal narrative, free-verse poetry, and a research project to reflect their own decision making and ethical responsibilities.

The unit provided context to grapple with problems that exist in society and to evaluate responsibility for taking reflective action to address injustice. Students encountered lives of people who were victims of systematic cruelty. In the process they examined ethical choices made in life. In addition to the Holocaust, the unit included stories of the poor treatment of Native Americans by the U.S. government, slavery, the Jim Crow era, and the internment of Japanese Americans during World War II. Beth supplemented *Night* with excerpts of *Life of an American Slave* by Douglass, *Incidents in the Life of a Slave Girl* by Jacobs, *The Interesting Narrative of the Life of Olaudah Equiano* by Equiano, and current-day news articles about violations of human rights that still take place. Fostering empathy for what it was like to be a slave, students created a body biography (Smagorinsky, 2001) of a slave or a concentration-camp prisoner. The final enterprise of the unit was a research project in which students took a stance on responsibilities of the individual, community, nation, and world to support human rights.

Nonreflection. A total of 112 out of 151 (74.2%) meaning units in Beth's teacher-research essay were nonreflective. Beth acknowledged that prior to student teaching she worried about whether the unit she designed would be too complex. She was nervous about whether the unit would succeed, saying,

> My unit was ambitious to say the least in that not only were we reading *Night*,
>
> slave narratives, and some other short stories, but also incorporating two research

projects and presentations, the personal narrative, and reader response and

vocabulary into the unit as well.

This meaning unit was coded as a nonreflection because it does not describe theoretical

concepts that influenced her to design the unit as she did. Some students expressed they

felt overwhelmed at the start of the unit. Beth listened to the students, noting that

"however, a few adjustments and discussions of completing work outside of class and

using class time to the fullest helped to allay their and my own fears." This was a

nonreflective meaning unit that did not describe ways she may have used her

understandings of educational theory or methods to make these adjustments.

Beth found that the unit helped students gain an appreciation for the rights of

others, as will be discussed in greater detail later in this analysis of her teacher-research

essay. She asserted,

The completion of the various activities and assignments in this unit, such as the

body biographies, free verse poems, and final enterprise all show the different

degrees to which the students began to develop an increasing understanding of the

plight of the individuals in these situations, taking into account what made each of

them a human being and thus worthy of being heard.

This meaning unit was nonreflective because it did not include a discussion of underlying

theoretical concepts. However, this meaning unit also expressed themes that Beth

highlighted in her teacher-research essay with stances that were reflective.

Nonreflection: Misunderstanding of a concept or an idea. One meaning unit

demonstrated a misunderstanding of flow. Beth described a set of student artifacts from

the assignment in which the class created body biographies of a slave. To support a stance that students in the class experienced flow, Beth said "The products are the proof of this flow." Flow is related to the stretching of skills (Csikszentmihalyi & Larson, 1984; Csikszentmihalyi & Rochberg-Halton, 1989; Nakamura & Csikszentmihalyi, 2002; Rathunde & Csikszentmihalyi, 1993) and to the production of high-quality, interesting, and engaging written texts by high school students (Larson, 1988; Shernoff et al., 2003). However, the relationship between flow and the stretching of skills as well as the production of high-quality texts is correlational not causal. The production of a high-quality text itself does not necessarily mean a student experienced a state of flow while producing the text.

Understanding. Thirty-six (23.8%) of Beth's meaning units were coded Level 2 for demonstrating understanding of a concept or an idea. Beth demonstrated an understanding of Applebee's (1996) concept of the curriculum as a conversation, as described by Smagorinsky (2008). A curriculum that is a conversation fosters student exploration of what it means to participate in a living literary tradition, in this case a tradition of exploring what it means to be human in the context of institutionalized cruelty such as the Holocaust and slavery, while seeking knowledge that is meaningful individually and to society. Beth understood that her guiding question of what it means to be human helped shape the curriculum as a conversation is clearly expressed:

> This question seems fairly straightforward; we all have eyes, hair, we breathe, we
> sleep, we eat. Further investigation of this question, however, reveals a much
> more complex question that leads to the examination not just of the physical

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characteristics of the human being, but of the human condition; both the individual and collective hopes, dreams, desires, fears, and nightmares of each member of the human race factor into our individual understanding of what being human means exactly.

Beth focused on the human condition. She strove to give students a reason to care about devoting a semester to exploring the human condition, as advocated by Smagorinsky (2008) and M. W. Smith and Wilhelm (2006). It is one thing to focus on abstract traits of being human such as having "hopes, dreams, desires, fears, and nightmares," but Beth's focus was sharper than this: "In questioning the traits that make one human, the subject arises of how these traits are distorted and taken for granted by some groups of people. The Holocaust serves as the one such instance."

