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In light of the continual problem of attrition in the field of special education and the need for well-prepared new special education teachers, the purpose of this study was to examine how dialogic reflective electronic journaling (e-journaling) between this researcher and undergraduate preservice teachers involved in a special education fieldbased experience in the schools addressed their critical reflection in classroom decisionmaking as well as their transformative learning the Fall semester of their senior year prior to student teaching in the Spring. Performance feedback was given by this researcher as part of the teacher preparation supports already in place for the field-based experience. Specifically, this study explored the preservice teachers' ability to cope with a classroom disorienting dilemma from a reflective perspective within their special education fieldbased placement, possibly experiencing positive personal transformation as teachers in the process. This study was underpinned by the theoretical framework of transformative learning theory. The qualitative methodology for this study was participatory action research (PAR), a type of action (change) research whereby researchers participate in a study alongside other study participants. In terms of data collection, study data were triangulated through three data sources: initial interviews, e-journaling documentation, and a final researcher-developed questionnaire. Study findings revealed that dialogic reflective e-journaling enhanced the reflective skills of the study participants when faced with classroom disorienting dilemmas and resulted in perspective changes that instigated a positive personal transformation as teachers in the process.

# DIALOGIC REFLECTIVE E-JOURNALING AND TRANSFORMATIVE LEARNING OF SPECIAL EDUCATION PRESERVICE TEACHERS

by

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Approved by

Dr. Stephanie Kurtts

Committee Chair



# **DEDICATION**

This dissertation is dedicated to my dear husband, R. Lee Carter, who earned his own Ph.D. back in 1994. Thank you, Lee, for not only your financial support as I worked full-time on my doctoral study and dissertation but also for your wise counsel concerning the doctoral journey. I've appreciated your love, guidance, and steadfast encouragement so much these past years!

# APPROVAL PAGE

This dissertation, written by Pamela Weatherly Carter, has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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#### **CHAPTER I**

#### INTRODUCTION

#### **Statement of the Problem**

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition from the field in terms of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). Nationally, there has been a shortage of special education teachers since the 1970s (Sultana, 2002). Boe (2006) studied long-term trends in the national demand, supply, and shortage of special education teachers and concluded that this shortage has been an intractable problem for decades, requiring resolute effort and substantial resources to reverse. Indeed, special education teacher shortages have reached high levels nationally, affecting all regions of the United States (Thornton, Peltier, & Medina, 2007). Zhang, Wang, Losinski, and Katsiyannis (2014) recounted the following: (a) a 2010 report by the American Association for Employment in Education (AAEE) indicated "considerable" or "some" shortage in all types of special education categories in the decade from 2000 to 2010 and (b) a 2009 report by the Bureau of Labor Statistics, U.S. Department of Labor specified that the demand for special educators is expected to increase by 17% by 2018, constituting a rate greater than what is predicted for all other occupations. According to Boe et al. (2013), attracting and retaining special

educators continues to be a challenge although employment trends have fluctuated in recent years.

The chronic special education teacher shortage cannot be successfully addressed until the surge of teacher attrition in the field is curtailed (McLeskey, Tyler, & Flippin, 2004). Fish and Stephen (2010) reported that the Center on Personnel Studies in Special Education (COPSSE) concluded that "nationally, the annual attrition rate of special educators is estimated at 13.5%, resulting in an annual loss of approximately 22,000 special educators" (p. 400). According to Boe, Cook, and Sutherland (2008), roughly 36.7% of special educators leave to escape teaching altogether, 7.75% leave for professional development, 31/8% leave for personal reasons, 16.5% retire, and 10% transfer to another teaching field.

Problematic work factors such as limited access to necessary material, case management difficulties due to high caseloads, paperwork that interferes with teaching, not feeling included in the school, and having principals who do not understand what they do contribute to the level of attrition of special education teachers (Billingsley, Carlson, & Klein, 2004) as does teacher burnout (Lee, Patterson, & Vega, 2011).

McLeskey et al. (2004) concurred that teaching conditions in special education are a major factor contributing to the teacher shortage. Vannest and Hagan-Burke (2010) found that after factoring out other job responsibilities, special education teachers spend less than half their day teaching. Youngs, Jones, and Low (2011) pointed out that in addition to common classroom challenges such as the acquirement of curricular knowledge, planning and providing instruction, motivating students and managing their behavior, and

attending to non-instructional responsibilities, beginning special education teachers have "additional obligations that differ either in degree or kind from those of their counterparts in general education" (p. 1506). These additional obligations include modification of curriculum for students with special needs, the development of Individualized Education Plans (IEPs), the employment of assistive technology to aid student learning, and careful adherence to federal special education laws and mandates.

In addition to continual problematic work factors such as the special education teacher workload, Rock et al. (2016) asserted that current challenges also include two other factors: (a) special education teacher role ambiguity and (b) special education teacher evaluation. According to McCall, McHatton, and Shealey (2014), the challenge of special education teacher role ambiguity manifests in special education teachers finding themselves teaching in a variety of settings (self-contained classrooms or schools, resource rooms, or inclusive general education classrooms) and serving in a variety of roles (working as a co-teacher, team teaching, functioning as a support facilitator, or being an interventionist). Additionally, special education teachers find themselves teaching students with a variety of disabilities and special needs. In terms of the challenge of special education teacher evaluation, current special education teacher evaluations often include a critique of student outcomes, resulting in teachers feeling pressured to raise student test scores although they serve students with special needs whose educational performance may be influenced by adverse socioeconomic factors (Rock et al., 2016).

According to Brownell, Hirsch, and Seo (2004), the lack of extensive, well-designed induction programs (supportive orientation programs for beginning teachers during the transition into their first teaching jobs) is an additional contributing factor to the level of attrition of special education teachers. Mentoring (personal guidance provided to beginning teachers by seasoned veteran teachers) is one aspect of an induction program that could particularly make a critical difference in the retention of new teachers (Darling-Hammond, 2003; Smith & Ingersoll, 2004). Youngs et al. (2011) reported research that indicates that support from mentors is associated with increased commitment and retention among beginning special education teachers.

Leko and Smith (2010) attested that both beginning and experienced special educators are leaving the field. District and school administrators are faced with the formidable task of filling positions vacated by these special educators (Leko & Smith, 2010). According to Smith and Ingersoll (2004), newly hired special educators are 2.5 times more likely to leave their teaching positions than other beginning teachers. This attrition of beginning special education teachers is particularly alarming. Educational productivity is reduced as beginning teachers who leave the profession never have the opportunity to grow in teacher effectiveness through years of experience (Darling-Hammond, 2003).

Billingsley and McLeskey (2004) asserted that "the shortage of fully certified special education teachers, which has been described as severe, chronic, and pervasive, threatens the quality of educational services that students with disabilities receive" (p. 2). This "revolving door" of changing teachers shortchanges students and impacts their

educational outcomes, resulting in (a) significant instability in the special education profession that makes it difficult to reduce the research-to-practice gap and develop evidence-based special education programs in the schools and (b) interference with established collaborative and co-teaching relationships and the sustainability of inclusive school reform (McLeskey & Billingsley, 2008). Fully certified special education teachers are often replaced with teachers who are less than fully qualified; these replacement teachers then often leave their positions as well before becoming fully certified, resulting in students with special needs receiving possibly years of low quality instruction, thus reducing their learning potential (Connelly & Graham, 2009).

Zhang et al. (2014) noted that according to a 2011 report by the U.S. Department of Education, Office of Postsecondary Education, 44 states reported teacher shortages in the area of special education in 2011-2012, particularly in low-income districts. Using a national sample of early career special education teachers, Fall and Billingsley (2011) discovered that those working in high poverty districts had less desirable work conditions, higher caseloads, and increased diversity than their counterparts in more affluent districts. According to Guarino, Santibañez, and Daley (2006), challenging work conditions in high poverty districts compromise teacher satisfaction, leading not only to turnover and workplace instability but also to negative educational outcomes for students.

#### **Purpose of the Study**

In light of the continual problem of attrition in the field of special education and the need for well-prepared new special education teachers (Boe et al., 2013), the purpose of this study was to examine how dialogic reflective electronic journaling (e-journaling)

between this researcher and undergraduate preservice teachers involved in a special education field-based experience in the schools addressed their critical reflection in classroom decision-making as well as their transformative learning the Fall semester of their senior year prior to student teaching in the Spring. Performance feedback was given by this researcher (a doctoral student with special education teaching experience). This dialogic reflective e-journaling was part of the teacher preparation supports already in place for the field-based experience; that is, cooperating teacher support, university supervisor support, and group seminar support led by a university professor.

The dialogic aspect of the e-journaling constituted the support derived from it.

"Dialogic" refers to a form of a dialogue hence "dialogic reflective journaling" in this case denoted written discourse between preservice teachers who shared reflectively about their classroom experiences and this researcher who read their journal entries and provided supportive performance feedback (Hughes, Kooy, & Kanevsky, 1997; King & LaRocco, 2006).

Specifically, this study explored the use of dialogic reflective e-journaling in addressing the preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based experience, possibly experiencing positive personal transformation as teachers in the process. According to Mezirow (1978b, 1991, 1995), a disorienting dilemma is a predicament that may instigate an eventual positive transformation within an individual. Maintaining a reflective perspective enables a teacher to deal consciously and effectively with inevitable classroom dilemmas (Larrivee, 2008b). Valli (1997) asserted that this

skill must be acquired at the preservice teacher level as it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience.

# **Research Questions**

The four research questions that guided this study were as follows:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

# Significance of the Study

Wilkins, Shin, and Ainsworth (2009) reported research that indicated that preservice teachers enrolled in initial teacher preparation programs need performance feedback; that is, systematic and objective feedback about such teachers' performance enables them to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom. Reflective teacher education (the preparation of teachers to be reflective practitioners) can be very helpful to preservice teachers in this regard (Broyles,

Epler, & Waknine, 2011; Larrivee, 2008b; Valli, 1997). Larrivee (2008b) asserted that importantly, reflective teachers are able to deal consciously and effectively with the inevitable dilemmas and tradeoffs involved in everyday decisions that affect the lives of students. Valli (1997) agreed with the contention of Schon (1983, 1987) that teachers who are reflective practitioners learn from and reconstruct experience through reflection, asserting that such teachers are more likely to seek out solutions rather than simply give up when faced with difficult classroom dilemmas or situations. She cautioned, however, that it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience; rather, reflective teacher education must begin at the preservice teacher level. Indeed, as of 2002, the National Council for the Accreditation of Teacher Education (NCATE) began promoting reflective practice as an essential component of teacher education programs in terms of teacher quality (Ostorga, 2006). Broyles et al. (2011) further maintained that reflective teaching incorporated not only the cognition involved in teaching but also metacognitive processes as well. They emphasized that teacher preparation programs should encourage preservice teachers to critically reflect in a metacognitive way, enhancing their teaching by generating and testing hypotheses related to individual teaching experiences.

There is a strong research base for the implementation of reflective teacher education. Valli and Rennert-Ariev (2000) reviewed nine national reform reports that targeted teacher education and found, among other factors, ardent consensus for reflection and inquiry in teacher education programs. Brownell, Ross, Colon, and McCallum (2005) compared critical features of effective general education teacher

programs with special education teacher programs. Both programs included reflection as a vital element to address with preservice interns and student teachers. Middleton, Abrams, and Scaman (2011) acknowledged that past research suggests that teachers who engage in reflective practice are better able to recognize the complexity of teaching, use judgements to choose appropriate strategies for teaching and learning in their specific contexts, and experience improved self-confidence. Results of their own case studies on reflective teacher education with two preservice interns yielded, however, the implication that preservice teachers benefit from guidance and mentoring as to the continued value of reflective practices in their future work as teachers in the field.

The intention of this study was to explore the use of dialogic reflective ejournaling in addressing undergraduate special education preservice teachers' ability to
cope with a classroom disorienting dilemma or other situation from a reflective
perspective within their special education field-based experience in the schools.

Hostetler, Macintyre Latta, and Sarroub (2007) asserted that learning to teach from a
reflective perspective is important to teachers as "no matter how much a teacher plans,
she or he is likely to encounter the unexpected" (p. 237). Within this study, reflective
teacher education was implemented via dialogic reflective e-journaling between this
researcher (a doctoral student with several years of special education teaching
experience) and undergraduate preservice teachers during a special education field-based
experience in the schools Fall semester of their senior year prior to student teaching in the
Spring. E-journaling is a component of e-mentoring that is known to foster a positive
mentor relationship for students (Crippen & Brooks, 2000). Students quickly learn to

appreciate the more immediate feedback to journal entries that is possible via e-mail (Banker, 2004) as the process of what can be thought of as a dialogue journal is repeated in a back-and-forth interchange of ideas (Hubbs & Brand, 2005). This iterative e-mailing can then be easily tracked and preserved over e-mail (Applebaum, 2014).

#### **Theoretical Framework**

This study was underpinned by the theoretical framework of transformative learning theory, a theory of adult learning advanced by Mezirow (1978b, 1991, 1995). This theory is based upon the concept of meaning perspective, a crucial developmental task of maturity whereby on becomes critically aware of one's own perspectives. Perspectives are changed as needed, resulting in positive perspective transformation. Mezirow (1991) revised his original ten phases of perspective transformation by adding in a new step, that of altering present relationships and forging new relationships. Perspective transformation begins with a disorienting dilemma and moves toward the building of competence and self-confidence. Mezirow (1995) emphasized the importance of critical reflection in his transformative learning theory by delineating three types of reflection: (a) content reflection (thinking back to what was done), (b) process reflection (considering the actions and factors involved), and (c) premise reflection (seeing the larger view of what is operating within one's own value system). This reflection delineation may be useful for teachers when a classroom disorienting dilemma is encountered, yielding transformational learning in the process.

# Methodology

Qualitative research is a process in which descriptive analysis is used to reason from the specific situation to a general conclusion (Wiersma & Jurs, 2009). Creswell (2013) described eight common characteristics of qualitative research: (a) natural setting (data is collected at the site where study participants experience the issue or problem under study), (b) researcher as key instrument (qualitative researchers collect data through examining documents, observing behavior, interviewing study participants, or using self-developed questionnaires- instruments developed by other researchers are not usually relied upon), (c) multiple methods (qualitative researchers typically gather multiple forms of data rather than having a single data source and then organize the data into categories and themes that cut across all data sources), (d) complex reasoning through inductive and deductive logic (qualitative researchers use an inductive process to build categories from the "bottom up" by organizing the data inductively while also using deductive thinking to build themes that are constantly being checked against the data), (e) participant meanings (qualitative researchers focus on learning the meaning that the study participants hold about the issue or problem), (f) emergent design (the initial plan for research as researchers begin to collect data), (g) reflexivity (qualitative researchers "position themselves" in the study; that is, they convey their background, explaining how this informs their interpretation of the study and noting what they have to gain from the study), and (h) holistic account (qualitative researchers report multiple perspectives, identifying the many factors involved in a situation, and generally sketch the larger picture that emerges without being bound by tight cause-and-effect relationships among

factors; rather, the complex interactions of factors are identified). As the present study met all eight parameters of qualitative research as delineated by Creswell, qualitative methodology was used.

The particular qualitative methodology for this study was participatory action research (PAR). According to McIntyre (2003), "PAR is a useful approach for linking theory and practice, teaching and learning, and reflection and action in a teacher preparation program" (p. 28). It is a type of action research; that is, it is "change research" that involves a nonlinear, recursive, and cyclical process designed to achieve tangible change in a specific situation, context, or work setting in order to improve teaching and learning by inquiring about problems and taking action to solve them (Bruce & Pine, 2010). In action research, important events that indicate need for change consideration are termed "critical incidents" (Langerock, 2000).

Researchers and practitioners work together in participatory forms of research such as PAR (Draper et al., 2011). According to McIntyre (2008), participatory action research (PAR) constitutes a unique social relationship between the researchers and practitioners as the researchers participate in the study with the practitioners, making everyone a study participant with a valued voice and an equal stake in the PAR project or study. Reason (1993) asserted that all such participants are actually co-researchers. McIntyre further emphasized that participatory action research embodies a dialectical process of investigation that results in "aha" moments due to self-scrutiny as well as collective scrutiny.

As this study constituted participatory action research, this researcher participated in the study alongside the practitioners via e-journaling with them from a dialogic standpoint, addressing their ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective. The practitioners were four undergraduate preservice teachers enrolled at a southeastern public university in the United States who participated in a special education field-based experience in the schools Fall semester of their senior year prior to student teaching in the Spring.

Within this study, triangulation (use of a variety of methods to collect data) was done as this reduced the risk of chance associations or biases due to the use of a one specific method (Maxwell, 2013). Data were triangulated through initial interviews, ejournaling documentation, and a final researcher-developed questionnaire. The initial interview questions were designed to ascertain the preservice teachers' perceptions of their own strengths and weaknesses and level of teacher self-efficacy as well as their present level of familiarity with the components of teacher reflection and transformative learning as they began their third field-based experience in the schools the Fall semester prior to student teaching in the Spring. The preservice teachers were required to e-journal with this researcher once a week (they were placed in the schools for a day and a half each week), reflecting upon a classroom disorienting dilemma or other situation they encountered within their special education field-based experience. If no disorienting dilemma occurred during the week, they were asked to e-journal about something that went particularly well, noting why the experience was positive. There was no set limit as to the number of e-journaling exchanges within each single weekly contact with this

researcher. Finally, at the end of the study (which was the week before the university Thanksgiving break), the preservice teachers anonymously completed a researcher-developed questionnaire consisting of open-ended questions that addressed the impact of dialogic reflective e-journaling upon them in terms of challenges and/or benefits, the influence of critical reflection upon their classroom decision-making, and their possible positive personal transformation as teachers in the process.