The guiding question has a long literary tradition that includes Wiesel and Douglas, who through their autobiographies and the force of their moral will, confront society with the need to recognize the full humanity and dignity of each person as an individual. This literary tradition of exploring in honest, unflinching terms what it means to be human in the face of systematic denigration of one's very humanity is continually reshaped by the larger society, so Beth includes current human-rights violations as part of the unit. M. W. Smith and Wilhelm (2006), who like Smagorinsky drew on Applebee's concept of a curriculum as conversation, advocated that a question that guides a unit should spark students to "solve problems, debate, and argue in ways through which they could immediately use and share with others" (p. 57). M. W. Smith and Wilhelm stressed

that the guiding question explored in a unit should connect to the real-life experiences and interests of students.

Students worked in groups to create body biographies in which they drew details from texts they read (e.g., *Incidents in the Life of a Slave Girl; Life of an American Slave; Night*) to depict a slave or a concentration-camp prisoner. Physical details presented in each drawing were supported with quotations from a text that illustrated treatment received by the slave or concentration-camp prisoner. Discussing student artifacts, Beth demonstrated an understanding of the use of alternative assessments for tracking student learning, as indicated in the following meaning unit in which she described a body biography created by a student based on *Night*: "The details chosen from the text, such as the fire or the numbers tattooed on the arms of the prisoners serves to show the depth of understanding of how these people were treated."

In this meaning unit, Beth assessed that the student demonstrated understanding for the treatment of concentration-camp prisoners through a means other than a standard written test. The student understood the relevance of tattoos on the arms of prisoners as yet another way the Nazis sought to dehumanize the prisoners. The next section of the analysis shows that Beth used this understanding of the value of alternative assessment to rethink her approach as a teacher.

Reflection. Beth had two reflective meaning units (1.3%) in her teacher-research essay. In the process of striving to help students become more empathetic to other individuals, Beth also gained an appreciation for the unique needs and giftedness of her students as individuals. Students communicated to Beth that they recognized the

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importance of being aware of the suffering of other people in order to address the suffering. Beth expressed the need to rethink her own approach to teaching a class as individuals, giving attention to their individual needs. By reading *Night*, Beth hoped students would view the victims of the Holocaust as individuals with needs and passions that would become meaningful to them. In turn Beth found that she gained a newfound appreciation for the needs and passions of her students as individuals, as demonstrated in the following meaning unit:

> What I hoped for my students more than anything else was that they see the individual victims of the human rights violations that we studied in class. One of the most important lessons that I learned during my student teaching was the value of seeing and understanding the individual student rather than only seeing them as a member of a collective "class."

This meaning unit showed that Beth used her field experiences to rethink her approach to teaching, leading to a new perspective in which she focused on the relationship that exists between the teacher and the individual students. Beth wanted students to appreciate the dignity and rights of each individual in society, so she needed to also appreciate the dignity and rights of each individual in her classroom. A focus on understanding the individual student is in line with Dewey's (1933/1986a) stance that a reflective teacher turns the focus to what the individual student is learning in relation to subject matter that is taught in the classroom. Beth stressed the value she placed on "seeing and understanding the individual student." To see and understand a student, Beth

took the step that Zeichner and Liston (1996, 2014) found is typical of reflective teachers; she would pay close attention to the affective dimension of teaching.

The extent to which students became invested in an exploration of what it means to be human in the face of cruelty also explored in the unit was unexpected for Beth. As noted earlier in this analysis, she worried that her unit would not succeed because of its complexity. Indeed, when she began to implement the unit, some students did express that they felt overwhelmed by the amount of work and the pace of the unit. Upon reexamination of her experiences in the classroom, Beth came to realize that the high school freshmen in her English class could exceed her expectations.

Finally, by looking back at her field experiences, Beth came to realize that alternative assessments through activities such as a body biography can be valuable ways to allow students to express their understandings of ideas and themes in a text. This is clearly expressed in the following meaning unit: "One of the most valuable pieces of information that I will take away from this unit is that traditional assessments in the form of tests and quizzes are not necessary for students to learn the information in meaningful ways."

Beth emphasized students learning "in meaningful ways." The body biography is not at all a traditional form of assessment. Yet, as shown earlier in this analysis, Beth understood that a student could express an understanding of the suffering of a concentration-camp prisoner through the body biography. The unit asked students to explore what it means to be human. Assignments such as the body biography gave students the chance to express their growing meaning making of complex ideas, such as

maintaining dignity in the face of being a concentration-camp prisoner, in ways that demonstrate their exploration of ideas in a multiple-choice question.

Critical reflection. No meaning units received a code of Level 4 for critical reflection.