According to Stake (1995), data analysis is "a matter of giving meaning to first impressions as well as to final compilations" (p. 71). Meaning of collected data for this study (yielding answered research questions) was derived via a categorizing data analysis strategy (Maxwell, 2013). The particular categorizing strategy was content analysis, a subjective interpretation of the content of text data and subsequent identification of themes (Hsieh & Shannon, 2005).

In terms of this study, validity was addressed in two ways. First, triangulation (use of a variety of methods to collect data) through three data sources (initial individual interviews, documentation of dialogic reflective e-journaling done between this researcher and study participants, and a final researcher-developed questionnaire) was employed since this reduced the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013). Second, respondent validation was done via member checks by soliciting feedback on researcher conclusions from study participants (C. M. Roberts, 2010). Data analysis reliability (Wiersma & Jurs, 2009) was addressed in terms of this study through the use of a second reader for interrater reliability. This reader

was a special educator trained in research techniques who is currently working in a different school district from the one used for the study participants' field placements.

#### Limitations

There were several limitations to this qualitative study. First, the selective sample of undergraduate preservice teachers placed in a special education field-based experience was small and thus not generalizable to other preservice teachers during their internship placement prior to student teaching. Second, a risk of bias (Creswell, 2013) existed as this researcher (a) served as a participant in this participatory action research study, (b) has extensive experience as a special education teacher, and (c) has been a special education university supervisor of other preservice teachers at the same university as the preservice teachers in the study sample (Creswell, 2013). Third, regarding interviews, there was risk of influence by this researcher in terms of reactivity; that is impact on the study or participants (Maxwell, 2013). For example, would this researcher refrain from asking leading questions? Finally, further research is needed to move from supposition to certainty in terms of whether the additional support of dialogic reflective e-journaling will positively influence the preservice teachers' level of success and retention in their upcoming student teaching experience as well as their level of success and retention in the challenging field of special education as future special education teachers.

# **Definitions of Key Terms**

For the purpose of this study, the following definitions of key terms were used.

Categorizing strategies in terms of qualitative data analysis: strategies that organize, describe, or theorize categories of data independently of context (Maxwell, 2013).

Content analysis: a categorizing strategy for the subjective interpretation of the content of text data through coding and subsequent identification of themes (Hsieh & Shannon, 2005).

Dialogic reflective e-journaling: e-journaling that focuses upon a reflective dialogue via written discourse between one individual and another (Hughes et al., 1997); King & LaRocco, 2006).

Disorienting dilemma: a predicament that may instigate an eventual positive transformation within an individual (Mezirow, 1978b, 1991, 1995).

*E-journaling*: systematic electronic journaling that is a component of e-mentoring known for fostering a positive mentor relationship between preservice teachers and university supervisors during field experiences (Crippen & Brooks, 2000).

*E-mentoring*: the use of computer-mediated communications such as discussion boards, chat rooms, web conferencing, or e-journaling to support preservice or inservice teachers (Smith & Israel, 2010).

Interactive data collection: involves the researcher interacting with study participants (Wiersma & Jurs, 2009).

*Internal reliability*: the extent that data collection, analysis, and interpretations are consistent given the same conditions (Wiersman & Jurs, 2009).

Noninteractive data collection: collection is done without researcher contact with study participants (Wiersma & Jurs, 2009).

Participatory action research (PAR): a type of action (change) research whereby researchers participate in the study alongside other study participants (Draper et al., 2011; McIntyre, 2003).

Performance feedback: systematic and objective feedback about a teacher's performance in order to enable him/her to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom (Wilkins et al., 2009).

Reflective teacher education: the preparation of teachers to become reflective practitioners in the classroom (Valli, 1997).

Reflective teacher practitioner: a teacher who uses reflection as he/she teaches in order to enhance instruction (Larrivee, 2008b; Valli, 1997).

*Reliability:* the consistency of research and the extent to which a study can be replicated (Wiersman & Jurs, 2009).

Research to practice gap: the gap between research and applicable practice in the classroom (Billingsley & McLeskey, 2004).

"Revolving door" of changing teachers: the need for new teachers in education as other teachers leave the field (McLeskey & Billingsley, 2008).

Special education teacher role ambiguity: the uncertainty of job expectations associated with being a special education teacher (McCall et al., 2014; Rock et al., 2016).

Transformative learning theory: theory of adult learning in which individuals become critically aware of their own perspectives, changing them as needed (Mezirow, 1978b, 1991, 1995).

*Triangulation*: the use of a variety of methods to collect data in order to reduce the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013).

*Validity*: the degree to which one's data sources truly measure what they purport to measure so that research findings can be trusted (Roberts, 2010).

# **Summary**

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). This study was designed to focus upon this concern via exploring the use of dialogic reflective journaling between this researcher (a doctoral student with special education teaching experience) and four undergraduate preservice teachers, addressing their ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based experience, possibly experiencing positive personal transformation as teachers in the process. The four research questions that guided this study were as follows:

- 1. What encountered classroom situation may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special

- education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

This study was underpinned by the theoretical framework of transformative learning theory (Mezirow 1978b, 1991, 1995). The qualitative methodology for this study was participatory action research (PAR), a type of action (change) research whereby researchers participate in a study alongside other study participants. This researcher participated in dialogic reflective e-journaling, providing performance feedback to four undergraduate preservice enrolled at a southeastern regional public university in the United States who were involved in a special education field-based experience in the schools Fall semester of their senior year prior to student teaching in the Spring.

In terms of data collection, study data were triangulated through three data sources. These sources included initial interviews, documentation of dialogic reflective e-journaling done between this researcher and study participants, and a final researcher-developed questionnaire.

Meaning of collected data for this study (yielding answered research questions) was derived via a categorizing data analysis strategy (Maxwell, 2013). The particular categorizing strategy used was content analysis, a subjective interpretation of the content

of text data through coding and subsequent identification of themes (Hsieh & Shannon, 2005).

Study validity was addressed through triangulation and member checks. Data analysis reliability was done through the use of a second reader for interrater reliability.

Limitations of this study included (a) a small, purposeful, and non-generalizable participant sample (b) a risk of researcher bias, (c) regarding interviews, a risk of influence by this researcher in terms of reactivity, and (d) need for further research to move from supposition to certainty in terms of whether the additional support of dialogic reflective e-journaling will positively influence the preservice teachers' level of success in their upcoming student teaching experience as well as their level of success and retention in the challenging field of special education as future special education teachers.

#### CHAPTER II

#### REVIEW OF THE LITERATURE

The need for a quality teaching force and appropriate preparation of teachers has been the subject of national reform reports for decades (Dykes, Gilliam, Neel, & Everling, 2012). Effective teacher preparation programs include not only sound course sequences but also embed valuable field-based experiences into their course of study for preservice teachers (Brownell et al., 2005; Scott, Gentry, & Phillips, 2014). Scott et al. (2014) pointed out that "without a cohesive preparation program to connect course content and practicum experience, candidates fail to see the 'full picture' of the teaching profession" (p. 295). Significantly, field-based experiences bridge the gap between theory and practice for preservice teachers (Khanam, 2015).

It is a particularly challenging task to prepare special education preservice teachers to be confident, instructionally competent, and cognitively capable in the classroom environment (Roberts, Benedict, & Thomas, 2013). According to Youngs et al. (2011), beginning special education teachers must contend with common classroom challenges such as acquirement of curricular knowledge, planning and providing instruction, motivating students and managing their behavior, and attending to non-instructional responsibilities. Additionally, these teachers must also modify curriculum for students with special needs, develop Individualized Education Plans (IEPs), employ assistive technology to aid student learning, and maintain careful adherence to federal

special education laws and mandates. The effective preparation of special education preservice teachers is crucial to the field of special education as newly hired special educators are 2.5 times more likely to leave their teaching positions than other beginning teachers (Smith & Ingersoll, 2004), contributing to the overall high attrition rate of special education teachers (Zhang et al., 2014).

In terms of field-based experiences, preservice teachers benefit from systematic and objective feedback about their performance as this enables them to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom (Wilkins et al., 2009). According to Cornelius and Nagro (2014), such performance feedback is commonly employed during field-based experiences to improve desired teaching behaviors in preservice teachers. These two researchers reviewed eight research studies pertaining to performance feedback and found that all the studies supported the use of such feedback in preservice training. In light of their review, they concluded that immediate, specific, positive, and corrective performance feedback should be included in every special education teacher training program to increase preservice teachers' correct implementation of evidence-based practices while teaching. Leko, Brownell, Sindelar, and Kiely (2015) concurred, stating that "critical to the development of effective performance is corrective feedback that highlights well-executed aspects of performance and those that need to be changed" (p. 33).

### **Theoretical Framework**

This study is underpinned by the theoretical framework of transformative learning theory, a theory of adult learning advanced by Mezirow (1978b, 1991, 1995). Mezirow's

theory is based upon the concept of meaning perspective, a crucial developmental task of maturity whereby one becomes critically aware of one's own perspectives. Perspectives are changed as needed, resulting in positive transformation. Through dialogic reflective e-journaling with this researcher, preservice teachers of this study received performance feedback as they dealt with classroom disorienting dilemmas or other situation from a reflective perspective within their special education field-based placements, possibly experiencing positive, personal transformation as teachers in the process.

# **Mezirow's Transformative Learning Theory**

As a professor of adult education at New York's Columbia University in 1978, Mezirow led the launch of a theory that would become known as "transformative learning" (Illeris, 2014). According to Howie and Bagnall (2013), Mezirow's transformative learning theory is noteworthy not only in light of its great staying power as an idea but also due to its decades-long evolution of closely related ideas that remain true to the original conceptual framework of the theory. This summary of Mezirow's transformative learning theory is organized by decades in order to trace its evolution through the years.

**Decade of the 1970s.** Mezirow first coined the term "transformation" in his 1978 qualitative study of U.S. women returning to postsecondary study or the workplace after an extended time away from such pursuits (Mezirow, 1978a). The study was conducted to examine factors that impede or facilitate women's progress in re-entry programs. He and his researchers discovered that the women in the study underwent a "personal transformation," going through some of the following ten phases of change: (a) Phase 1 –

a disorienting dilemma; (b) Phase 2 – a self-examination with feelings of guilt or shame; (c) Phase 3 – a critical assessment of epistemic, sociocultural, or psychic assumptions; (d) Phase 4 – recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change; (e) Phase 5 – exploration of options for new roles, relationships, and actions; (f) Phase 6 – planning a course of action; (g) Phase 7 – acquisition of knowledge and skills for implementing one's plan; (h) Phase 8 – provisional trying of new roles; (i) Phase 9 – building of competence and self-confidence in new roles and relationships, and (j) Phase 10 – a reintegration of one's life on the basis of conditions dictated by one's own perspectives.

In his seminal article titled "Perspective Transformation," Mezirow (1978b) advanced a theory of adult learning based upon the concept of meaning perspectives that he had discovered through the aforementioned qualitative study. He characterized "meaning perspective" as "an integrated psychological structure with dimensions of thought, feeling and will" (p. 108) and then posited that a crucial developmental task of maturity is becoming critically aware of our perspectives and changing them as needed, resulting in perspective transformation. According to Mezirow (1978b), the process of perspective transformation has far-reaching implications for the education of adults. Indeed, he contended that "there is no higher priority for adult education than to develop its potentialities for perspective transformation" (p. 109). He further suggested that transformation in meaning perspective is instigated by life's dilemmas, theorizing that the resolution of dilemmas and the transformation of meaning perspectives requires us to

become critically aware of being caught in our own history—reliving it and the cultural and psychological assumptions which structure the way we see ourselves and others.

Mezirow's early transformative learning theory launched in the late 1970s was influenced by two other theorists (Mezirow, 1978a). Kuhn's (1962) theoretical contention that paradigms are of great importance affected Mezirow's thinking to the point that he included paradigms as a frame of reference in his own theory. He was also impacted by Freire's 1970 likening of traditional education to the "banking" method of learning whereby the teacher deposits information to those students whom he/she deems worthy of receiving the gift of knowledge (Mezirow, 1978b), being particularly influenced by Freire's assertion that the antidote to this reliance on someone else and the lack of free thought was conscientization with its emphasis upon developing a consciousness that has the power to transform reality through critical awareness.

Decade of the 1980s. In this decade, Mezirow began devising a critical theory of adult learning and adult education (Mezirow, 1981). His theory was influenced by Haberman's 1971 work that proposed three domains of learning: the technical (learning that is rote, specific to a task, and clearly governed by rules), the practical (learning that involves social norms), and the emancipatory (introspective learning that is self-reflective). Mezirow (1981) asserted that of Habermas's three domains of learning, the emancipatory domain is of particular interest to adult educators, theorizing that the concept of emancipatory action (self-knowledge and self-reflection) is tantamount with perspective transformation since critical reflectivity plays a crucial role in the adult learning process. Mezirow also defined critical reflectivity as "awareness of why we

attach the meanings we do to reality" (p. 16). He delineated that (a) affective reflectivity refers to our becoming aware of how we feel about our perceptions, thoughts, actions, and habits, (b) discriminant reflectivity refers to our assessment of the efficacy of our perceptions, thoughts, actions, and habits, and (c) judgmental reflectivity refers to our becoming aware of our value judgments about our perceptions, thoughts, and actions.

Expanding the view of perspective transformation by relating Habermas's emancipatory process to self-directed learning, Mezirow (1981) proposed three revised types of learning: (a) instrumental (learners ask how they could best learn the information in question, (b) dialogic (learners ask when and where learning should take place), and (c) self-reflective (learners ask why they need to learn the information in question. Central to perspective transformation and these three types of learning are *meaning* perspective (the structure of cultural and psychological assumptions within which our past experience assimilates and transforms new experience) and meaning schemes (the constellation of concept, belief, judgment, and feeling which shapes a particular interpretation). Mezirow further theorized that three learning processes operate within each of the three learning types: (a) learning within meaning schemes (learners work with what they already know by expanding on, contemplating, and revising their present systems of knowledge), (b) learning new meaning schemes (learners acquire new schemes that are compatible with existing within their own meaning perspectives), and (c) learning meaning transformation (the learner redefines an encountered problem that cannot be resolved through present meaning schemes or through learning new meaning schemes). According to Mezirow, perspective transformation occurs in two dimensions

related to changing meaning schemes. On one hand, it can occur painlessly through an accumulation of transformations in set meaning schemes. On the other hand, it can be painful, requiring a critical re-evaluation of oneself.

Decade of the 1990s. Mezirow (1991) presented revisions of his initial theory in the decade of the 1990s which according to Kitchenham (2008), led to a "tighter description of the theory" (p. 119). The original 10-phase model of perspective transformation was expanded to include an additional phase between the original phases of 8 and 9. This additional phase reflected the importance of critical self-reflection with the end result being the renegotiation of existing relationships followed by the negotiation of new relationships. Mezirow maintained that critical self-reflection is the central element to perspective transformation, noting that its meaning becomes significant to the learner through critical discourse with others. He further contended that there are three types of meaning perspectives: (a) epistemic (related to knowledge and how a person uses knowledge), (b) sociolinguistic (related to language and how it is used in social settings, and (c) psychological (related to the way people viewed themselves).

Mezirow (1991) further theorized that the remedy for any epistemic, sociolinguistic, or psychological distortion was perspective transformation achieved through his revised 11-phase model as well as through reflective discourse (he noted that a person does not have to experience all eleven phases or experience them in a set order to achieve a perspective transformation). The revised phases of the model included: (a) Phase 1 – a disorienting dilemma; (b) Phase 2 – a self-examination with feelings of guilt or shame; (c) Phase 3 – a critical assessment of epistemic, sociocultural, or psychic

assumptions; (d) Phase 4 – recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change; (e) Phase 5 – exploration of options for new roles, relationships, and actions; (f) Phase 6 – planning of a course of action; (g) Phase 7 – acquisition of knowledge and skills for implementing one's plans; (h) Phase 8 – provisional trying of new roles; (i) Phase 9 (newly added) – altering present relationships and forging new relationships; (j) Phase 10 – building of competence and self-confidence in new roles and relationships; and (k) Phase 11 – a reintegration into one's life on the basis of conditions dictated by one's perspective.

Mezirow (1995) next re-emphasized the importance of critical reflection in transformative theory by delineating three types of reflection and their roles in transforming meaning schemes and perspectives: (a) content reflection (thinking back to what was done), (b) process reflection (considering the causes of actions and factors involved), and (c) premise reflection (seeing the larger view of what is operating within one's own value system). He also delineated two types of transformation: (a) straightforward transformation of a meaning scheme (occurs through content and process reflection and (b) a much more profound transformation of a set of meaning schemes (occurs through premise reflection).

Upon considering the current debate over the nature and meaning of learning,
Mezirow (1996) described the objectivist paradigm (the Western rational tradition), the
interpretist paradigm (the cognitive revolution), and the emancipatory paradigm
(transformation theory). He asserted that transformation theory "constitutes a dialectical

synthesis of the objectivist paradigm of learning and the more recent interpretive paradigm" (p. 164).

Finally, Mezirow (1998) analyzed and clarified the meaning, significance, development, and common applications of critical reflection of assumptions (CRA) by addressing concept differentiation, CRA taxonomy, and discourse. Kitchenham (2008) summarized Mezirow's CRA taxonomy by explaining that it involved (a) objective reframing of assumptions (either a narrative critical reflection of assumptions that requires critically examining something that was communicated to a person or an action critical reflection of assumptions that requires taking a moment to critically consider one's own assumptions in a task-oriented problem-solving situation to define the problem itself), and (b) subjective reframing on assumptions that includes one of four forms of critical self-reflection on assumptions (narrative critical self-reflection that is the application of such reflection to oneself, systemic critical self-reflection that constitutes self-reflecting on workplace or moral-ethical norms, therapeutic critical self-reflection that entails examining one's problematic feelings and their related consequences, and epistemic critical self-reflection that is the investigation of not only the assumptions but also the causes, the nature, and the consequences of one's frame of reference as to why one is predisposed to learn in a certain manner. Mezirow (1998) postulated that "adults who are concerned with facilitating meaningful adult learning need to understand the significance of CRA and variations in how CRA is used for different purposes" (p. 197). The challenge, he asserted, is the translation of the concept of CRA into curricula or programs, instructional methods, materials development, and evaluation criteria.

Decade of the 2000s. This decade began with Mezirow offering another revision of transformative learning by arguing that a meaning perspective is a frame of reference that comprises habits of mind (what a person does when confronted with a problem) and subsequent points of view (coherent beliefs) that may include the following variety of dimensions: sociolinguistic, moral-ethical, epistemic, philosophical, and aesthetic (Mezirow, 2000). He was certain to note that although a person can change his/her points of view by trying on another person's point of view, one cannot, however, try on someone else's habit of mind. Mezirow (2003) further purported that the essence of adult education is the fostering of effective adult reasoning that includes critical reflection and dialectical discourse. Given this level of adult reasoning, transformative learning then ensues. He contended that such learning "transforms problematic frames of reference-sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets)- to make them more inclusive, discriminating, open, reflective, and emotionally able to change" (p. 58).

Unfortunately, Mezirow passed away at the age of 91 in 2014, an event that signified a crucial loss to the world of adult education. Kitchenham had referred to the longevity and significance of Mezirow's legacy in 2008, noting that "transformative learning theory has undergone modifications and incorporated new constructs as they are debated, and will, undoubtedly, continue to influence adult learning praxis across many disciplines" (p. 120). Indeed, what started as a discovery long ago within a qualitative study of the experiences of adult women re-entering school or the workforce resulted in a critical theory of learning that has influenced adult education for years and will likely

continue to do so into the future (Christie, Carey, Robertson, & Grainger, 2015). In the words of Mezirow himself (2003), it is acknowledged that "although adults may developmentally acquire the capabilities to become critically self-reflective and exercise judgment, the task of adult education is to help the learner realize these capabilities by developing the skills, insights, and disposition essential for their practice" (p. 62).

### **Putting Transformative Learning Theory into Practice**

The embodiment of Mezirow's transformative learning theory is in its real-life application. Mälkki (2012) noted that Mezirow's theory "has been validated through numerous empirical studies and continues to provoke scholarly discussion internationally" (p. 208). Such application has been documented in various perspective papers and studies such as those that follow.

Steffy and Wolfe (2001) applied transformative learning theory to a developmental model called "Life Cycle of the Career Teacher" that set out six progressive phases of professional growth for teachers (the novice phase, the apprentice phase, the professional phase, the expert phase, the distinguished phase, and the emeritus phase). They contended that as teachers progress throughout their careers, they can either engage in transformational processes (critical reflection on practice, redefinitions of assumptions and beliefs, and enhanced self-worth) or conversely, they can disengage from the work environment as a source and stimulation for new learning and begin a gradual decline into professional withdrawal. School administrators can facilitate a positive trajectory through the model by promoting transformative learning and

encouraging teachers to propel themselves through this developmental model via a reflection-renewal-growth cycle.

Brown (2005) undertook a qualitative study to assess the possible effects of transformative learning strategies on preservice administrators' beliefs and future professional behaviors toward issues of justice in education. Forty graduate students of educational administration participated in the study. Three aspects of Mezirow's transformative learning theory were reported to have been applied in this study: (a) centrality of experience (students were assigned the task of visiting an educational setting unlike any they had ever experienced), (b) critical reflection (students were exposed to and participated in diversity panels and were required to reflect in a journal about this assignment), and (c) rational discourse (students engaged in an one-on-one cross-cultural interview with an individual different from their own ethnicity/race). Study results indicated that all students did experience a perspective transformation as a result of participating in the adult learning activities. Additionally, the students' awareness and acknowledgement of their own beliefs, attitudes, and assumptions increased significantly. Importantly, data analysis also revealed an increase in the students' willingness to engage in and facilitate critical, constructive inquiry regarding issues of social justice and equity.

Via a mixed methods study, Stansberry and Kymes (2007) investigated whether teachers who had themselves experienced assessment in a graduate course through an electronic portfolio (e-portfolio) would be more likely to use portfolio-based assessment with their students in their own classrooms. Seventy-eight teachers enrolled in a university master's degree program took a Literacy and Technology Across the

Curriculum course and completed the assignment of creating an e-portfolio containing artifacts from all nine course modules. The following phases of Mezirow's model of perspective transformation were applied to this study and experienced by the participant teachers: (a) disorienting dilemma (having to learn new technology); (b) self-examination (teachers began to examine their own assumptions about technology); (c) critical assessment and a sense of alienation (teachers began critically assessing their assumptions about teaching with technology); (d) exploring options for new ways of acting (teachers moved from critical assessment to exploration of technology use); (e) building confidence in new ways of behaving (teachers expressed confidence in the new skills of technology they were learning to use; (f) planning a course of action (upon completing their e-portfolios, the teachers expressed plans to continue to use their new technology skills in the future); (g) acquiring knowledge in order to implement plans (teachers noted that they planned to learn more about technology); (h) experimenting with new roles (the collaboration involved with creating an e-portfolio with teacher classmates was somewhat of a new role as teachers tend to work on their own in their classrooms); and (i) reintegration into society (teachers expressed how they now planned to use their new technology skills in their workplace). Data for this study were collected via (a) a pre- and post-survey analyzed quantitatively and (b) a final reflection paper analyzed qualitatively (reflective writing was also embedded in each course module but these reflections were not analyzed). Study findings revealed that perspective transformation did occur with the teachers in terms of technology mastery. Additionally, although the intention of teachers to use e-portfolios as assessment tools with students in

their own classrooms was stronger than before the technology course, the level of intention was still rather weak.

Mälkki (2012) sought to apply Mezirow's theory of transformative learning to the context of involuntary childlessness in order to explore ways in which this particular disorienting dilemma could launch reflection. The particular aim of her study was to examine the emotional and social dimensions of the relation between disorienting dilemma and reflection which, in Mezirow's theory, has been predominantly conceptualized from the cognitive viewpoint. Data was collected by interviewing four involuntarily childless women who were between the ages of 20 and 40 and came from different backgrounds in Finland in terms of education, geography, and professional life. Each participant lived in a stable relationship. According to Mälkki, all of the completed interviews were quite in-depth, open, and conversational in nature. Data analysis revealed four intertwined themes: (a) the role of reflection within a non-facilitated context of lifeevent crisis differs from the more often discussed role of reflection in facilitated contexts (reflection appeared to enable meaning-making in a chaotic situation not understandable from within existing meaning frameworks); (b) disorienting dilemmas appear to be inherently emotional experiences (one's relation to these feelings became the significant factor determining whether reflection was reached or not); (c) reflection does not only bring positive issues to the fore (views changed through reflection may also lead one into new kinds of misunderstandings and disagreements with significant others which in turn, can serve as a second-wave trigger for further reflection over one's own assumptions versus the assumptions of others); and (d) the meaning derived via reflection is only

understandable in relation to that person's unique meaning perspective (what to an outsider may appear superficial could actually be the transformative opening to new insight).

Doucet, Grayman-Simpson, and Wertheim (2013) investigated the transformative educational journeys of 14 undergraduate white women enrolled in a diversity and social justice course at a northeastern public university in the United States that had 150 registered students in all. Lectures were given to the class twice a week. Consistent with the value of critical dialogue within transformative learning theory, small groups of 25 were required to meet for a third 50-minute discussion session each week. Additionally, aligning with the value of critical self-reflection within transformative learning theory, all students were required to engage with an unfamiliar cultural community and critically self-reflect on that engagement experience. Study results revealed occurrences of cognitive and relational transformations consistent with Mezirow's phases of transformative learning within all study participants as they engaged interpersonally with culturally unfamiliar others and participated in critical discourse and critical self-reflection.

Drawing upon concepts from Mezirow's transformative learning theory, Fenoglio and Taylor (2014) examined the process of perspective transformation in three youth sport coaches in the United Kingdom. They utilized a case study approach to examine a shift in personal coaching philosophies with data gathered via semi-structured interviews. Through the processes of critical reflection, rational discourse, and action, all three coaches experienced a perspective transformation from an outcome-oriented, winning-at-

all-costs approach to a more child-centered approach to youth sports that guaranteed children their right to play and have access to age-appropriate, positive sporting experiences.

The aim of research by Summut (2014) was to discover if and how Mezirow's transformative learning theory can be applied to business coaching, leadership coaching, and life coaching. Eight coaches were selected by a purposive selection strategy from a pool of 570 people. All of the participants were female and a founder of or a partner in a coaching/consulting organization. Most of the coaches focused on leadership coaching. All had provided coaching services for at least two years on an individual basis, practicing what they termed to be a form of transformational coaching. The participants had varying understandings of transformation and how it is addressed within their coaching practices. Data were collected through individual semi-structured interviews, observation, and audio recording. Research findings indicated a robust link between the fields of business coaching, leadership coaching, and life coaching and six of Mezirow's core elements of transformation, that of (a) individual experience, (b) critical reflection following a catalyst (known as a disorienting dilemma within Mezirow's transformative learning theory), (c) dialogue, (d) holistic orientation, (e) awareness of context, and (f) authentic relationships. Summut concluded that as the field of coaching continues to rapidly grow, it could benefit from the application of theories of adult education, especially transformative learning theory.

Carrington, Mercer, Iyer, and Selva (2015) examined the impact of Mezirow's transformational learning upon final-year, undergraduate preservice teachers and their

approach to inclusive teaching. This transformational learning took place within a critical service-learning program at a university in Australia. The aim of the service-learning program was to provide the students with an opportunity to consider diversity and inclusion after participating in on-campus academic learning activities and tutorials designed to stimulate questioning of traditional beliefs and assumptions about diversity, social justice, and the role of schools in society. The service-learning program was designed to complement the field studies experience in the schools by requiring preservice teachers to complete 20 hours of non-paid service work within one of a range of available community programs that supported adults or children who were marginalized with diverse backgrounds and needs. These partner organizations included homework clubs for refugee children, drop-in centers for homeless people, rehabilitation centers for individuals with acquired brain injury, and aged care facilities. Data were collected from an e-mailed questionnaire in 2009 completed by 13 preservice teachers as well as from transcripts of focus group interviews conducted in 2009 with twelve preservice teachers and in 2010 with 13 preservice teachers. Study findings revealed that the critical service-learning program was a positive experience for the preservice teachers and did impact their ability to think and teach inclusively. Specifically, the students came to a transformative understanding of the particular values of respect, empathy, and the ethic of care, feeling ready to apply this new-found insight in the classroom.

Parra, Gutiérrez, and Aldana (2015) presented study results of a critically reflective teaching experience of three university professors at a private university in Bogota, Columbia. Two research questions were addressed: (a) How does one design a

critically reflective process aimed at transformative teaching and learning? and (b) What do professors learn about their own practices and about their students' learning when they jointly carry out critically reflective teaching? The professors engaged in collaborative reflection to recognize and question their frames of reference and to build new ones per Mezirow's theory of transformative learning. The experience of the three professors yielded three instructional principles for preparing self-directed, autonomous, and socially responsible students: (a) linking learning experiences promoted in class with students' lives and contexts, (b) confronting both instructors' and students' frame of reference, and (c) recognizing the influence of broader curricular, disciplinary, and institutional contexts in instructional practices and students' learning.

Christie et al. (2015) investigated whether Mezirow's theory of transformative learning could be put into practice in adult education with three case studies undertaken by the researchers themselves. The case studies involved (a) a group of mature-aged women returning to school at a regional university in Australia, (b) a group of teachers from the developing province of Papua, Indonesia attending a ten-week program in Australia designed to enhance their English language proficiency and upgrade their teaching practices and pedagogical knowledge, and (c) two groups of people who participated in workshops aimed at increasing learners' awareness of the ways in which they see the world (the first group was comprised of 81 Ph.D. students at a Swedish technological university and the second group was comprised of 53 final year teacher education students enrolled in an Australian preservice course). Analysis of study data revealed that in all three cases, transformative learning helped the students to regularly

re-assess the validity of their perspectives and enabled them to apply what they had learned in unexpected situations. Because of this, Christie et al. (2015) contended, transformative learning "has a place in all forms of university and adult education" (p. 22).

Lastly, Brown and Brown (2015) used Mezirow's transformative learning theory to support study participants' framing of life transformations. A qualitative, emergent, and exploratory research design was applied in this study. Participant sample consisted of eight women with an age range of 41-57 years who obtained their undergraduate degree at the traditional age and later returned to school to complete their doctorate during their midlife years (after age 40). During the course of the study, all were currently Ph.D. students or had already earned their doctorates. All of the women's doctoral programs contained a focus in gerontology. Interviews were conducted with each study participant. Each woman was asked to describe her first transformative learning phase, a disorienting dilemma (her choice to return to school at a later age), followed by a second phase (selfexamination; that is, critical reflection of their disorienting dilemma), and a third phase (rational discourse that allowed the participant to disclose, explain, or challenge their own particular beliefs about their return to school to pursue a doctorate that led up to a life transformation). All of the women reveled in their successful obtainment of their doctorates, having enjoyed the doctoral journey even in the face of some ironic gender bias and ageism as their doctoral department was gerontology. In the end, the women reintegrated well back into their own lives based upon their new perspectives.

### **Reflective Teacher Education**

Leko and Smith (2010) asserted that focused and individualized attention on beginning special education teachers, who are most vulnerable to attrition, can improve the retention of these particular educators over a long period of time, ultimately improving services for students with special needs. One type of specialized attention that can begin at the point of preservice training is reflective teacher education, i.e., helping prospective teachers become reflective practitioners able to critically reflect. Reflection is a vital component in teacher programs nationwide (Broyles, Epler, & Waknine, 2011).

The process of critical reflection is a fundamental element of Mezirow's transformative learning theory (Mezirow, 1991). Mezirow stated that learners must engage in critical reflection of their experiences in order for transformation of meaning perspectives to subsequently occur. Transformative learning fosters a shift in outlook through critical self-reflection (Mezirow, 2000). Embracing Mezirow's view, Gregson and Sturko (2007) agreed that reflective practitioners may experience transformative learning as they open up their frame of reference to new ways of teaching and learning. Russell (2005) definitively asserted that "fostering reflective practice requires far more than telling people to reflect and then simply hoping for the best . . . reflective practice can and should be taught- explicitly, directly, thoughtfully, and patiently . . ." (p. 203). According to Lambe (2011), the art of reflection provides a valuable learning framework in which preservice teachers can be helped to scrutinize and self-evaluate their own development and progress. Hickson (2011) concurred, noting that critical reflection is "a powerful technique that has the potential to invigorate and energize practice" (p. 837).

Indeed, reflective teacher education is universally accepted as a worthy outcome of teacher education programs (Nelson, Miller, & Yun, 2016). Hence, the aim of this study was to explore the use of dialogic reflective e-journaling between this researcher (a doctoral student with special education teaching experience who will give performance feedback) and preservice teacher participants involved in a special education field-based experience, addressing their ability to cope with classroom disorienting dilemmas or other situations from a reflective perspective.

### **Features of Reflective Teacher Education**

The idea of reflection in teaching originated with the use of the scientific method to analyze how people think and learn (Dewey, 1933). Dewey contrasted reflective thinking (active consideration based upon evidence) with habits of thought that are unsystematic, lack evidence, are based upon false assumptions, or mindlessly conform to tradition and authority. He espoused that three attitudes are required in the process of reflective thinking: (a) open-mindedness (being open to other points of view, willing to change one's own point of view), (b) responsibility (taking ownership for the consequences of one's actions), and (c) wholeheartedness (thoroughly committing oneself to seeking better solutions to perplexing concerns). Upon review of Dewey's work, Ostorga (2006) decided that open-mindedness is the most significant attitude in the process of reflective thinking since the open-minded teacher continuously analyzes the efficacy of routines and practices, not believing in one single truth or in one right way to teach.

A discussion of reflective teacher education would not be complete without the mention of van Manen, one of the pioneers of reflectivity. Van Manen (1977) espoused three sequential levels of reflectivity as follows: (a) first and lowest level of reflectivity technical rationality (concerns the technical application of educational knowledge and basic curriculum principles), (b) second level of reflectivity—practical action (occurs when the teacher becomes more concerned with clarifying assumptions and predispositions while assessing educational consequences in order to reach interpretive understanding), and (c) third and highest level of reflectivity—critical reflection (teacher is concerned with the worth of knowledge and social circumstances as useful to students). Van Manen (1991) was particularly interested in the application of reflectivity to pedagogy, noting that "pedagogy refers to our reflective sense-making or theorizing about concerns of education or child-rearing" (p. 510). He explained that reflection occurs in those moments when we are able to think about our experiences, about what we did or should have done, or about what we might do next. According to van Manen, four forms of reflection exist. Anticipatory reflection enables one to deliberate possible alternatives, decide on courses of action, plan what needs to be done, and anticipate the results of our planned actions. Active or interactive reflection (reflection-in-action) is a stop-and-think type of reflection that allows one to make needed decisions on the spur of the moment. Recollective reflection facilitates sense-making of past experiences which enables one to gain new or deeper insights into the meaning of experiences with children. Van Manen noted that teachers become more experienced practitioners as a result of recollective reflection. The final form of reflection according to van Manen (1991) is

mindfulness which is thoughtful, tactful action that is "thinkingly attentive" while "living the pedagogical moment" (p. 516). According to van Manen (1995), "good teachers 'thinkingly act' and often do things with immediate insight" (p. 36).

Within his seminal works, Schon (1983, 1987), a cognitive psychologist, popularized the notion of reflective practice by criticizing the portrayal of teachers as technicians and replacing this view with the concept of teachers as committed, autonomous decision-makers, i.e., "reflective practitioners" who continually learn from and reconstruct experience through reflection. He delineated between reflection-in-action and reflection-on-action, maintaining that reflection-in-action enables the practitioner to detect a problem as it occurs, consider alternatives, and shift the course of action to solve it while reflection-on-action is the careful consideration of an incident after it has happened.