Paula

Paula taught a unit on *Macbeth* in an 11th-grade English inclusion class at Site A. All students had an individual education plan. Activities included free writing about students' own motivations for success in relation to themes from *Macbeth*, Biopoems and illustrations about characters in the play, journals, and the creation of a mock newspaper. Paula noted that students worked with a high level of engagement. The mock newspaper was created through a 3-week culminating enterprise in which students produced news articles and a variety of other aspects of a newspaper ranging from classified advertisements based on characters in the play, to editorials, comic strips, and obituaries.

Nonreflection. Of 70 meaning units in Paula's teacher research essay, 45 (64.3%) were coded as nonreflective based on a description of routine practices as a teacher. Paula initially established her conception of herself as an advocate for all students to achieve at their full capability, saying, "As someone who has never been able to imagine being anything but an educator, I have always believed that every student has the ability to achieve greatness in the classroom, despite any problems with learning disabilities or motivation." Paula established that in her self-concept as a teacher she believes in the capacity of all students to achieve at a high level, regardless of disability. Paula did not

take the next step of connecting her high expectations for students to the theoretical concepts and ideas related to the positive effects that high expectations of teachers can have for student achievement, so this meaning unit was coded as nonreflective. It is a statement about her personal stance, not a statement showing understanding of a theoretical concept. Further, Paula expressed the pleasure she found in the challenge of student teaching while discussing the challenge of designing and implementing instruction that would motivate students to become engaged in learning, given the need to modify instruction based on the diagnosed needs of students with dyslexia or severe learning disabilities. Paula said "I found this to be an exciting challenge and one that I found was not only fun, but also extremely rewarding to achieve." Further, Paula noted that students did show increased motivation and improved performance. In the following meaning unit, Paula asserted, "I was able to experience magic in the classroom as I quickly started to see even the most unmotivated students improve in almost every aspect of learning, from attendance to daily grades to test grades." Paula knew, from examining performance in student work, that students made progress. The meaning unit was coded as nonreflective because she did not take the step of discussing concepts and ideas related to increased motivation, or these student-learning gains she found to be in evidence, based on performance in their assignments and tests.

Nonreflective statements can also describe an activity without further exploration of theory. In the following meaning unit, Paula introduced the Biopoem assignment:

One of the first assignments I did with my students was a "Biopoem" assignment

in which students were asked to use information they have learned so far from the

play and write a Biopoem on a main character from *Macbeth.*

This was a routine description of the description of the Biopoem, with no further

exploration in the meaning unit of theoretical concepts and ideas associated with the

assignment. The assignment included creating an illustration. Paula noted, "I asked

students to provide an illustration that was so vivid that I could take one look at it, and

know exactly whom the poem was written about without even reading it." Here, Paula

described directions she gave to students to create a vivid illustration, but without

connecting the description to wider theoretical concepts.

Finally, Paula found that providing encouragement and guidance to students

helped them produce higher quality written texts that showed creativity. Over the span of

3 weeks, students produced a newspaper set in Scotland. Various elements of a traditional

newspaper were included such as articles about events in the play, editorials, political

cartoons, and advertisements. Paula noticed improved texts produced by students after

revision. She provided encouragement to students and was patient as they revised their

work. This is a valuable observation, but it is also unclear whether Paula connected her

observations to a specific theoretical concept or idea. It is possible that Paula may

understand that her emphasis on revision with encouragement took place in the ZPD

(Vygotsky 1978), in which she guided students to revise work that required a level of

skill that was just above what they could accomplish alone, but within the range of what

students could do with assistance. Smagorinsky (2008) emphasized instruction that takes

place in the ZPD. However, Paula did not discuss the concept of the ZPD, so there is insufficient discussion to say if she is expressing an understanding of the ZPD in this meaning unit.

Nonreflection: Misunderstanding of a concept or an idea. No meaning units in Paula's teacher-research essay were coded as nonreflection for lack of demonstrating understanding of a concept.

Understanding. A total of 24 (34.3%) of Paula's meaning units were coded as Level 2. In the following meaning unit, Paula demonstrated understanding of ways she could learn about the motivations of students by examining the products of their free-write assignments on the topic of what it means to be ambitious.

> The responses I got from this free-write assignment let me know things about these students that helped me understand them deeply as individuals, and as individual learners. An overwhelming amount of these students could not even define "ambition," at the beginning of my unit. By the end of my unit in April, however, I found that these same students were the ones who showed me phenomenal work that showed they understood the dark side of ambition that is so vividly illustrated in Macbeth.

Paula believed that studying the results of free writing could help her better understand the meaning making of students. She then took the reflective step of evaluating this belief based on the application of free-writing assignments in her classroom. She found that students who previously could not define the concept of ambition were able to express negative aspects of ambition by the end of the unit. She

understood that the directions she gave for drawing a vivid illustration of a character in *Macbeth* to accompany a written Biopoem provided motivation for a student who tended to previously be unmotivated.

> I noticed that upon saying that, one of my students who was always particularly unmotivated in the classroom, started scribbling on a sheet of paper immediately. This student was usually always asleep at this point during class, so I was thrilled to see him anxiously preparing for this assignment.

This meaning unit was coded as Level 2 because Paula demonstrated an understanding of the idea that the directions she gave for the Biopoem assignment could help a student become engaged in the assignment. Paula provided clear goals for the assignment. M. W. Smith and Wilhelm (2006), drawing on Csikszentmihalyi (1990), identified clarity of goals as an element of a flow experience. Studies related to flow experience demonstrated that "in flow, we always know what needs to be done. The musician knows what notes to play next, the rock climber knows the next moves to make" (Csikszentmihalyi, 1996, p. 111). However, Paula did not connect this understanding of the importance of clear goals to further application in the context of teaching.

Students drew pictures expressing their understanding of ways the harmful actions of Macbeth poisoned his mind. Paula recognized that students have different ways of learning. Some may have more skill in drawing a picture than in written expression. Paula described an artifact of student work as follows, with the description coded as nonreflective because at this point it is a routine description:

There is a quill that is writing on a skull all the names that Macbeth has killed or

arranged to have killed so far in the play. There are blood droplets all over the

skull, indicating the amount of bloodshed Macbeth has been responsible so far in

the play, and there are coffins with crosses on it and daggers, indicating

Macbeth's guilt over these murders.

Paula realized that the student demonstrated an understanding of thoughts that were

poisonous in Macbeth's mind. Paula described assessing this understanding through

student artwork in the following meaning unit:

While this student may struggle with writing and reading comprehension when it

comes to test taking, his artwork shows that he understands the main character's

inner thoughts and feelings, something that is sometimes hard to indicate on a

written test.

This meaning unit showed that Paula understood the ability of a student to

demonstrate knowledge in an alternative assessment. This same student, who Paula in the

teacher-research essay described as previously unmotivated in class, might not have

demonstrated such an understanding through a written test. Different students may enter

an English class with different strengths and different needs. The drawing provided Paula

with the opportunity to simply explore the student's understandings at the level of

whether the student knew certain facts about thoughts that may trouble Macbeth.

Reflection. One meaning unit in Paula's teacher-research essay demonstrated

reflection between pedagogical theory and experiences in the classroom. Through

reflection, after conducting classroom inquiry, Paula gained insight into ways she could

encourage students to produce high-quality texts and assess the texts. Paula reflected on her ability to help students succeed in creating high-quality texts by showing an interest in them as individual learners. She discussed a newspaper advertisement designed by a student. The student created an advertisement for a company that sells gravestones, because of the amount of death in the play. The company was named "Scorpion gravestones" because Macbeth bemoaned "Oh full of scorpions is my mind, dear wife!" (Act 3, Scene 2). Scorpions crawled through cracks in the gravestone, in line with the play's dark mood. Gravestones were on sale for a low price because of the amount of death in the play. Paula discovered she was able to learn about the interests and motivations of her students.

> Over the course of my unit on Macbeth, I found that even the most unmotivated of students could turn in "A" work. The key in making sure this happens, I have found, is finding out what motivates each student to succeed, letting them know you believe in them, and finding ways to accommodate each type of learner.

M. W. Smith and Wilhelm (2006) identified that a social contract to care exists between teachers and students. Dimensions of the contract to care include efforts to learn about the student as an individual, caring about the student as an individual, addressing the student's interests, helping the student learn and striving to ensure that the student does learn, and finally, showing passion about the subject and about teaching (M. W. Smith & Wilhelm, 2006, pp. 163–164). Finding out what motivates students to succeed is an aspect of learning about and addressing their interests. Paula explicitly identified the importance of caring about students as individuals and in showing belief in the abilities of

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students to succeed. Thus, Paula applied M. W. Smith and Wilhelm's contract to care in action in her student teaching. As she reflected about her efforts, she determined that students were able to produce high-quality texts deserving of a grade of "A."

Critical Reflection. No meaning units received a code of Level 4.