Concerned about the social, cultural, and political aspects of reflective approaches, Smyth (1992) conceded that "there can be merit in a reflective stance towards teaching if it is construed in a way that permits and requires broader questions to be asked about what is worthwhile in teaching and why" (p. 294). He maintained that if teachers are to discover the forces that inhibit and constrain them and work at changing those conditions, they need to engage in the following four forms of action in terms of their teaching: (a) describing (teachers reflect and develop a discourse about their own and others' teaching, describing specific teaching events either orally or through journaling, (b) informing (teachers analyze their descriptions to capture the pedagogical principles of what it is they do), (c) confronting (teachers situate teaching in a broader

cultural, social, and political context by engaging in critical reflection about the assumptions that underlie methods and classroom practices, and (d) reconstructing (teachers begin to link consciousness about the processes that inform the day-to-day aspects of their teaching with the wider political and social realities within which it occurs).

Valli (1997) concurred with Schön's contention, asserting that reflective teachers are able to consider their own teaching behaviors and the context in which they occur by looking back on events with the intention to make judgements, altering their teaching behaviors in light of craft, research, and ethical knowledge as needed. According to Valli, teachers as reflective practitioners link theory to practice as they contemplate with deliberation, infusing instruction with careful thought. Faced with difficulties in the classroom, reflective teachers are more likely to seek out solutions, rather than simply giving up. Valli cautioned that it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience. Indeed, as of 2002, the National Council for the Accreditation of Teacher Education (NCATE) began promoting reflective practice as an essential component of teacher education programs in terms of teacher quality (Ostorga, 2006).

Hutchinson and Allen (1997) developed the Reflection Integration Model to help preservice teachers become reflective learners in their field-based placements. The model is composed of four components: (a) pre-experience (preservice teachers are told the purpose of the experience so that a connection is made between the purpose and the activities they will be completing), (b) experience (the goal of the experience determines

the setting), (c) reflection (in order to make the experience meaningful, the preservice teachers learn to think reflectively about the experience to reconfigure their thought processes and find a connection between theory and practice), and (d) integration (to achieve successful integration, the preservice teachers are guided through personal introspection). The Reflection Integration Model enables teacher educators and preservice teachers to develop a strategy for devising a more reflective approach to processing experiences.

Larrivee (2008a) pointed out that there are escalating accountability pressures on teachers which require them to assure that students are reaching set standards of performance. Such demands, she explained, can leave teachers feeling powerless. Yet, she noted, the best remedy for this sentiment is for teachers to develop the habit of engaging in systematic reflection about their work. Larrivee (2008b) asserted that "perhaps the most important reason for teachers to develop as reflective practitioners is to be skilled at dealing more consciously with the inevitable dilemmas and tradeoffs involved in everyday decisions that affect the lives of students" (p. 88). She maintained that the dissonance created in realizing that a problem exists requires the reflective thinker to be an active inquirer, both in the critique of current conclusions and the generation of new hypotheses. According to Larrivee (2008a), a continuum of three levels of reflection has evolved over several decades. These levels include surface reflection (focus on strategies and methods used to reach predetermined goals), pedagogical reflection (connecting theory and practice), and finally critical reflection (consideration of moral and ethical implications and consequences of classroom practices on students). She stressed that it is important for teachers to progress along this continuum of reflective practice so that they can be critically reflective, able to focus their attention both inwardly and outwardly in light of the social conditions in which these practices are situated.

Broyles, Epler, and Waknine (2011) asserted that reflective teaching incorporates not only the cognition involved in teaching but also metacognitive processes as well. They emphasized that teacher preparation programs should encourage preservice teachers to critically reflect in a metacognitive way, enhancing their teaching by generating and testing hypotheses related to individual teaching experiences. Such critical reflection encompasses the practitioners' past experiences, ideological beliefs, and social contexts (Meierdirk, 2016). Bates, Ramirez, and Drits (2009) contended that the ultimate goal of critical reflection is change or transformation.

# Research Base for the Implementation of Reflective Teacher Education

There is a strong research base for the implementation of reflective teacher education. Valli and Rennert-Ariev (2000) reviewed nine national reform reports that targeted teacher education and found, among other factors, ardent consensus for reflection and inquiry in teacher education programs. Brownell, Ross, Colon, and McCallum (2005) compared critical features of effective general education teacher programs with special education teacher programs. Both programs included reflection as a vital element to address with preservice interns and student teachers. Middleton, Abrams, and Scaman (2011) acknowledged that past research suggests that teachers who engage in reflective practice are better able to recognize the complexity of teaching, use

judgements to choose appropriate strategies for teaching and learning in their specific contexts, and experience improved self-confidence. Results of their own case studies on reflective teacher education with two preservice interns yielded, however, the implication that preservice teachers benefit from continued guidance and mentoring as to the value of reflective practices so that they are sure to apply what they learned and experienced in field-based placements to their future work as educators in the workplace.

### **Journaling**

This study explored the use of dialogic reflective e-journaling in addressing preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based placement, possibly experiencing as teachers a positive personal transformation via transformational learning (Mezirow, 1981, 1991, 1995). Hubbs and Brand (2005) attested that "reflective journals can be significant adjuncts in the transformative learning process" (p. 63).

### The Evolution of Journaling

King and LaRocco (2006) pointed out that journaling, the act of recording one's experiences, is not new. Cave drawings up through the writing of words have chronicled the personal happenings and thoughts of individuals. Journaling began in the schools as a technique for improving student writing but has evolved over the years into a medium through which student understanding of concepts can be ascertained, reflection and critical thinking can be encouraged, and connections between theory and practice can be

made. Furthermore, according to King and LaRocco, "journal writing adds energy and synergy to the learning process" (p. 2).

In the past, using paper and a writing instrument was the primary mode of journaling but with the advent of new technology, the rise of distance education courses, and the changing nature of adult students (e.g., part-time or fully employed), the popular mode of journaling today has become electronic journaling (e-journaling) due to its convenience (King & LaRocco, 2006). E-journaling is one type of computer-mediated technology used to facilitate electronic mentoring (e-mentoring) that can support preservice as well as inservice teachers (Crippen & Brooks, 2000; Donne & Lin, 2013). Threlfall (2014) asserted that "E-journals are an effective way in which undergraduates can engage in reflection" (p. 328).

The concept of reflective journaling in higher education is not new and has been used across a range of disciplines in addition to teacher education, including physical education, nursing, music education, early childhood education, outdoor education, business, design, psychology, distance education, physiotherapy, and information and technology education (O'Connell & Dyment, 2011). There is strong evidence in the research literature that a structured approach to the teaching of reflective writing that targets and scaffolds student learning of reflective skills is beneficial for preservice teachers (Hume, 2009). Threlfall (2014) concurred, noting that teacher educators should prepare preservice teachers for any reflective process via individual or group tutorials. Thorpe (2004) recommended that journal writing objectives should be communicated clearly to the students.

### Reflective Journaling during Field-based Experiences

Reflective journaling, either via paper and pen or e-journaling, can lead to positive changes in performance by preservice teachers during field-based experiences (LaBelle & Belknap, 2016). The reflective writing done in such journaling expedites the growth of preservice teachers as reflective practitioners as it prompts them to identify particular classroom situations that are concerning and stimulate examination of assumptions, triggering consideration of alternative and future actions (Hume, 2009; Parra et al., 2015). Having little or no teaching experience, preservice teachers can naturally be preoccupied with acquiring a repertoire of survival skills in the classroom. Reflective journaling provides a framework in which they can examine and reflect upon relevant educational issues. It also serves as a bridge between imagined views held by students and the realities of teaching (Lee, 2004).

According to Trautwein and Ammerman (2010), if reflective journaling is not a formal, required component of teacher preparation, it is unlikely to happen. If, however, preservice teachers habitually reflect upon field experiences because they are required to, they are more likely to engage in reflection once they enter the teaching profession.

According to Hostetler et al. (2007), learning to teach from a reflective perspective is important to teachers as "no matter how much a teacher plans, she or he is likely to encounter the unexpected" (p. 237).

### **Dialogic Reflective Journaling**

Garmon (2001) asserted that there are two types of reflective journaling: (a) response reflective journaling (preservice teachers reflect independently from teacher

educators with only rare feedback given to them) and (b) dialogue (now called dialogic) reflective journaling (preservice teachers engage in written discourse with teacher educators for an extended period of time). Dialogic reflective journaling is often cited as a powerful tool for promoting reflection in teacher education (Lee, 2004). According to King and LaRocco (2006), continuing dialogic exchange between preservice teachers and teacher educators helps students deepen their learning and reflection. In terms of dialogic reflective journaling, Thorpe (2004) cautioned that "reflective thinking requires a trusting relationship if one is to write about individual thoughts, feelings, and experiences honestly . . ." (p. 329). According to Hubbs and Brand (2005), journaling provides students practice in the art of reflection that is important in learning new material and is essential for transformative learning, especially when the instructor engages the student in mutual dialogue through written discourse.

When e-journaling is the mode of dialogic reflective journaling rather than paper and pen, students quickly learn to appreciate the more immediate performance feedback to journal entries that is possible via e-mail (Banker, 2004) as reflection entries are repeated in a back-and-forth interchange of ideas (Hubbs & Brand, 2005). This iterative e-mail communication can then be easily tracked and preserved over e-mail (Applebaum, 2014).

O'Connell and Dyment (2011) reviewed over 75 articles on dialogic reflective journaling. They learned that for students and instructors, dialogic reflective journaling has benefits and challenges.

Benefits. In terms of benefits, O'Connell and Dyment asserted that "the literature is unequivocal in its contention that students profit from journaling" (p. 48), noting that the acquired dividends include providing data as a starting point for learning, centering students in the learning process, promoting creativity in learning, and encouraging critical reflection. Garmon (2001) noted also that dialogic reflective journaling promotes self-understanding and provided instructor feedback for students. O'Connell and Dyment found the following benefits for instructors: (a) journaling encourages "discussion" between instructors and students thus creating an atmosphere for dialogic teaching, (b) through reading students' journal entries, instructors are able to gauge how well students are comprehending topics or skills, and (c) journaling enables instructors to get to know their students individually, particularly if the instructors provide authentic, consistent, and meaningful feedback to students. Hubbs and Brand (2005) concurred, noting that "the reflective journal holds potential for serving as a mirror to the student's heart and mind . . . allowing access to the student's making of meaning'" (p. 61).

Challenges. Upon their review of the literature on dialogic reflective e-journaling, O'Connell and Dyment discovered the following challenges: (a) the need to train students how to journal and how to critically reflect, giving specific guidelines on effective journaling, (b) helping students feel comfortable writing honestly despite the reality that their instructors will be reading their entries, (c) the overuse of journaling by instructors, leading to apathy from some students toward reflection, (d) students and even some instructors are unfamiliar with and wary of the journaling medium, (e) journals are not a good fit for all students' learning styles, (f) female students generally have more positive

attitudes toward journaling and keep journals more often than male students, (g) journals can blur the boundaries between the lives of students and instructors, (h) some instructors who grade student journals note challenges assessing them in a fair and consistent manner, (i) there is a possibility that what is written in a journal by either students or instructors may be revealed in court, (j) journals can be time-consuming, and (k) student entries tend not to be highly reflective. Garmon (2001) also suggested that some students find the requirements and procedures for journaling to be arduous.

### Gap in the Literature

Perspective articles and empirical studies exist in the literature on the topic of dialogic paper and pen journaling and e-journaling with preservice teachers (Christie et al., 2015; Donne & Lin, 2013; Garmon, 2001; Hubbs & Brand, 2005; Lee, 2004; Summut, 2014; Threlfall, 2014). A gap in the literature exists, however, with regard to a specific focus on dialogic reflective e-journaling in terms of preservice teachers involved in a special education field-based experience in the schools the Fall semester of their senior year prior to student teaching in the Spring.

### **Summary**

The need for a quality teaching force and appropriate preparation of teachers has been the subject of national reform reports for decades (Dykes et al., 2012). It is a particularly challenging task to prepare special education preservice teachers to be confident, instructionally competent, and cognitively capable in the classroom environment (C. A. Roberts et al., 2013). In terms of field-based experiences, preservice teachers benefit from systematic and objective feedback about their performance as this

enables them to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom (Wilkins et al., 2009). According to Cornelius and Nagro (2014), such performance feedback is commonly employed during field-based experiences to improve desired teaching behaviors in preservice teachers.

This study was underpinned by the theoretical framework of transformative learning theory, a theory of adult learning advanced by Mezirow (1978b, 1991, 1995). Mezirow's theory is based upon the meaning perspective, a crucial developmental task of maturity whereby one becomes critically aware of one's own perspectives. Perspectives are changed as needed, resulting in positive transformation. Through dialogic e-journaling with this researcher, preservice teachers of this study involved in a special education field-based experience received performance feedback as they dealt with classroom disorienting dilemmas or other situations from a reflective perspective, possibly experiencing positive personal transformation as teachers in the process.

The idea of reflection in teaching originated with the use of the scientific method to analyze how people think and learn (Dewey, 1933). Van Manen (1977) was a pioneer of reflectivity who by 1991 became particularly interested in the application of reflectivity to pedagogy. Within his seminal works, Schon (1983, 1987) popularized the notion of reflective practice by criticizing the portrayal of teachers as technicians and replacing this view with the concept of teachers as committed, autonomous decision-makers, i.e., "reflective practitioners" who continually learn from and reconstruct experience through reflection. The concept of reflective teacher education was advanced by Smyth (1992), Valli (1997), Hutchinson and Allen (1997), Larrivee (2008a), and

Broyles, Epler, and Waknine (2011). There is a strong research base for the implementation of reflective teacher education (Brownell, Ross, Colon, & McCallum, 2005; Middleton, Abrams, & Scaman, 2011; Valli & Rennert-Ariev, 2000).

Journaling, the act of recording one's experience, is not new. It began in the schools as a technique for improving student writing but has evolved over the years into a medium through which student understanding of concepts can be ascertained, reflection and critical thinking can be encouraged, and connections between theory and practice can be made (King & LaRocco, 2006). There is strong evidence in the research literature that a structured approach to the teaching of reflective writing that targets and scaffolds student learning of reflective skills is beneficial for preservice teachers (Hume, 2009). Reflective journaling, either via paper and pen or electronic journaling (e-journaling), can lead to positive changes in performance by preservice teachers during field-based experiences (LaBelle & Belknap, 2016). Garmon (2001) asserted that there are two types of reflective journaling: (a) response reflective journaling (preservice teachers reflect independently from teacher educators with only rare feedback given to them) and (b) dialogue (now called dialogic) reflective journaling (preservice teachers engage in written discourse with teacher educators for an extended period of time). When e-journaling is the mode of dialogic reflective journaling rather than paper and pen, students quickly learn to appreciate the more immediate performance feedback to journal entries that is possible via e-mail (Banker, 2004). O'Connell and Dyment (2011) reviewed over 75 articles on dialogic reflective journaling and learned that for students and instructors, dialogic reflective journaling has benefits and challenges.

A gap in the literature exists with regard to a specific focus on dialogic reflective e-journaling in terms of preservice teachers involved in a special education field-based experience in the schools the Fall semester of their senior year prior to student teaching in the Spring. This study was designed to fill this gap in the literature.

#### **CHAPTER III**

#### **METHODOLOGY**

The aim of this study was to explore the use of dialogic reflective e-journaling in addressing undergraduate special education preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective, possibly experiencing as teachers a positive personal transformation via transformational learning. The four research questions that guided this study were as follows:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

This chapter delineates the research design, population and sample, data collection, data analysis procedures, and limitations of this study. A summary of this content then concludes this methodology chapter.

## **Research Design**

All research methodology can be classified as either (a) quantitative, (b) qualitative, or (c) mixed methods, a hybrid of quantitative and qualitative methodology (Roberts, 2010). A qualitative research methodology was chosen for this study.

## Rationale for Use of Qualitative Research Methodology

Qualitative research is a process by which descriptive analysis is used to reason from the specific situation to a general conclusion (Wiersma & Jurs, 2009). According to Roberts (2010), the qualitative approach to methodology is based on the philosophical orientation called phenomenology which centers upon people's experience from their perspective; that is, qualitative researchers look at the essential nature of something, not quantity as is done with quantitative research. Creswell (2013) described eight common characteristics of qualitative research: (a) natural setting (data is collected at the site where study participants experience the issue or problem under study), (b) researcher as key instrument (qualitative researchers collect data through examining documents, observing behavior, interviewing study participants, or using self-developed questionnaires- instruments developed by other researchers are not usually relied upon), (c) multiple methods (qualitative researchers typically gather multiple forms of data rather than having a single data source and then organize the data into categories and themes that cut across all data sources), (d) complex reasoning through inductive and deductive logic (qualitative researchers use an inductive process to build categories from the "bottom up" by organizing the data inductively while also using deductive thinking to build themes that are constantly being checked against the data), (e) participant meanings

(qualitative researchers focus on learning the meaning that the study participants hold about the issue or problem), (f) emergent design (the initial plan for research cannot be tightly prescribed as phases of the process may change or shift after qualitative researchers begin to collect data), (g) reflexivity (qualitative researchers "position themselves" in the study; that is, they convey their background, explaining how this informs their interpretation of the study and noting what they have to gain from the study and (h) holistic account (qualitative researchers report multiple perspectives, identifying the many factors involved in a situation, and generally sketch the larger picture that emerges without being bound by tight cause-and-effect relationships among factors; rather, the complex interactions of factors are identified). As the present study met all eight parameters of qualitative research as delineated by Creswell, qualitative methodology was used.