Conclusion

Two co-assessors were able to reach 100 percent agreement on the coding of the meaning units and 100 percent agreement on the depth of reflection exhibited in the teacher research essays. This study illustrated how the Kember et al. (2008) framework to analyze depth of reflection in student writing can be useful in an English-teacher-education program as a validated way to produce teacher work samples demonstrating the depth of reflection of teacher candidates. Further, this study illuminates ways in which eight teacher candidates demonstrated reflection in teacher-research essays after conducting classroom inquiry. One teacher research essay showed evidence of critical reflection. Tina expressed change in her fundamental assumptions related to the curriculum that was intended to foster the possibility for students to experience flow, as they also took on literary roles in the English classroom. Each of the remaining seven teacher-research essays in this study were coded as reflective. An English-education program would be able to use the results of this analysis of all eight teacher-research essays as evidence of a validated framework of reflection in the writing of teacher candidates. The study is limited to examining the depth of reflection in the teacher-research essays of teacher candidates. It is beyond the scope of the study to examine any aspect of teacher-candidate performance or aptitude that was not made visible in the teacher-research essays.

CHAPTER 5: CONCLUSION

This study provides support for the use of a four-category protocol that can guide a teacher-education program through an objective assessment of reflection that is in evidence in student writing. In doing so, the study addresses a lack of agreement about how to document reflective thinking (Kember, 2001; Sparks-Langer et al., 1990). This is the first published study in the field of English education that uses the Kember et al. (2008) four-category protocol to analyze depth of reflection in teacher-candidate writing. This study demonstrates ways that the Kember et al. protocol can enable a teacher-education program to document written evidence of reflection. Further, this study describes the depth of reflection of teacher candidates as they address strengths and deficiencies they identify in their own instruction; an area of growing emphasis in a field that is in need of further research. The Kember et al. can provide guidance in the assessment of reflection of writing produced by teacher candidates during coursework in a secondary English program.

Implications for Research and Theory

This study illuminated the reflective thinking that was in evidence in written products of teacher candidates in an English-teacher-education program. Rodgers (2002) warned that when reflection loses "its ability to be seen" because of lack of clarity in the definition and assessment of reflection, it will "lose its value" (p. 842). This study clarifies ways a teacher program can define and assess reflection to objectively document reflection in the written work of teacher candidates. This study demonstrated that the Kember et al. (2008) framework to analyze depth of reflection can enable the assessment

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of reflection in essays produced during coursework in secondary English education by teacher candidates, following the conduct of classroom inquiry. Each of the eight teacher candidates demonstrated at least Level 3, reflection, and one candidate demonstrated critical reflection. These ratings were tested by a coassessor who is familiar with the protocol and 100% agreement was reached. This is the first published study in the field of English education related to the use of the Kember et al. four-category framework by a teacher-education program to analyze depth of reflection in teacher-candidate writing. Reflection remains a poorly defined term in the research literature, given the variety of ways reflection is understood. This study contributes to an understanding of reflection as described by Kember (2001; Kember et al., 2008). Furthermore, limited research relates to the use of the Kember et al. (2008) protocol to determine depth of reflection in student writing at the undergraduate level. This study adds to the research literature on the use of the protocol.

Implications for the Assessment of Reflection

The four categories of the protocol used in this study provide guidance to assess the depth of reflection in student written work such as a teacher-research essay. Other forms of written work can also be assessed including reflective journal entries. The Kember et al. (2008) protocol allows teacher educators to assess the level of reflection demonstrated in writing by students through a protocol that has been reliably tested, rather than stating subjectively that students showed reflectiveness in their writing. Assessment using the protocol is at the whole-paper level, rated according to the highest level of reflection demonstrated.

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A limitation of this protocol is that assessors should be familiar with the theoretical basis for the description of the four categories of the Kember et al. (2008) protocol to use the categories as guidance in determining depth of reflection demonstrated in student written work. Not only is familiarity with the theoretical basis for the description of the categories of the protocol important, but bias needs to also be considered. This protocol is based on a pragmatic and constructivist approach to identifying critical reflection, which differs from the way that assessors who adhere to critical theory would identify critical reflection. An assessor who prefers to identify critical reflection based on an indication of increased awareness of equity issues and social justice issues may come to different conclusions than an assessor who prefers to view critical reflection based on an indication of a fundamental change in philosophical understanding of an idea or concept. It is advisable for at least two people to co-assess the written work of students in order to address possible validity issues.

An additional limitation that appears evident from this study is that assessors should also be familiar with the disciplinary material about which students are writing, because the way an assessor assigns a code to a meaning unit can be influenced by familiarity with the subject matter. An assessor who is not familiar with subject matter is more likely to potentially misinterpret ideas expressed in the written work of students. Finally, the protocol is useful as a guide for identifying depth of reflection in written work. It should not be used as a basis to assess the motivations for the observed themes that may emerge in the analysis. Likewise, the protocol should not be used to predict future performance of students.