# Rationale for Qualitative Research Genre: Participatory Action Research (PAR)

Qualitative research is an umbrella term that refers to several research genres within qualitative methodology (Roberts, 2010). As this researcher participated in the study alongside special education preservice teachers via e-journaling with them from a dialogic standpoint and addressing their ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective, this study constituted the qualitative research genre of participatory action research (PAR). Four undergraduate special education preservice teachers enrolled at a large southeastern public university in the United States were study participants. All were enrolled in their third field-based

experience in the schools Fall semester of their senior year prior to student teaching in the Spring.

According to McIntyre (2003), "PAR is a useful approach for linking theory and practice, teaching and learning, and reflection and action in a teacher preparation program" (p. 28). It is a type of action research; that is, it is "change research" that entails a nonlinear, recursive, and cyclical process designed to achieve tangible change in a specific situation, context, or work setting in order to improve teaching and learning by inquiring about problems and taking action to solve them (Pine, 2010). Christie et al. (2015) maintained that the spiral process of action research encompasses planning, acting, observing, analyzing, and then evaluating. Langerock (2000) pointed out that in action research, important events that indicate need for change consideration are termed "critical incidents."

Researchers and practitioners work together in participatory forms of research such as PAR (Draper et al., 2011). According to McIntyre (2008), participatory action research (PAR) constitutes a unique social relationship between the researchers and practitioners as the researchers participate in the study with the practitioners, making everyone a study participant with a valued voice and an equal stake in the PAR project or study. Reason (1993) asserted that all such participants are actually co-researchers. McIntyre further emphasized that participatory action research embodies a dialectical process of investigation that results in "aha' moments due to self-scrutiny as well as collective scrutiny. Bruce (2010) emphasized that within special education teacher preparation programs, participatory action research is often used to facilitate the

transformation of preservice teachers into reflective practitioners. She contended that "teacher excellence and teacher retention may be supported through the preparation of reflective practitioners who have developed an inquiry stance" (p. 58).

## **Population and Sample**

This study was conducted with a sample of four undergraduate special education preservice teachers drawn from the population of students at a large southeastern public university in the United States. This researcher engaged in dialogic reflective e-journaling with the study participants, providing performance feedback to them. The special education preservice teacher participants were not evaluated in any way in terms of their study participation as such assessment inhibits honest reflection (Lyster & Wormnaes, 2008). This was a purposeful sampling; that is, the sample was selected to meet the purpose of the research (Wiersma & Jurs, 2009). Creswell (2013) asserted that while a probability sample permits a researcher to ascertain statistical inferences to a population, "it is a purposeful sample that will intentionally sample a group of people that can best inform the researcher about the research problem under examination" (p. 147). Wiersma and Jurs (2009) pointed out that the rationale behind the use of purposeful sampling is based upon the attainment of information-rich data that can be studied in depth without the assumption that members of the sample are equivalent data sources; rather, those selected are all believed to be information-rich study participants.

### **Background Information of Study Participants**

The purposeful sample for this study consisted of four undergraduate special education preservice teachers at a large southeastern public university in the United

States. Two of the preservice teachers were majoring in Special Education: General Curriculum (K-12) while the other two were dual majoring in Elementary Education (K-6) and Special Education: General Curriculum (K-12). All of the preservice teachers were enrolled in their third field-based experience in the schools (special education placement for all participants) which took place the Fall semester of the preservice teachers' senior year prior to student teaching in the Spring.

Special education: General curriculum major. Preservice teachers enrolled in this major are required to complete a total of 127 semester hours including academic concentration requirements as well as a minimum of 52 professional program semester hours in addition to teacher licensure requirements, i.e., three field-based experiences and student teaching. Not only do they acquire knowledge of students with high incidence disabilities, they learn to deliver effective instructional strategies and interventions to work with high incidence disabilities in the general curriculum, develop appropriate classroom management skills and behavioral interventions, implement formal and informal assessment methods, and demonstrate effective communication and collaboration skills with families, colleagues, and professionals. These preservice teachers are further prepared to work with school-age learners with high incidence disabilities through an emphasis upon the following: (a) supportive and positive culturally competent interactions with parent and families of individuals with disabilities, (b) interprofessional collaboration, (c) student and family support for transitions, (d) assistive and instructional technology applications, and (e) positive support for behavior.

Elementary education and special education: General curriculum dual major. Preservice teachers enrolled in this dual major are required to complete a total of 127 semester hours which include four field-based experiences as well as student teaching. In student teaching and seminar, they spend ten weeks in an elementary education setting that enrolls students with disabilities and six weeks in a secondary special education setting. These preservice teachers are required to complete the following: (a) general education (i.e., liberal arts) requirements, (b) coursework required for licensure by the state, (c) coursework from the special education major needed to learn best practices for teaching students with high incidence disabilities (K-12), and (d) elementary education (K-6) coursework needed to learn best practices for effective instruction with the state standard course of study. Through their specialized coursework, they learn to (a) be knowledgeable of students with high incidence disabilities, (b) implement effective teaching strategies and interventions for working with students with high incidence disabilities in the general curriculum, (c) develop appropriate classroom management skills and behavioral interventions, (d) conduct informal and formal assessments, and (e) demonstrate effective communication and collaboration skills with families, colleagues, and other professionals.

# Pilot Study of Initial Interview and Final Questionnaire Questions via the Delphi Process

Initial interview and final questionnaire questions to be used in this study were piloted via the Delphi process, a group communication technique involving a panel of experts providing controlled feedback with no face-to-face interaction among the panel members themselves (Wiersma & Jurs, 2009). Three former doctoral students from the

university well-versed in qualitative research were recruited to serve as experts. Proposed initial interview and final questionnaire questions were e-mailed to them by this researcher with the request to review the questions and give written feedback via an e-mail response. This researcher then perused the provided written feedback and integrated selected suggestions into the finalized interview and questionnaire questions to be used in this study.

## **Recruitment of Study Participants**

Upon doctoral committee approval of the dissertation proposal, this researcher submitted an application to the Institutional Review Board (IRB) of the university from which study participants would be drawn. The purpose of an IRB is to review and consider approval of university research proposals as well as to maintain study participant protection in terms of ethical issues and confidentiality (Roberts, 2010).

Upon IRB approval, this researcher first conducted a study participant recruitment (with the instructing professor's permission) at the seminar class for special education: general curriculum majors who were enrolled in a special education field-based experience. Two study participants were derived from this effort. This researcher then conducted a second study participant recruitment (with the instructing professor's permission) at the seminar class for elementary education and special education: general curriculum dual majors who were also enrolled in a special education field-based experience. This second recruitment yielded two more study participants.

At both recruitments, the instructing professor introduced this researcher who greeted the class and exited. The study was then described to the preservice teachers by a

departmental graduate assistant with any questions answered. Next, the graduate assistant reviewed the university IRB "Consent to Act as a Human Participant" form and distributed this to any preservice teachers interested in participating in the study to obtain from them signed consent to be part of the research sample. The study commenced once the two preservice teachers from the first recruitment gave consent to participate. One of these students completed eight weeks of participation as she went to her field placement over Fall Break and the other student completed seven weeks of participation as she did not go to her field placement over Fall Break. Two weeks later, the two preservice teachers from the second recruitment joined the study upon their consent to participate (see Table 1).

Table 1
E-Journaling Participation

	Week of							
Participant	Sept.	Oct.	Oct. 10	Oct. 17	Oct. 24	Oct. 31	Nov.	Nov. 14
Vanessa	*	*	*	*	*	*	*	*
Amy	*	*	*	FB	*	*	*	*
Kim			*	*	*	*	*	*
Lisa			*	FB	*	*	*	NES

Note. \* = E-journaling Entry Submitted; FB = Fall Break; NES = No Entry Submitted

One of these students completed six weeks of participation as she also went to her field placement over Fall Break while the other student completed only four weeks of participation as she did not go to her field placement over Fall Break nor did she submit an e-journaling entry for the last week of the study which was the week before the university Thanksgiving break. Study participant pseudonyms are "Vanessa," "Amy," "Kim," and "Lisa."

#### **Data Collection**

Data collection may be interactive or noninteractive; that is, interactive collection involves the researcher interacting with study participants while noninteractive collection is done without such contact (Wiersma & Jurs, 2009). For this study, triangulation (use of a variety of methods to collect data) was employed since this reduces the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013). Data were triangulated through three data sources: initial interviews (interactive collection), documentation of dialogic reflective e-journaling done between this researcher and study participants (interactive collection), and a final researcher-developed questionnaire (noninteractive collection). Use of pseudonyms were used in terms of the first two data sources, that of initial interviews and dialogic reflective e-journaling documentation. A master list was kept of the pseudonyms and stored separately from the data in a different file drawer of a locked file cabinet in the office of this study's faculty advisor. In terms of the third data source, the preservice teachers were asked to complete the final questionnaire anonymously to reduce the risk of bias; that is, allaying the possibility of participants answering questions in such a way to please this researcher with whom they had developed a relationship during the course of the study.

Initial interviews were audiotaped with study participant permission and erased once they were transcribed for later analysis. Data collected electronically (e-journaling)

was printed by this researcher and then immediately deleted from the utilized university e-mail account. The final questionnaire was e-mailed to the study participants who were instructed to print it off to complete by hand and then mail it to this researcher's faculty advisor with no identifying information given. Upon receipt of the questionnaires, the faculty advisor gave them to this researcher for eventual data analysis.

#### **Data Sources**

### **Initial Interviews**

Soon after study participants' consents were obtained, this researcher met individually on campus with each participant to conduct an initial semi-structured interview. The initial interview questions were designed to ascertain the special education preservice teachers' perceptions of their own strengths and weaknesses and level of teacher self-efficacy in terms of teaching as well as their present level of familiarity with the components of teacher reflection and transformative learning as they began their third field-based experience in the schools the Fall semester prior to student teaching in the Spring.

### **Dialogic Reflective E-Journaling Documentation**

For their field-based experience, the participant special education preservice teachers were placed in the schools all day on Monday as well as Wednesday morning of each week, attending a weekly seminar led by their course professor on Wednesday afternoon. As part of this study, participant preservice teachers were required to individually e-journal once a week with this researcher. There was no set limit as to the

number of e-journaling back-and-forth exchanges within each single weekly preservice teacher contact with this researcher.

Specifics concerning the e-journaling. The participant special education preservice teachers initiated the individual weekly contact with this researcher, describing a classroom disorienting dilemma or other situation they had encountered during their field-based experience. This researcher then facilitated the growth of the preservice teachers into reflective practitioners; that is, teachers who continually learn from and reconstruct experiences through reflection (Schon, 1983, 1987), seeking solutions when faced with classroom difficulties, rather than giving up (Valli, 1997). This facilitation was done in two ways: (a) this researcher encouraged the preservice teachers to adopt what Dewey (1933) espoused as three attitudes required in the process of reflective thinking: open-mindedness (being open to other points of view and willing to change one's point of view), responsibility (taking ownership for the consequences of one's actions), and wholeheartedness (thoroughly committing oneself to seeking better solutions to perplexing concerns and (b) this researcher promoted critical reflection by the preservice teachers as purported by van Manen (1991): the teachers learned to reflect upon their classroom disorienting dilemma or other situation by considering what occurred before the disorienting dilemma or other situation, what they did or should have done in light of the disorienting dilemma or other situation, and what they might do next in terms of the situation at hand. According to van Manen, this critical reflection perpetuates "mindfulness"; that is, thoughtful, tactful action that is "thinkingly attentive" while "living the pedagogical moment" (p. 516). In 1995, van Manen further maintained

that "good teachers 'thinkingly act' and often do things with immediate insight" (p. 36). If no classroom disorienting dilemma or other situation occurred during a week, the study participants were directed to reflect upon an encountered positive experience, noting why success was obtained.

Through assistance from this researcher in processing the classroom disorienting dilemma or other situation from a reflective perspective, the participant special education preservice teachers could possibly experience a positive personal transformation as educators via transformational learning (Mezirow, 1991). Near the end of the study, this researcher introduced the concept of transformational learning via e-journaling to the study participants so that the preservice teachers could contemplate which, if any, of the following phases of transformational learning they may have gone through during their field-based experience in the schools (according to Mezirow, a person does not have to experience all phases or experience them in a set order to achieve a perspective transformation): (a) Phase 1 – a disorienting dilemma; (b) Phase 2 – a self-examination with feelings of guilt or shame; (c) Phase 3 – critical assessment of one's own assumptions; (d) Phase 4 – recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change; (e) Phase 5 – exploration of options for new roles, relationships, and actions; (f) Phase 6 – planning a course of action; (g) Phase 7 – acquisition of knowledge and skills for implementing one's plans; (h) Phase 8 – provisional trying of new roles; (i) Phase 9 – altering present relationships and forging new relationships; (j) Phase 10 – building of competence and self-confidence in new roles and relationships; and (k) Phase 11 – a perspective change.

Final researcher-developed questionnaire. At the end of the study, study participants anonymously completed a researcher-developed questionnaire consisting of open-ended questions about the impact of dialogic reflective e-journaling on them in terms of benefits and/or challenges, the influence of critical reflection upon their classroom decision-making, and their possible positive personal transformation as teachers in the process. The questionnaire was completed anonymously to reduce the risk of bias in terms of the study participants answering questions in such a way to please this researcher with whom they had developed a positive relationship during the course of the study.

### **Data Analysis**

According to Creswell (2013), data analysis can be a challenging task for qualitative researchers as it involves (a) organizing study data (in order to manage it), (b) conducting a preliminary read-through of the database (writing memos during this stage of the research process; that is, short phrases, ideas, or key concepts that occur to the researcher), (c) coding (grouping gathered information into categories, seeking evidence for the code from different data, and then assigning a label to the code), (d) organizing themes (extrapolating broad units of information that consist of several codes that form a common idea), (e) interpreting the data (moving beyond the codes and themes to extract a larger meaning of the data) and (f) representing and visualizing the data (packaging what was found in figures, text, or tables). Wiersma and Jurs (2009) noted that data collection and data analysis usually run together with considerable overlap. They asserted that early data collection may suggest a category or theme and then later data may support, refute,

or extend the researcher's initial thinking. Indeed, Wiersma and Jurs contended, "all in all, analysis in qualitative research is a process of successive approximations toward an accurate description and interpretation of the phenomenon" (p. 237). Creswell suggested that the qualitative researcher hence engages in a process of moving in analytic circles in lieu of implementing a fixed linear approach to data analysis.

The hallmark of qualitative data analysis lies in its focus upon thick description.

According to Weirsma and Jurs (2009), such thick description lends thoughtful interpretation because the qualitative researcher goes "behind the scenes" to elucidate the underlying dynamics of situations being studied.

### Content Analysis: The Specific Data Analysis Used in This Study

Stake (1995) declared that data analysis is "a matter of giving meaning to first impressions as well as to final compilations" (p. 71). Meaning of collected data for this study (yielding answered research questions) was derived via content analysis, a categorizing data analysis strategy (Maxwell, 2013) that entails the subjective interpretation of the content of text data through coding and subsequent identification of themes (Hsieh & Shannon, 2005). Data collected via this study through three data sources (initial individual interviews, documentation of dialogic reflective e-journaling done between this researcher and study participants, and a final researcher-developed questionnaire anonymously completed by the participants) were subjected to such content analysis. A frequency table was also created to chart comments made by study participants that reflected derived themes/subthemes in order to delineate the frequency of these aligned statements.

Since qualitative research often produces large quantities of information from obtained data sources, this information needs to be organized and then reduced via the coding process (Schreier, 2012; Wiersma & Jurs, 2009). According to Creswell (2013), the process of coding involves aggregating text or visual data into small categories of information and assigning labels to them. Chenail (2012) noted that qualitative data analysis codes are both denotative and connotative; that is, the information is defined in terms of how it is "literally" used in the data (i.e., denotation) and then associated to other data around it (i.e., connotation). According to Saldaña (2016), a code "represents and captures a datum's primary content and essence" (p. 4).

Coding can be inductive (coming from the data) or deductive (coming from other sources such as theory or prior research) in terms of content analysis (Ravitch & Carl, 2016). Additionally, a variety of coding methods can be utilized, depending upon the nature of one's research questions and the type of data sources (Saldaña, 2016). An inductive approach to coding is used via a descriptive method; that is, the primary topic of each datum excerpt is summarized in researcher-created words or phrases (Ravitch & Carl, 2016; Saldaña, 2016).

Once coding is completed, the process of attaining themes will begin. This process consists of grouping several codes together to form a common idea (Creswell, 2013). Ravitch and Carl (2016) asserted that as researchers analyze coded data to develop themes, they should refine and revise the themes as needed, rereading the whole data set to ascertain if derived themes accurately reflect the data. Theories emerge with help from memoing, the writing down of ideas by the researcher as coding is being done (Creswell,

2013). Miles, Huberman, and Saldaña (2014) stressed that such memos serve an additional analytic function as they are not just descriptive summaries of data; rather, they represent an attempt to synthesize data into higher level analytic meanings as occurring thoughts are captured throughout the coding process. This researcher applied the above principles to attain themes/subthemes from the data of this study.

## Validity

Validity is the degree to which one's data sources truly measure what they purport to to measure so that research findings can be trusted (C. M. Roberts, 2010). In terms of this study, validity was addressed in two ways. First, triangulation (use of a variety of methods to collect data) was employed since this reduces the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013). Data were triangulated through the following three data sources: (a) initial individual interviews, (b) documentation of dialogic reflective journaling done between this researcher and study participants, and (c) a final researcher-developed questionnaire. Second, respondent validation was done via two member checks by soliciting feedback from study participants (C. M. Roberts, 2010) on themes/subthemes derived from the documentation of dialogic reflective e-journaling in terms of research question #1 as well as research question #2.

### Reliability

Reliability refers to consistency of research and the extent to which a study can be replicated. Internal reliability refers to the extent that data collection, analysis, and interpretations are consistent given the same conditions (Wiersma & Jurs, 2009). In terms

of this study, data analysis reliability will be addressed through the utilization of a second reader for interrater reliability.

### Limitations

There are several limitations to this qualitative study. First, the purposeful sample of undergraduate special education preservice teachers is small and not generalizable to other preservice teachers during their field-based experience in the schools. Second, a risk of bias exists (Creswell, 2013) as this researcher (a) will serve as a participant in this participatory action research study, (b) has extensive experience as a special education teacher, and (c) has been a university supervisor of other preservice teachers at the same university as the preservice teachers in the study sample. Third, regarding interviews, there is risk of influence in terms of reactivity; that is, impact on the study setting or participants (Maxwell, 2013). For example, will this researcher refrain from asking leading questions? Finally, further research is needed to move from supposition to certainty in terms of whether the additional support of dialogic reflective e-journaling will positively influence the preservice teachers' level of success in their student teaching experience as well as their level of success and retention in the challenging field of special education as future special education teachers.

### **Summary**

The aim of this study was to explore the use of dialogic reflective e-journaling in addressing undergraduate special education preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective, possibly

experiencing as teachers a positive personal transformation via transformational learning.

The following four research questions guided this study:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

A qualitative research methodology was chosen for this study as it met all eight parameters of qualitative research as delineated by Creswell (2013). As this researcher participated in the study alongside special education preservice teachers via e-journaling with them from a dialogic standpoint, this study constituted the qualitative research genre of participatory action research (PAR).

This study was conducted with a sample of undergraduate special education preservice teachers drawn from the population of students at a large southeastern public university in the United States. This was purposeful sampling; that is, the sample was selected to meet the purpose of the research (Wiersma & Jurs, 2009). The purposeful sample for this study consisted of four undergraduate special education preservice

teachers, two of which were majoring in Special Education: General Curriculum (K-12) with the other two enrolled in a dual major of Elementary Education (K-6) and Special Education: General Curriculum (K-12).

Once this researcher's dissertation proposal was approved by the doctoral committee, an application concerning the proposed study was submitted to the Institutional Review Board (IRB) of the university from which study participants were drawn. Upon IRB approval, two study participant recruitments were done via visiting (with the instructing professor's permission) the seminar courses on campus that aligned with the preservice teachers' field-based experience in the schools. After study participants were secured, the study commenced and continued up through the week before the university Thanksgiving break.

In terms of data collection, study data was triangulated through three data sources. These sources included initial individual interviews (interactive collection), documentation of dialogic reflective e-journaling done between this researcher and study participants (interactive collection) and a final researcher-developed questionnaire (noninteractive collection). Initial and final questionnaire questions were piloted via the Delphi process, a group communication technique involving a panel of experts providing controlled feedback with no face-to-face interaction among the panel members themselves (Wiersma & Jurs, 2009). Three former doctoral students from the university well-versed in qualitative research were recruited to serve as experts, providing feedback to this researcher on proposed initial interview and final questionnaire questions.

Data analysis for this study (the giving of meaning to collected data to yield answered research questions) was derived via content analysis, a categorizing data analysis strategy (Maxwell, 2013). Data derived from the three sources were organized and then reduced by a coding process. An inductive approach to coding was used via a descriptive method; that is, the primary topic of each datum excerpt was summarized in researcher-created words or phrases (Ravitch & Carl, 2016; Saldaña, 2016). Once coding was completed, the process of attaining themes began. This process consisted of grouping several codes together to form a common idea (Creswell, 2013). Themes emerged with help from memoing, the writing down of ideas by the researcher as coding proceeded (Creswell, 2013).

Study validity was addressed through triangulation and member checks. Data analysis reliability was addressed through the use of a second reader for interrater reliability. Limitations to this study included (a) a small, purposeful, nongeneralizable participant sample, (b) a risk of researcher bias, (c) regarding interviews, a risk of influence by this researcher in terms of reactivity, and (d) need for further research to move from supposition to certainty in terms of whether the additional support of dialogic reflective e-journaling will positively influence the preservice teachers' level of success in their upcoming student teaching experience as well as their level of success and retention in the challenging field of special education as future special education teachers.

#### **CHAPTER IV**

### **RESULTS**

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). This study was designed to focus upon this concern via examining how dialogic electronic journaling (e-journaling) between this researcher (a doctoral student with special education teaching experience) and undergraduate preservice teachers involved in a special education field-based experience in the schools addressed their critical reflection in classroom decision-making as well as their transformative learning the Fall semester of their senior year prior to student teaching in the Spring. The specific purpose of this study was to explore the use of dialogic e-journaling in addressing the preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based placement, possibly experiencing positive personal transformation as teachers in the process. According to Mezirow (1978b, 1991, 1995), a disorienting dilemma is a predicament that may instigate an eventual positive transformation within an individual. Maintaining a reflective perspective enables a teacher to deal consciously and effectively with inevitable classroom dilemmas (Larrivee, 2008b). Valli (1997) asserted that this skill must be acquired at the preservice teacher level as it cannot be taken for granted that preservice

teachers will become reflective practitioners once they are in the field and gain experience.

Four research questions guided this study:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

For this study, triangulation (use of a variety of methods to collect data) was employed since this reduces the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013). Data were triangulated through three data sources: initial interviews, documentation of dialogic reflective e-journaling between this researcher and study participants, and a final researcher-developed questionnaire which the four undergraduate special education preservice teachers completed anonymously to reduce the possibility of bias; that is, answering questions in such a way to please this researcher with whom they had developed a relationship during this study.

The structure of this chapter is as follows. First, in-depth descriptions of study participants are given as drawn from the initial interviews. Next, content analysis of data is delineated with emerging themes and subthemes displayed on frequency charts as applicable. A summary then concludes this chapter.

## **Study Participants**

The purposeful sample for this study consisted of four undergraduate special education preservice teachers enrolled in their third field-based experience in the schools which took place the Fall semester of the preservice teachers' senior year prior to student teaching in the Spring. Once study participants consented to be in this study, this researcher met individually on campus with them to conduct an initial semi-structured interview. The initial interview questions were designed to ascertain the special education preservice teachers' perceptions of their own strengths and weaknesses and level of teacher self-efficacy in terms of teaching as well as their present level of familiarity with the components of teacher reflection and transformative learning as they began their third field-based experience in the schools. Pseudonyms assigned to the four participants for the purpose of this study were as follows: "Vanessa," "Amy," "Kim," and "Lisa."

### **Data Derived from Initial Interviews**

Vanessa. Vanessa is a 21-year-old undergraduate senior majoring in Special Education: General Curriculum (K-12). Her field-based experience for the duration of this study was in a seventh-grade middle school resource setting where she taught two classes of math and two classes of language arts. She worked with about 25 students on a daily basis. Vanessa noted that her upcoming student teaching placement will be in a K-5

resource setting doing pull-out and some inclusion. This is the exact setting she hopes for when she graduates when she begins her career as a special education teacher. Future plans include eventually earning her master's degree and doctorate as well as teaching abroad.

Vanessa noted that she decided to become a special education teacher for three reasons: (a) her best friend growing up had Down syndrome (sadly, this friend passed away before she finished high school), (b) she herself was diagnosed as dyslexic at age 8 (she received beneficial resource services), and (c) she is grateful to the teachers who helped her succeed in school and wishes to "give back" by becoming a teacher herself. In terms of her feelings concerning the field of special education, Vanessa shared that although she feels that special education has come a long way, she believes that there are three areas in need of improvement: (a) there continues to be a lack of understanding by some people over the motivation of special education in terms of the need for modifications and accommodations for certain students, (b) collaboration between special education and general education could be better, and (c) more efficacious preservice teacher preparation is needed.

Vanessa noted that performance feedback given to her from her university supervisor or cooperating teachers has helped her realize that she needs to be confident in her natural leadership and instructional ability. She needs to remember that she is capable of commendable teaching skills.

Vanessa shared the following concerning her own view of her present strengths and weaknesses:

Some of my strengths as a preservice special education teacher include my eagerness to keep my students motivated and engaged as well as finding innovative ways to teach course materials while still providing appropriate scaffold for students. Since I've always been a leader my whole life, speaking to a large group of students or administrators is something I don't find intimidating or scary—I love getting to collaborate with people around the ideals of special education and working to find new innovative and effective ways to present material to students requiring specialized education services.

My biggest weakness as a teacher is that since I am extremely passionate about creating a safe and innovative environment for my students and give my 135%, being able to sustain this kind of effort is very hard. I have had to learn that it's great to give your 135%, but that the only way you can be effective as a teacher is sometimes giving 95% or 100% and that is all okay.

According to Vanessa, being a reflective teacher means that a teacher is constantly in the mode of reflection upon his/her teaching by considering what is working and then planning for the next lesson. She noted that the concept of being a reflective teacher was briefly touched upon last semester in terms of a field placement reflective writing assignment. To Vanessa, daily reflections, collaborative lesson observations, and journaling are all reflective exercises.

When asked about her usual response when confronted with a disorienting dilemma or other situation when teaching, Vanessa replied that she takes a calm stance to defuse things, being very careful with specific wording of any directives she makes for the safety of herself and those around her.

Vanessa was then questioned about her familiarity with the components of transformative learning as well as electronic journaling (e-journaling). She noted that she had only recently heard of transformative learning; thus, she was not fully aware of its components. In terms of e-journaling, Vanessa explained that the closest experience she

has had to e-journaling was writing her own reflective activity logs during her field placements which she submitted electronically to her seminar professor at the end of each semester (there was no dialogical exchange).

Finally, Vanessa described her present overall level of teacher self-efficacy in terms of teaching in this way:

As a teacher, I feel as though I have become more confident through my series of field placements over the last three years. I have definitely seen changes in not only my approach to teaching but also in my confidence as a teacher. I believe that my confidence as a teacher has not only impacted my own self-confidence as a person but also has affected my passion of continuing to pursue this career after being told time and time again that being a teacher might not be the best career for me because I am "too smart" to waste my time.

Amy. Amy is a 26-year-old undergraduate senior majoring in Special Education: General Curriculum (K-12). Her field-based experience for the duration of this study was at the high school level where she taught Math inclusion for the first two blocks of the day. Following the first two blocks of the day, she then worked with a resource teacher for one block, serving ninth through 12th graders all in one classroom. Amy noted that she would like to work with a resource teacher for her student teaching placement in the Spring. Although she initially thought she wanted to student teach at the elementary level, she shared that after beginning her present high school field-based experience, she had surprisingly discovered that she really liked the high school level. In terms her job preference upon graduation, Amy explained that she would like to start off as a special education resource teacher at the elementary or secondary level, eventually becoming a program facilitator in the future.

Amy noted that she decided to become a special education teacher after serving as an assistant at an elementary school. She had the opportunity to work with the EC population and starting really enjoying working with children with special needs. This piqued her interest in special education. In terms of her feelings concerning the field of special education, Amy shared that she feels that the field has evolved for the better. At first, she was unsure about how inclusion was working but since seeing it work well in the schools when it is properly implemented, she now believes that inclusion helps not only the students with special needs who are being included but also the general population as these students learn to be more accepting of differences.

Amy stated that she appreciates any performance feedback given to her from her university supervisor or cooperating teacher as she is all about "growth mindset." She noted that she finds information or feedback about such things as lesson plans to be beneficial as in her opinion, the only way preservice teachers grow as teachers is to get such feedback and implement needed changes.

Amy shared the following concerning her own view of her present strengths and weaknesses:

My strength is that I do care about my students and I do think it is very important to create a relationship with my students. I am very . . . I think it is very important to implement rigor and I am a firm believer in that and I do consider that a strength because you always should overestimate rather than underestimate a student.

My weaknesses . . . would say consist of . . . sometimes I doubt myself when I'm teaching and I think that one of my problems is I do compare myself to others. I'm like, "Man, I like how she does that" but I don't know how to perform that way. I also find classroom management to be hard at times. I think those are the main ones.

According to Amy, being a reflective teacher may relate to the concept of "growth mindset"; that is, teachers taking feedback in order to grow as practitioners. She noted that none of her university classes have been dedicated to reflection.

When asked about her usual response when confronted with a disorienting dilemma or other situation when teaching, Amy replied that she always tries first to figure out what to do on her own via at least two intervention methods as needed. (If the first intervention method doesn't work, then she tries to rectify the situation at hand with the second intervention.) If the second intervention method doesn't work, she noted that she will seek help via internet research or consulting with her cooperating teacher who knows the students and can give her personalized feedback about them.

Amy was then questioned about her familiarity with the components of transformative learning as well as electronic journaling (e-journaling). She shared that she is not familiar with transformative learning. She then explained that although she has never engaged in e-journaling before, she has been exposed to discussion boards where class members reply to each other's comments and opinions on a course topic.

Finally, Amy described her present overall level of teacher self-efficacy in terms of teaching in this way:

When I'm in the classroom, I feel very confident when I am actually teaching. Where I feel like I lack confidence is for some reason when I am in the class [university seminar connected to field-based experience]. It's like I don't feel like I am in my comfort zone. Like I said, it's the studying part where I lack a little bit. Nobody else is from my background (that is, being Mexican- I was born here in the U.S. but my parents and some other family members were born in Mexico) and people don't understand my perspective. Sometimes, I feel like I don't fit in.

Kim. Kim is a 21-year-old undergraduate senior dual majoring in Elementary

Education (K-6) and Special Education: General Curriculum (K-12). Her field-based

experience for the duration of this study was in an all sixth-grade middle school where

she was assigned to one of the EC teachers. Kim taught Inclusion Math twice a day as

well as Inclusion English twice a day. During the school's "PAWS [Promoting

Achievement with Students] Time" (a time in the school day when students had 35

minutes to go to teacher for help with classwork or homework), she assisted her EC

teacher as she provided extra support to students in the resource room. Kim noted that her

upcoming student teaching placement will be in an elementary resource classroom for 6

weeks and then in a fourth-grade general education classroom for 10 weeks. She shared
that she is not sure yet what her job preference is upon graduation. She does know that
she prefers the upper elementary grade level in terms of both general education and
resource teaching.

Kim explained that she decided to become a special education teacher for three reasons: (a) her mother was a preschool teacher for quite some time so teaching kind of ran in the family, (b) her adopted little brother was diagnosed at 2 ½ years of age as having high-functioning ASD (Autism Spectrum Disorder), a diagnosis that challenged the family and impacted Kim's decision to seek dual certification in general education and special education in college (she was 15 years old at the time of her adopted brother's diagnosis), and (c) Kim was encouraged by a high school English teacher of hers to join the North Carolina Teacher Cadet Program as she had done an exceptional job with a class assignment to teach about a chapter from the course textbook to her English class

(as a North Carolina Teacher Cadet, she had the opportunity to teach lessons in a sixth-grade English classroom her junior year and in a third-grade classroom her senior year). In terms of her feelings concerning the field of special education, Kim shared that this field is definitely not for everybody as it requires a lot of patience, a love and passion for kids, and an understanding that kids with special needs are just like everyone else—they just have a different way around things.

Kim noted that performance feedback from her university supervisor and cooperating teacher is really important and helpful. In her opinion, it is really the only way to grow. Kim stated that she particularly leaned upon her cooperating teacher for performance feedback during her field-based experience.

When asked to share her strengths and weaknesses as a special education preservice teacher at this point in time, Kim replied as follows:

I'm going to start with a weakness but I'm going to call it an "area of improvement" because this is something I am working on this semester especially because I'm in my behavior class right now. I kind of wish we had this class sooner. It's really helping me with the whole behavior management aspect of teaching. I think that's especially a big component of special education like with behavior disorders and things like that. And you know that with students in general you have to do that. This semester in my internship, I am trying to pay more attention to behavior management and how my cooperating teacher knows things and how to think more about the actions I have been taking in terms of behavior management. In the past, I've noticed that this is something that I needed to work on so this is one of my main focuses I'm working on this semester.

In terms of my strengths, I think I've noticed like I've gotten pretty good at asking the students questions, asking them questions that are requiring [them] to think deeper. I've noticed that especially recently, I'm pretty good at asking those deeper critical thinking questions.

According to Kim, reflective teaching is something you do as you're teaching as well as after you're teaching (at the end of the school day). She noted that during the school day, it's that thinking in your head when you consider what to do to fix a lesson and after school, it's a little more like the big picture as one considers needed improvements. Kim stated that reflective teaching was talked about by her university supervisor and in seminar class. She further noted that this was something practiced via paper and pen journaling when in internships. She explained that she would handwrite some little notes about how the school day went and would turn these in to her seminar professor.

When asked about her usual response when confronted with a disorienting dilemma or other situation when teaching, Kim replied that she talks with her cooperating teacher. Additionally, she sometimes consults with her cohort friends who also are involved in a field-based experience.

Kim was then questioned about her familiarity with the components of transformative learning as well as electronic journaling (e-journaling). She noted that she was unfamiliar with transformative learning and had not had experience with e-journaling.

Finally, Kim described her present level of teacher self-efficacy in terms of teaching in this way: "I feel pretty confident. I feel prepared going into student teaching next semester."

**Lisa.** Lisa is a 23-year-old undergraduate senior dual majoring in Elementary Education (K-6) and Special Education: General Curriculum (K-12). Her field-based

experience for the duration of this study was in a seventh/eighth-grade middle school working alongside an English/Language Arts (ELA) resource/inclusion teacher, serving eighth graders. This teacher also provided seventh and eighth-grade "content support" which constituted the use of the Hill Reading Achievement Program (Hill RAP). Lisa's school day was composed of one planning time period and six teaching periods (one resource period, three content support periods, and two inclusion periods). Lisa noted that her upcoming student teaching placement will be in a second-grade general education classroom for 10 weeks followed by teaching resource and one math inclusion noted that she likes the K-2 level but also enjoys high schoolers. She is leaning, however, toward becoming a general education teacher at the K-2 level, doing her best to serve properly the children with special needs who are placed in her classroom.