Recommendations for the Use of the Protocol

I recommend using the Kember et al. (2008) four-category protocol as a validated tool to analyze and document depth of reflection in written products. In addition, the protocol can be used as an assessment tool to help a teacher educator provide feedback to a candidate about development of reflective thinking that is demonstrated in the candidate's written work. Candidates can learn to understand and control their reflective thinking with guidance from a teacher educator, aided by this protocol. The Kember et al. protocol can help a teacher educator shed light on reflective thinking of candidates. Data that are derived from the assessment of reflection in written products of candidates can help a teacher educator and a teacher-education program make more informed decisions about ways to improve instruction to foster candidates who will become reflective teachers. The protocol can be useful as part of a goal of a teacher-education program to facilitate reflective thinking and reflective teaching among candidates. This goal can be used in conjunction with the wider goal of helping teacher candidates make connections between theory and practice (Clarke & Peterson, 1986) to develop the ability to make instructional decisions based on an in-depth understanding of students, as well as of subject matter (Cochran-Smith & Lytle, 2009).

Kember et al. (2008) described the possibility of translating the depth of reflection demonstrated into letter grades, providing the example of a rubric in which written work demonstrating critical reflection is assigned an A, reflective writing receives a B, writing that shows understanding is graded a C, and writing that is nonreflective is given a D. If this basis for grading were used with the eight teacher candidates in the present study,

only one teacher-research essay would receive an A and the others would receive grades of B. (The analysis of reflective thinking in this study did not impact the grades of the teacher candidates in a course.) The teacher-research essay that demonstrated critical reflection is not necessarily the highest quality essay when other criteria are also considered, such as the use of evidence to support claims, or the depth of analysis of student artifacts. Because the protocol is limited to providing guidance on depth of reflection demonstrated on a whole-paper level, I recommend caution in using it as a criterion-based assessment for which letter grades are assigned. This protocol is appropriate for use as a guide in documenting reflection for purposes such as meeting accreditation requirements and engaging in research. This study also points to the appropriateness of using the protocol in conjunction with other criteria based on the discipline and content of a course.

I share Boud's (1999) concern that reflection could be hindered rather than facilitated when a student's grade in a course is impacted by an assessment of reflection. For example, if candidates know that to earn an A on a teacher-research essay they need to demonstrate a fundamental change in outlook on an idea or a concept, it is likely that the candidate will indeed strive to show such a change even though Kember (2001) noted that this level of reflection can take an extended amount of time to develop and may not be likely to occur in the limited amount of time available in a single course or field placement. If candidates were to try to discuss a critical reflection in an essay that may not have actually occurred for the purpose of striving to make an A on written work, I am concerned that the action may hinder the reflection process. Caution should be taken to

avoid turning expressions of reflection and critical reflection in written work into actions that are grounded in routine, prescribed action to fulfill criteria for grades (Boud & Walker, 1998) rather than expressions that are driven by the attitudes of open-mindedness, wholeheartedness, responsibility (Dewey, 1933/1986a), and directness (Dewey, 1916/1980).

Recommendations to Encourage Reflection in a Teacher-Education Program

This section provides general observations about ways a teacher-education program might encourage reflection among teacher candidates, while using the approach to reflection and pedagogy described in this study. Keeping in mind the contextual need for teacher-education programs to define what is meant by reflection and to document evidence of reflection, it is hoped that a program may find this discussion useful.

Despite the difficulties that may be faced by a teacher-education program committing to systematically preparing candidates to be reflective practitioners, I do propose that it is an effort worth taking. It is challenging to systematically guide candidates toward higher levels of reflective thinking, to adopt reflective thinking as habits, and to become reflective teachers who continually improve their practice through systematic inquiry. The many ways reflection is defined, operationalized, and documented results in a situation in which the very term loses its meaning at the same time that documentation of reflective thinking is strongly encouraged for accreditation purposes. Although a joint definition of reflection might be a challenge for faculty, a potentially more difficult path that University of Connecticut (Norlander-Case et al., 1999) pursued was the establishment of a common-core curriculum. Course scheduling

issues might also become contentious if a teacher-education program that currently does not have modules to promote reflective teaching were to incorporate new courses related to topics such as teacher-research methods, philosophy of education, and a seminar tied to field experiences.

My recommendations that follow are consistent with a stance that the facilitation of reflective thinking among teacher candidates should be part of the core aims of a teacher-education program (Lyons, 2010; Norlander-Case et al., 1999). Steps that can be taken in a teacher-education program to promote reflective thinking and reflective teaching by candidates include the following:

☐ Establishing a supportive environment for reflective thinking and for inquiry;

☐ Guiding candidates to learn about the role of reflection in teaching;

☐ Guiding candidates through the conduct of systematic reflection and inquiry;

☐ Guiding candidates toward becoming "present" (Rodgers, 2010) to students;

☐ Encouraging the development of attitudes involved in the conduct of reflection and inquiry.