Lisa shared that the main reason she decided to dual major in Elementary

Education (K-6) and Special Education: General Curriculum (K-12) was because her

brother (who is just 15 months older than she is) has ADHD. She noted that due to his

ADHD, she felt that he often was not treated fairly nor did he have the same

opportunities that she did when they were in school. In terms of her feelings concerning
the field of special education, Lisa stated that special education is a good thing yet needs
improvement as does general education. To her, all kids need help- not just kids who
have a disability.

Lisa noted that as a preservice teacher, she loves performance feedback. She explained that such feedback is extremely important as criticism is great. In her mind,

feedback enables a preservice teacher to grow by learning from the perspectives of others.

Lisa shared the following concerning her own view of her present strengths and weaknesses:

Let's just start with the weaknesses. So in my gen ed [general education] placement, I didn't have any exposure to IEPs [Individualized Education Programs]. I was told I wasn't supposed to when I was in gen ed. But now I get to see IEPs, helping my OSTE [On-Site Teacher Educator] write goals. As of right now, I think I still need to work on that. As a teacher, I need more exposure to IEPs and what they look like. I got to go to some meetings but I feel like I could always go to more. So I would say that's a weakness—my lack of knowledge of IEPs. Another weakness that I feel I have (not just as a special education teacher but as a teacher in general) is pacing. I think that this just might come with experience- when to move on and when not to move on and how to keep track of your time and instructing.

A strength I have is just rapport with students. I think students in general feel comfortable around me and I feel comfortable around them. So I think with students, this is really important. I think another strength of mine is to individualize. I take into account the student and who that student is as a person before anything else—disability, gender, age—whatever. Before anything else, they are a human being. And so, this is also probably another one of my strengths.

According to Lisa, being a reflective teacher means that you sit back and say this is what happened. She noted that she wanted to participate in this researcher's present doctoral study because it would involve critical reflection which she feels is extremely important.

When asked about her usual response when confronted with a disorienting dilemma or other situation when teaching, Lisa replied that this was a hard question. She noted that she just tries to calm the situation, thinking through what she should do rather than taking immediate action with no forethought. Her priority is to think how the student

feels as student needs are the heart of teaching. Lisa shared that disorienting situations probably happen more with kids with special needs. To her, it is best to react to the problem in a calm way that doesn't destroy the self-esteem of involved students.

Lisa was then questioned about her familiarity with the components of transformative learning as well as electronic journaling (e-journaling). She noted that she had heard of transformative learning and wondered if it referred to moving from one step to another. In terms of e-journaling, Lisa explained that she has done paper and pencil journaling but not e-journaling. She has journaled in a notebook about good or challenging experiences she encountered during her field placement.

Finally, Lisa described her present overall level of teacher self-efficacy in terms of teaching in this way:

I think I'm pretty confident. I think I'm pretty confident only because I know it's okay to fail. We tell that to our students all the time. I think as adults or as teachers, we forget it. I even tell my kids sometimes when I've done something wrong in front of them . . . like, "Oops . . . I said that wrong!" I don't think I'm the best teacher ever. I have room for improvement and I want to improve. I don't think I'm horrible either. I just feel that I'm comfortable in front of the kids.

## **Content Analysis of Data Related to Research Question 1**

For their field-based experience, the four participant undergraduate special education preservice teachers of this study were placed in the schools all day on Monday as well as Wednesday morning of each week, attending a weekly seminar led by their course professor on Wednesday afternoon. The four study participants were Vanessa, Amy, Kim, and Lisa (pseudonyms). As part of this study, they were required to individually e-journal once a week with this researcher in a dialogic (back and forth)

reflective manner, describing a classroom disorienting dilemma or other situation they had encountered during their field-based experience. If no classroom disorienting dilemma or other situation occurred during a week, the study participants were directed to reflect upon an encountered positive experience, noting why success was obtained. There was no set limit as to the number of e-journaling back-and-forth exchanges within each weekly preservice contact with this researcher.

The dialogic reflective e-journaling documentation was analyzed to answer this study's first research question: What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers? E-journaling done by the four study participants was carefully perused by this researcher. A special educator with teaching, facilitator, and research experience in the field of special education served as a second reader for this data analysis. Inter-rater reliability was assessed via determining the percentage of agreement between this researcher and the second reader in terms of derived themes and any subthemes. The percentage of agreement in terms of themes and subthemes for this study's first research question was 93%.

To answer Research Question 1, the following nine themes delineating classroom situations constituting disorienting dilemmas for one or more of the study participants were derived via content analysis: (a) behavior management, (b) concern over the social/emotional well-being of a student, (c) collaboration (two subthemes: collaboration with a parent and collaboration with co-workers), (d) instructional challenge, (e) preservice teacher's lack of content knowledge, (f) student health concern, (g)

implementation of the Individuals with Disabilities Education Act (IDEA), (h) dealing with specific disabilities (subtheme: choosing proper modifications for a student), and (i) quality of professional development. These emerging themes and subthemes are presented below. The four study participants were Vanessa, Amy, Kim, and Lisa (pseudonyms).

## **Behavior Management of Students**

Within their e-journaling, all four study participants cited classroom situations constituting disorienting dilemmas that involved the theme of behavior management of students. This theme was the most cited of the eight that emerged from the dialogic reflective e-journaling documentation.

Vanessa. Two of Vanessa's submitted e-journal entries entailed a classroom disorienting dilemma she encountered involving behavior management of students. She described one of the dilemmas in the following way:

The disorienting dilemma for me came when my teacher was trying to address another student's behavior outside of the classroom and a student got upset at me for not allowing them to come to the board to put up practice math problem from their daily math focus and then proceeded to get very angry and start throwing papers and pencils and proceeding to use his inappropriate mouth to express his anger towards me. I told him that this was not appropriate behavior and that this is not how we talk to anyone. He then continued to proceed using inappropriate behavior so I called for an administrator to escort him out of the classroom and deal with discipline issues.

**Amy.** Two of Amy's submitted e-journal entries also entailed a classroom disorienting dilemma she encountered involving behavior management of students. She described one of the dilemmas in this way:

I have an 11th-grade student who refuses to do any work. The regular education teacher and special education teacher, I feel, have given up on him completely because they don't even say anything to him anymore when he is off task. I approached this student to offer my help. This is the way I can usually get kids that are off task to refocus. Instead, this particular student just rolled his eye at me and said, "I am not stupid, you know?" as he turned around mocking me and once again to talk to his friends. I have little tolerance for disrespect and I let that get the best of me as I proceeded to tell him, "Well, Mr. Tommy (pseudonym), I do not recall me saying that you were stupid but your careless attitude—now that I can say is stupid. I cannot make you care but I will call you out on it. No need to get defensive with me when I have simply offered you help." His friends started laughing at him and while I knew I had set up a clear statement to make him realize that I was not going to put up with his disrespect, I felt like I fed into his game and thus made him respect me no more than what I had started with. The only response he had was "whatever" and just rolled his eyes at me once again. I walked away saying, "Well, I will move on to someone who actually does care. I'm not going to waste my time with your attitude."

**Lisa.** Within her e-journaling, Lisa cited two disorienting dilemmas involving the theme of behavior management of students. One of the dilemmas was described by her in this way:

There is one child on my OSTE's [On-Site Teacher Educator: cooperating teacher's] caseload that has ADHD and has an extremely hard time focusing, controlling his behaviors, and keeping his hands to himself (especially around the ladies). He is inclusion for both math and English, which is where I get to see him.

**Kim.** Kim's submitted e-journal entries mentioned three classroom disorienting dilemmas she encountered involving behavior management of students. She described one of the dilemmas as follows:

The dilemma I want to e-mail you about this week is specific to a student's behavior. I'll call this student Aron. The word I would use to describe Aron's behavior is impulsive. It appears to me that he acts and talks before thinking. I suspect he may be ADHD from my observations of his behavior (but I'm not an

expert, I may be wrong). He consistently speaks out of turn and he is always wanting to move around by getting out of his seat without permission. Although I don't like using this term (it's the only word I can think of right now), I would describe Aron to be sort of the "class clown." He does things for attention from his classmates and his teachers, even when I know he knows he shouldn't do it. Sometimes I sincerely think he's "acting dumb" to get the attention he wants, and it's distracting to the other students as what he says typically tends to confuse the other students. It's also frustrating to me as a teacher because I know he is smart and it's so frustrating to see him "act dumb." I apologize for the lack of a more professional description—it's a little hard for me to explain this behavior.

## Concern over the Social/Emotional Well-being of a Student

Three of the study participants e-journaled on the theme of concern over the social/emotional well-being of a student. Lisa and Kim twice shared a classroom disorienting dilemma concerning this and Amy once described an incident aligning with this concern. One journal entry on this theme per each of these three study participants is presented below.

Lisa: During my resource period, "Heath" apparently punched a locker in the hallway. My OSTE [On-Site Teacher Educator: cooperating teacher] was out there with him while I was in the class so I didn't see him. When he came in, he was really upset. Heath's desk is near the back of the room with duct tape around it. He has expressed this as a strategy to help him stay focused during a past meeting, but had suddenly changed his mind—he did not want to sit there. The highlight of the situation was that I took a chair and sat directly beside him and showed concern for his hand because it was bleeding, and allowed him to vent to me. I told Heath that he needed to start taking responsibility of himself and his anger. We had a short talk about ways to express our anger without violence (during this time, he told me he was starting anger management soon). He then actually started doing his work, acting interested in the assignment.

**Kim:** One of the students, I'll call her Jill, in my OSTE's [On-Site Teacher Educator: cooperating teacher's] homeroom class and first math resource class is currently in the process of being switched from resource to the OCS [Occupational Course of Study] program. When I spoke to my OSTE, she

said "It's basically a done deal." I think there's one more meeting that has to happen between the parents and the teachers, but it's pretty much sure to happen. So Wednesday morning, Jill and the other school resource teacher came into my OSTE's classroom (it was just me and her in the classroom at the time). Jill was sobbing. The other resource teacher explained that Jill wanted to give my OSTE a hug and talk to her. Apparently, Jill's mother told Jill about her switch the night before and the teachers didn't know the mom would tell her then. Anyways, Jill was very upset because she knew she would no longer be with her friends in her current classes or with the teachers that she has grown to like so much. It just broke my heart seeing Jill sob that day because she is such a sweet young lady and I felt so sad for her. My OSTE and the other resource teacher were trying to comfort her, saying that she can come visit them and her classmates all the time and that this was the best decision for her. They gave her hugs and gave her comfort.

**Amy:** I had a student who was getting stressed out with a timed computer math game. He was getting to the point where he was banging on the table. I went to him, we did a untimed inequality examples and we talked out how to solve the problems. We took keynotes on a notecard for him to use as a resource during his computer usage. By this time, he felt confident enough to try some of the timed examples.

#### Collaboration

Within their e-journaling, all four study participants cited disorienting dilemmas involving the theme of collaboration. Emerging subthemes for this theme included "collaboration with a parent" and "collaboration with a co-worker."

Kim described a disorienting dilemma involving the theme of collaboration with a subtheme of "collaboration with a parent" as follows:

This week, one of the disorienting dilemmas that has been on my mind has to do with a specific student—I'll call him Luke. So on Monday, I collected the homework of our first math class. I noticed that one of the students did NONE of the homework. I asked my OSTE [On-Site Teacher Educator: cooperating teacher] if this happens consistently and she said it does. She said she has tried various consequences like verbal warnings and lunch detentions. She tried to contact home, but has gotten no response. There is no other given contact for [the]

parents like e-mail, either. She has suspicion that there at problems at home for Luke. We talked with the school guidance counselor at lunchtime and she said she believes the family of Luke has around five kids total and struggles financially. Also, he is new to the school and new to the area, so I don't think we have immediate access to [the] previous teacher's contact information, but I'm not sure. Teachers have asked about why he hasn't done homework and have gotten responses like "my brother took it out of my backpack" and not much else of a response after that, according to the other EC [Exceptional Children's] teacher that he has class with. The other EC teacher said at lunch that she was able to get hold of the mother when she called once and she said exactly, "She (the mom) sounded high as a kite."

Vanessa, Amy, and Lisa described a disorienting dilemma involving the theme of collaboration with a subtheme of "collaboration with a co-worker." Here is what they had to say:

Vanessa: On Monday, my supervising teacher was absent so I was working beside her sub for the day. The fact that it was Monday and the students had a sub- they were acting upon many undesirable behaviors that would not have been allowed if my teacher was present. I tried my best, in my scope of knowledge, to try to keep as much of the normal structure and expectations for the students. However, the substitute kept going against my directions and allowing students to not follow procedures. I did address this with my supervising teacher when I saw her on Wednesday but still felt unsuccessful in maintaining control of the class on Monday.

Amy: I wanted to share an experience that I was faced with on Monday. I am in a high school Math 3 class and for the first time this year, I was unable to grasp the concept that the teacher [regular education teacher] was teaching (logarithms). I have been able to build a rapport with the students and they feel comfortable to come and ask me for help if needed. I usually am able to walk around the room, spot the confused looks, and provide the extra support. So far, I was understanding the material. On Monday, however, the table turned and when it was time for students to do their independent work, I was lost. On top of that, I was left alone with a class of 25+ students. I felt so useless. The regular education teacher was pulling students one by one in the hall to discuss grades and work that needed to be made up. My cooperating teacher had been called to the office for something so she was not there either.

Here I was standing at the podium trying to do the worksheet myself and figure out how to do these problems. One by one, hands were shooting in the air, students were coming up to me, and I had nothing to offer other than, "I am so sorry but I am learning along with you guys and I have to figure it out myself first before I can help you." Finally, after about 10 minutes of increasing off-task talk and my anxiety feeling to the roof, my cooperating teacher walked in. I asked her if I could shadow her explaining to the students how to work out the problems. She told me that she did not understand how to do it either so she would focus on the behavior interventions instead. She mentioned that there was no way for high school [resource] teachers to know all of the cross-content courses and this was her first year assigned to this Math 3 course.

Lisa:

On Monday, this child acted phenomenal in class. He was absolutely fantastic and when I told him how proud I was of him, he responded with "I took my medicine today." As the day went on to lunch, which he has with a different teacher, he apparently made [this] teacher upset because she asked him to put up his chair and supposedly he wouldn't. So she marched over to my OSTE [On-Site Teacher Educator: cooperating teacher] with him and in front of the rest of the staff and students said very angrily, "Since this is your baby, maybe you can make him put up his chair!" My OSTE just plainly asked him to do it and he did. The other teacher walked off with a huff and rolled her eyes.

# **Instructional Challenge**

Vanessa, Kim, and Amy all encountered one instructional challenge which constituted a classroom disorienting dilemma for them.

Vanessa: This week, while teaching a mathematics concept in my placement, my students just didn't get it. I tried to scaffold the instruction to the best of my ability as well as present the material a variety of different ways in which have worked in the past for these specific students. I kept trying to bring it back to the basics and then build in small incremental steps, but it seemed like nothing I did helped them. I know as a teacher, we are sometimes not going to be able to get through to our students, regardless of how hard we try. I think for me it was more of a frustrating experience to see my students struggle and not be able to help them.

Kim:

I spent quite some time last week trying to figure out what I would do for this math lesson. I researched online how other teachers have done lessons on decimals and thought about all the different avenues I could've gone. That's when I realize maybe this wasn't going to be as "easy" as I'd thought. I started with such as broad topic that I didn't know exactly where to go with it. Online, I saw examples of lessons where teachers used base ten blocks, Styrofoam cups that are put together to make a turn-dial, grids, and all sorts of other ideas. All I knew was what the students should have learned about decimals in the fifth grade, but most likely, especially because it's a resource class, the students would need a full-on review [about] what they actually are. So I could only guess what the students already knew about decimals. With that in mind, I tried to make my lesson as if it were to be taught to someone who had never heard of a decimal, with a specific focus on the place value, per request of my OSTE [cooperating teacher]. However, I don't think it was as basic as it could've been.

Amy:

Today my teacher told me to give an impromptu lesson for two students that were struggling with writing their opinion writings. The writing prompt was "Do you think the nation would benefit from legalizing marijuana?" I had 20 minutes to come up with my 30-minute lesson. I began [by] comparing the alcohol prohibition to the marijuana prohibition that we are encountering today. The two students completed a Venn diagram to compare and contrast the two. They had already learned about the two. After this, they were shown a video and were read an article. I guided them through an Oreo graphic organizer and the students had to use this to answer their prompt. I noticed that when asking the students comprehension questions that they were answering with answers that had nothing to do with the lesson. They were simply repeating things from background knowledge. Comprehension was definitely a struggle and I wish that I knew this prior to teaching.

# Preservice Teacher's Lack of Content Knowledge

One day in her field placement, Amy was assisting in a high school Math 3 inclusion class when she realized that she herself did not grasp logarithms, the concept the general education teacher was teaching. This is what she had to say:

I wanted to share an experience that I was faced with on Monday. I am in a high school Math 3 class and for the first time this year, I was unable to grasp the concept that the teacher was teaching (logarithms). I have been able to build a rapport with the students and they feel comfortable to come and ask me for help if needed. I usually walk around the room, spot the confused looks and provide the extra support. So far, I was understanding the material.

On Monday, however, the table turned and when it was time for students to do their independent work, I was lost. On top of that, I was left alone with a class of 25+ students. I felt so useless. The regular education teacher was pulling students one by one in the hall to discuss grades and work that needed to be made up. My cooperating teacher had been called to the office for something so she was not there either. Here I was standing at the podium trying to do the worksheet myself and figure out how to do these problems.

One by one, hands were shooting in the air, students were coming up to me, and I had nothing to offer other than, "I am sorry but I am learning this along with you guys and I have to figure it out myself first before I can help you." Finally, after about 10 minutes of increasing off task talk, and my anxiety feeling to the roof, my cooperating teacher walked in. I asked her if I could shadow her explaining to the students how to work out the problems. She told me that she did not understand how to do it either so she would focus on the behavior interventions instead. She mentioned that there was no way for high school teachers to know all of the cross-content courses and that this was her first year assigned to this Math 3 course.