Candidates can be welcomed into a community of practice (Lave & Wenger, 1991) of reflective teachers. Teacher educators can share with candidates a common determination for meeting the challenges of using reflection and inquiry to continually evolve as professionals. These challenges include helping candidates learn practices that are valued ways of participating in this community of practice of reflective teachers. Teacher educators who establish a supportive environment for reflection would then do so by guiding candidates toward increasing expertise and independence, as they use

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inquiry and reflection to inform educational choices. Candidates should be guided toward

taking control and responsibility for their own learning (Schön, 1991) as they strive

toward increased responsibility as teachers. Guidance toward reflective teaching can be

enhanced with the introduction of literature related to reflective teaching (McCann,

Johannessen, Kahn, Smagorinsky, & Smith, 2005; Zeichner & Liston, 2014) and methods

of conducting teacher research (G. L. Anderson et al., 2007; Chiseri-Strater & Sunstein,

2006; Falk & Blumenreich, 2005; Goswami, Lewis, Rutherford, & Waff, 2009; Hopkins,

2008; Hubbard & Power, 2003). Classroom inquiry conducted by candidates should

involve dialogue with peers, university supervisors, cooperating teachers, and teacher

educators. To the greatest extent possible, I recommend a teacher-education program

strive to build a learning community (Schwab, 1976) whose members would include the

candidates, teacher educators, and in-service teachers, with dialogue that involves

candidates in seeking new educational ideas and the improvement of teaching practices

(Swales, 1990).

A teacher educator who guides candidates through the process of reflection

should bear in mind the difficulties of negotiating theory learned at a university and

practices in the classroom setting during field experiences. Candidates need to feel safe in

a supportive environment to take risks to be open to new ideas and new concepts.

Teacher-education programs should strive to help candidates be willing to rethink their

fundamental ideas as new evidence arises based on reflection and inquiry. This rethinking

can be a challenge because the experience of doubt can lead a person to feel unsettled

(Dewey, 1933/1986a). This feeling can be exacerbated if the candidate may interact in

field experiences in a school setting in which cooperating teachers may not support the practices taught at the university (Putnam & Borko, 2000). Additionally, resistance to reflective thinking and reflective teaching may come from some candidates who are accustomed to didactic approaches to teaching and learning in which the teacher supplies answers that are either right or wrong to students who passively receive information rather than actively construct their own meaning (M. W. L. Wong, Kember, Wong, & Loke, 2001). By contrast, a candidate who embraces reflective thinking will view the doubt raised by a problematic situation as an opportunity to construct new understandings of beliefs and practices through inquiry (Dewey, 1933/1986a).

Promotion of presence (Rodgers, 2010; Rodgers & Raider-Roth, 2006) by teacher candidates would be a way to encourage reflection-in-action (Schön, 1983) while also considering the affective and academic needs of students. The concept of presence emphasizes reflectiveness and inquiry as well as compassion in responses during the context of teaching. The candidate who develops presence would be alert to the needs of students and also have a heightened sense of self-awareness. A teacher educator wishing to encourage presence among candidates should model presence for candidates. Dialogue that is open to an exchange of ideas on the basis of mutual respect is an important aspect of presence. A useful description of the approach to dialogue demonstrated by a teacher with presence is provided by Noddings (2013) during a discussion of instruction that is morally responsible and based on care:

> If either partner shows signs of discomfort, the other will digress to provide
>
> reassurance, have a good laugh, or reminisce. Short pauses also offer an

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opportunity for self-reflection. A teacher may suspect she is going too fast or too deep for her student, or she may realize that the language she uses is not helpful to this student (p. 120).

In order to foster the development of reflective thinking as a habit, candidates should be encouraged to be open to new ideas and understandings based on an examination of evidence, wholeheartedly committed to the pursuit of inquiry, and responsibly committed to a careful consideration of the consequences of possible actions (Dewey, 1933/1986a). Reflective morality, described by Dewey and Tufts (1932/2008), stressed the importance of inquiring into the social conditions that have an impact on curriculum and on a student's educational opportunities. I recommend that a teacher-education program that fosters reflective thinking among candidates encourage the candidates to pay close attention to social conditions and to the way their actions can impact the larger society. A candidate who adopts an attitude of reflective morality will seek to help children gain the knowledge and skills that will enable them to reach their fullest capability of contributing to an ever-evolving democratic society. Further, candidates would develop an attitude that Dewey (1916/1980) called directness, or faith that inquiry and reflective thinking are worth pursuing on the basis of the contributions that can be made to the wider society.

Future Research

Further research into the use of the Kember et al. (2008) four-category protocol by teacher-education programs to assess and document reflective thinking is warranted. It would be useful to repeat this study in other English-education programs, and in other

content areas. There are ways this research related to the use of the Kember et al. four-category protocol in a teacher-education program could be expanded. Future research could compare and contrast depth of reflection demonstrated by teacher candidates in two different types of writings (e.g., Harland & Wondra, 2011). Future research into the use of the Kember et al. four-category protocol could also include interviews with teacher candidates to determine factors that help or hinder them as they strive to demonstrate reflection in their written work and in their performance as future educators (e.g., Roux et al., 2012).
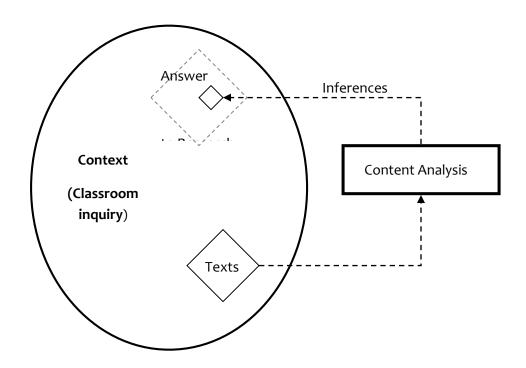
Reflection is an ill-defined term in the research literature. The lack of clarity related to ways of defining, operationalizing, and documenting reflection calls for further research. There is a need to apply diverse modes of inquiry that shed light on the reflective thinking of teacher candidates in various ways. Drawing on Boud and Falchikov (2007), other areas in need of investigation include the meaning-making of candidates during the process of reflective thinking, ways that programs can explicitly help candidates understand the connection between reflection and learning, and ways that candidates can foster reflective thinking among students they will teach during field experiences. There is a need for a variety of studies related to the guidance of reflective thinking, engagement in reflective thinking, and the documentation of reflective thinking from a wide array of perspectives.

<div align="center">**Conclusion**</div>

This study examined the use of a validated protocol that can provide guidance toward the documentation of teacher candidates' reflective thinking. As shown in this

study, the Kember et al. (2008) protocol can provide guidance to document reflection. Teacher-education programs are accountable for demonstrating that teacher candidates examine reasons for the progress made by students or lack of progress. Teacher candidates in this study engaged in reflective thinking, and the Kember et al. framework provided guidance, illuminating ways teacher candidates considered their beliefs or knowledge in the light of evidence. Currently there is no widely accepted protocol in place to determine levels of reflective thinking demonstrated by teacher candidates. This is a problem in need of further attention, given that teacher-education programs tend to state that a key goal of the program includes encouraging teachers to be reflective practitioners. Leading accreditation agencies including CAEP encourage teacher-education programs to foster reflective thinking. When the aim of a teacher-education program includes developing teachers who will be reflective practitioners, it would help programs to use a validated protocol to assess depth of reflection in student writing to monitor and report progress toward that goal.

APPENDIX A: SYMBOLIC REPRESENTATION OF CONTENT ANALYSIS IN THE

STUDY

Adapted from *Content Analysis: An Introduction to its Methodology,* by K. Krippendorff,

2004, Thousand Oaks, CA: Sage, p. 82. Used with permission.

APPENDIX B: EVALUATION RUBRIC FOR THE TEACHER RESEARCH ESSAY

Evaluation Standards

____   Created a Provocative Introduction with Thesis That Clearly Stated Your Overall

Impression of the Effectiveness of Your First Integrated Language Arts Unit in Terms of

Helping Students Meet Stated Unit Objectives and SC English Course Standards and in

Terms of Helping Students Enter a State of Flow (20 points)

____   Developed Thoughtful Analyses of Embedded & Representative Student Artifacts

That Supported Your Thesis and Provided Evidence That

NCTE CAEP Standard 3.7.1 and 3.7.2 were Met—see below (30 points)

_____ Analysis of First or First Set of Student Artifacts (10 points)

_____ Analysis of Second or Second Set of Student Artifacts (10 points)

_____ Analysis of Third or Third Set of Student Artifacts (10 points)

_____   Analysis of Additional Artifacts

_____ Chose Meaningful, Representative Artifacts (10 Points)

____   Reflected On Needed Changes within Unit Rationale, Design and/or Assessments

and/or Insights About What Contributes to Effective Integrated English Language Arts

Units (20 points)

____   Developed a Summative Conclusion (10 points)

_____ Employed Edited American English (5 points)

_____ Included Copy of Scoring Guide to Electronic Version and Hard Copy of Essay; Submitted Essay on Time as Final Polished Document and as Statement of Your Professional Growth and Development; Submitted Hard Copy and Electronic Version on Student Teaching CD (5 points)

_____ Final Grade—100 Points Total (91–100 = A)

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