I was wondering. If I find myself in the same situation as a special education teacher, what would be appropriate to do? How could I, as an intern, handle this situation better?

## **Student Health Concerns**

One study participant, Vanessa, was quite disconcerted to encounter three times during this study a student of hers presenting with what is commonly known as a grand mal seizure on Monday and Wednesday of Week 4 and on Monday of Week 7 of this study. She described the two incidents during Week 4 in this way:

On Monday, I had a disorienting scenario in my placement—involving a student who had a major seizure in our classroom. The student was all okay and then

suddenly he started to shake uncontrollable and was not responding to my cooperating teacher and I. I immediately called the front office to get a first responder (as part of our school's protocol, a faculty member who is trained in basic first aid/CPR and then if it is a severe case- then EMS is called), and then proceeded to escort the rest of our class to the small computer lab down the hall, while my teacher took care of the scenario in the classroom. I was able to get the students out of the classroom before things got worse and the students listened effectively to directions that I gave. The students in the computer lab were very chatty and did not listen to directions, as they were probably worried (I would assume) about the student. After the student was taken by EMS to the ER, my teacher came to get my students and I from the computer lab. By this time, our teacher assistant had come into the computer lab and given me the opportunity to take a moment to breathe. This scenario was obviously very overwhelming and a lot to process. We had a similar situation today in which the same student had another seizure, this time in the bathroom. Luckily, we had sent another student with him and the other student ran back to our class and said he was on the floor shaking. My teacher then proceeded to grab one of the male administrators and took care of the scenario. I was in the classroom with the students this time and neighboring teachers popped their heads in to ensure that things were going okay.

During Week 6 of this study, Vanessa shared in her e-journal entry that learning about a different student who was suffering from what is commonly known as petit mal seizures may have triggered distress in her as she was already dealing with other student concerns. She explained this experience as follows:

This week, what has been happening in my internship placement over the last week (student with a seizure, student involved with child protective services, student there one day and not there the next-moved) just hit me all at once. I don't know [if] it's because my supervising teacher and I finally talked about it all in the same conversation, or it's been lingering for a while and something like this triggered it. I am thinking—if it was set off by a trigger—that it would have been finding out that one of our students has been having absent seizures in his classes and no teacher has caught up to it yet. The only reason why we know is because his mom alerted [the] school about him having them more frequently at home. Because of his classification, teachers believed the "staring into space" was part of his processing speed as well as his productivity in general. This semester, I think I've seen more than I could ever have expected to see going into student teaching in the Spring. Sometimes I don't know if why I have a hard time with

student issues is because I am someone who wants to fix things (a natural fixer) or because I am very empathetic towards others, taking on other people's problems.

# **Implementation of the Individuals with Disabilities Education Act (IDEA)**

Within her e-journaling one week, Lisa's disorienting dilemma concerned the proper implementation of IDEA. Here is how she described the situation:

So this week I did have a dilemma at my internship. It is concerning the kid I talked about in my first journal. Here is some background story to help catch you up. During the first week, I journaled with you about this same student—"Heath." He was accused of bullying a boy on the bus. It turns out Heath didn't actually push this other boy, he had just somehow touched him and the boy fell, like fell hard. The boy had a chunk of his head missing, face all scraped up. It was pretty bad. Well, [the] mom of the boy had originally pressed charges on Heath, but later pressed charges on the school, claiming that Heath had bullied her child on many occasions and the school hasn't done anything about it (I'm honestly not sure if this is true). She ended up pulling her child out of school to homeschool him. As you can see, this was a huge mess. \_\_\_\_\_ did an article about it, I'm sure you will find it. Though all of this may sound like a dilemma already in itself, it is not the dilemma I want to talk to you about. After all this happened, Heath is now in all resource classes except for his electives. He is fully capable of being in inclusion [classes] and should be. They only moved him to resource because of his behavior. I'm just not sure how this is okay. If we are supposed to implement LRE [Least Restrictive Environment], then why isn't this happening for Heath? They even changed his schedule before they did his IEP which is illegal, right? Heath also has to be escorted from class to class because other kids were threatening to beat him up. I'm just overall concerned and find this whole ordeal a dilemma.

## **Dealing with Specific Disabilities**

Amy e-journaled one week about a student of hers who struggles with dyslexia and dysgraphia, describing a disorienting dilemma involving the theme of dealing with specific disabilities with the subtheme of choosing proper modifications for a student. Here is what she had to say:

This week, I did my observation and presented a literacy lesson on "The Cookie Thief' poem video which is about how oblivious one can be to how wrong we can be about something or someone. I asked my students to make a connection to the poem by asking them to write to the prompt: When have you jumped to conclusions about someone or have you ever felt prejudged? If so, tell me about that time and tell me how it made you feel. If you cannot think of an instance, tell me about a time that you felt prejudged. All of my students were quite engaged in the lesson and were writing diligently. I walked around and complimented by saying, "I love how hard you guys are working. I can tell you guys are taking your time to write neatly. This makes it easier for me to read what you have." One student quickly raised his hand and said, "Read this." I found myself struggling to make out what he had written and just said the couple of words I could make out. He said, "I have dyslexia and dysgraphia." I told him to do the best he could and if he wanted, he could tell me what he wanted to write. I feel like he shut down after [this] though because he said, "Nah" and put his hands on his forehead. I gave him space and walked away. I saw him continue to write and when it was time to turn it in, he brought it up. When the students stepped out, I tried to go through and read their responses. I was unable to read this certain student's writing. I noticed a lack of punctuation and capital letters. (Some I could not make out what they were supposed to be.) I have never dealt with a dyslexic student. What can I do in these cases? What kind of supports can I provide this student? I consider allowing him to type his assignments, but I debate on this because there should be some writing practice as well for him.

## **Quality of Professional Development**

One week, Lisa had the opportunity to participate in a professional development at her school when students were released early. The topic was bullying. The professional development turned out to constitute a disorienting dilemma for her, however. Hence, quality of professional development emerged as a theme through her experience and was reflected within her e-journaling. This is what she shared:

The most important point that was addressed during the presentation/meeting was that someone's perception is their reality. The county took a survey done by the students at the school to collect data. There were a handful of teachers that became upset thinking the information was skewed and the students did not report correct data, but the presenter explained that they reported based on how they felt. So their data is their perception of how bullying occurs/is handled, etc. and

whatever their perception is is their reality. It is how they see their world while at school.

I feel, based on this point, [that] the presenter should have further addressed these concerned teachers. Though it seemed like they were just reluctant to change, they could have really not understood. I think the presenter should have further explained why the students' self-surveyed data was so important even if they thought it was skewed. The presenter just came off as, "Like it or not, this is what it is and your school needs to do something about it."

Table 2
Frequency Chart of Themes/Subthemes by Participant for Research Question 1

	Stu				
Theme/Subtheme	Vanessa	Amy	Kim	Lisa	Total
Behavior management of students	2	2	3	2	9
Concern over the social/emotional well-being of a student	0	1	2	2	5
Collaboration					
Subtheme 1: With a parent	0	0	1	0	4
Subtheme 2: With a coworker	1	1	0	1	
Instructional challenge	1	2	1	0	4
Preservice teacher's lack of content knowledge	0	1	0	0	1
Student health concern	4	0	0	0	4
Implementation of IDEA	0	0	0	1	1
Dealing with specific disabilities					
<b>Subtheme:</b> Choosing proper modifications for a student	0	1	0	0	1
Quality of professional development	0	0	0	1	1

Note. IDEA= Individuals with Disabilities Act.

Respondent validation was done via member checks by soliciting feedback on researcher-derived themes/subthemes for the first research question (Roberts, 2010). The preservice teachers were given a member check chart to peruse and decide whether or not participant comments drawn from the e-journaling documentation aligned accurately with derived themes/subthemes. Three of the study participants elected to participate in this member check. Each preservice teacher agreed with the presented alignment of e-journal entries to derived themes/subthemes. Their input to this researcher is as follows:

**Kim:** I believe that the e-journal entries all match the themes and subthemes correctly.

Vanessa: I feel like the themes derived from the research are correct! You encompassed not only the variety of issues preservice teachers face, but also accurately documented the reflective cycle (from my perspective) extremely accurately!

**Lisa:** I believe the entries fit the categories they are in.

### **Content Analysis of Data Related to Research Question 2**

Within this researcher's response to the first e-journaling contact by the study participants, the real-life context of these initial e-journal entries was used to describe and review the concept of critical reflection. This researcher then proceeded to facilitate the growth of the preservice teachers into reflective practitioners as they practiced critical reflection through their subsequent e-journaling, continually learning from and reconstructing experiences through reflection (Schon, 1983, 1987) and seeking solutions when faced with classroom difficulties, rather than giving up (Valli, 1997). This facilitation was done in two ways. First, this researcher encouraged the preservice

teachers to adopt what Dewey (1933) espoused as three attitudes required in the process of reflective thinking: *open-mindedness* (being open to other points of view and willing to change one's point of view), *responsibility* (taking ownership for the consequences of one's actions), and *wholeheartedness* (thoroughly committing oneself to seeking better solutions to perplexing concerns. Secondly, this researcher promoted critical reflection by the preservice teachers as purported by van Manen (1991): the teachers learned to reflect upon their classroom disorienting dilemma or other situation by considering *what occurred before the disorienting dilemma or other situation*, what they did or should have done in light of the disorienting dilemma or other situation, and what they might do next in terms of the situation at hand. According to van Manen, this critical reflection perpetuates "mindfulness"; that is, thoughtful, tactful action that is "thinkingly attentive" while "living the pedagogical moment" (p. 516). In 1995, van Manen further maintained that "good teachers 'thinkingly act' and often do things with immediate insight" (p. 36).

Upon reading submitted e-journal entries, this researcher was certain to affirm the classroom disorienting dilemma/situation or encountered positive experience described by the study participants, address any questions asked, prompt further reflection (instigating dialogic reflective back-and-forth exchange), acknowledge and praise good reflection on the part of the study participants, and share insights based upon years of experience in the field of special education. In this way, the undergraduate preservice teachers' growth into reflective practitioners was continually facilitated throughout the study.

This study's second research question was as follows: *How does dialogic* reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma? This research question was examined in two ways. First, three themes were derived from the e-journaling documentation that depicted ways dialogic reflective e-journaling shaped the study participants' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma or other situation. These themes aligned with the critical reflection tenets of van Manen taught to the study participants by this researcher as dialogic reflective e-journaling progressed throughout this study. The three themes were as follows: (a) consideration of what occurred before the classroom disorienting dilemma or other situation, (b) consideration of what was done or should have been done during the classroom disorienting dilemma or other situation (being "thinkingly attentive" while "living the pedagogical moment"), and (c) consideration of what needs to be done after the classroom disorienting dilemma or other situation. Second, the second research question of this study was answered via a review of the study participants' answers to questions 2 and 3 of the final questionnaire, one of this study's three data sources.

## **Content Analysis of E-Journaling Documentation**

Content analysis of e-journaling documentation for the second research question was done across all study participants. As there were two different participant recruitments for this study, the number of weeks the preservice teachers participated in the study was variable due to different start times and the university fall break. Vanessa

participated for eight weeks (she went to her field-based placement over fall break),

Amanda participated for seven weeks, Kim participated for six weeks (she also went to
her field-based placement over fall break), and Lisa participated for five weeks but did
not submit an e-journal entry for the last week of the study.

A special educator with teaching, facilitator, and research experience in the field of special education served as a second reader for this data analysis. Inter-rater reliability was assessed via determining the percentage of agreement between this researcher and the second reader in terms of derived themes. The percentage of agreement in terms of themes for this study's second research question was 87%.

Respondent validation was done via member checks by soliciting feedback on researcher-derived themes for the second research question from study participants (Roberts, 2010). The preservice teachers were given a member check chart to peruse and decide whether or not participant comments drawn from the e-journaling documentation aligned accurately with derived themes.

Growth of the four preservice teachers in terms of critical reflection was examined via two levels of reflection competency: (a) the adequacy of the study participants' reflective responses to prompts given by this researcher upon submission of a weekly e-journal entry and (b) the adequacy of critical reflection done by study participants independently with no prompting given.

### Vanessa.

Reflective responses to prompts given by this researcher. Within her ejournaling, Vanessa's dialogic exchanges illustrated reflection across all three emerging themes in response to prompts given by this researcher. Here is what she had to say in one entry that encapsulated all of the themes as she reflectively considers what occurred before, during, and after an encountered classroom disorienting dilemma:

Thinking reflectively about the disorienting dilemma, something that I could have done better to prepare for Monday was catching the student's behavior before it became escalated (seeing the warning signs and acting upon the small undesirable behaviors). Not allowing the student's behaviors to get past the point of small risk behaviors. Something that I could do next in light of Monday's experience is not only reflect upon the experience but also take this experience as a learning experience and not take it as a defeat. Being open to "thinking on my feet."

Critical reflection done independently with no prompting given. By her second week of e-journaling, Vanessa was beginning to reflect critically with independence and no prompting. Such e-journaling entries from this point included two that illustrated Theme 1, two that illustrated Theme 2, and one that illustrated Theme 3. Having reflectively considered how to prepare before her lesson and think about what she should do during her lesson, Vanessa shared within one e-journal entry why the lesson that she presented was successful:

I believe a couple of the reasons why the lesson [went] so well was that I was able to effectively manage off-task behavior, while limited the chance for a disorienting dilemma during my lesson. I was able to set clear expectations and rules for the students to follow, as well as provided ample reminders of expectations throughout the lesson. Having clear and concise expectations and rules from the beginning set up for the students what was appropriate and inappropriate behavior as well as how I expected them to participate.

### Amy.

Reflective responses to prompts given by this researcher. Within her ejournaling, Amy's dialogic exchanges also illustrated reflection across all three emerging
themes in response to prompts given by this researcher. The following journal entry is an
example of reflection about what needs to be done after a classroom disorienting
dilemma has occurred. Amy shared this out of concern for a student of hers with
independent work challenges:

I know that this student enjoys attention and as I was discussing with my cooperating teacher, it may be that he is avoiding work as well. A behavior contract seems like a great idea. The checklist I was mentioning would be a checklist of the activities to be done in class that day. He would check them off as soon as he completes them. Its purpose is for him to be about to self-monitor himself. If he has 3 out of 5 activities checked, then he would be given a signature for that day. If he is able to get a signature 4 out of 5 days, then he will be eligible to get a homework pass or possibly something from the snack machine. I would give him a weekly option and he would have at least two things to choose from.

Critical reflection done independently with no prompting given. By her third week of e-journaling, Amy was beginning to reflect critically with independence and no prompting. Such e-journaling entries from this point included two that illustrated theme 1, three that illustrated theme 2, and three that illustrated theme 3. One of Amy's e-journal entries demonstrated both theme 1 (she had reflected upon the classroom disorienting dilemma the week before—a high school student refused to do his work and was disrespectful when asked to get on task) and theme 2 (per van Manen, she was "thinkingly attentive" while living the pedagogical moment" with this same high school student, taking thoughtful, tactful action with immediate insight during her lesson this

time). She described in detail her subsequent encounter with the student who tends to not do his work:

I implemented your suggestion and tried to interact with my past student in a nonacademic way. He responded well to me when I asked him how his weekend had been and if he had plans for Veterans Day. He let me know that he would be going up to Virginia with some of his cousins on a fishing trip. He informed me that this was one of his favorite past times. During instructional time, he still chose to not do his work. I passed by him and reminded him to focus on completing his assignment. He nodded his head but still did not do it. Instead of getting tangled in his avoidance, I came up to one of the girls he was talking to and asked her if she was doing okay. She ended up asking a question on how to solve something and I noticed meanwhile he turned his head to look at this paper too (what was seemingly) "following along." He said that that problem was easy, so I asked him if he would mind helping the student solve it. He said that he would try. I thanked him and told them if they came across something that was confusing, [then] to let me know. A while later, I walked along and noticed they had solved the problem they were instructed to talk about. I noticed again they were talking off topic though.

I personally had to take it as a minor accomplishment and walk to other students who were raising their hands. I felt like if I bombarded him again, I would end up at square one with him. For now, I was proud that he took on a different attitude and was happy that I let bygones be bygones. I feel like because our initial interactions were tense, I should gradually gain his trust and respect back.

### Lisa.

Reflective responses to prompts given by this researcher. Within her ejournaling, Lisa's dialogic exchanges illustrated reflection across all three emerging
themes in response to prompts given by this researcher. One week, Lisa e-journaled about
her concern that "Heath," a student with well-known behavioral challenges, was abruptly
moved from inclusion classes to being in all resource classes with an escort walking him
from class to class (for his own protection due to physical threats directed toward him by

other students). This change of placement was done before his IEP was amended as a parent whose child was allegedly bullied by Heath pressed charges against the school. This researcher prompted Lisa to reflect upon the juxtaposition that as a future teacher, she will find herself required to align with federal guidelines in terms of IEPs while also adhering to administrative concerns. Lisa pondered this disorienting dilemma and had this to say:

If I was the teacher in this situation, I would have went to my principal privately to tell him how important it is for the team to meet to change his [Heath's] IEP before changing his schedule. I would also converse with him about Heath's needs and if we are truly meeting his needs by changing his IEP. I think meeting with the principal one [on] one about your concerns would help them understand why you feel the way you do.

Critical reflection done independently with no prompting given. By her third week of e-journaling, Lisa was beginning to reflect critically with independence and no prompting. Another e-journal entry submitted by Lisa about "Heath" illustrated themes 1, 2, and 3 as she reflected upon what occurred before, during, and after the disorienting dilemma of Heath entering the classroom upset as previously recorded on page 94 of this chapter.

### Kim.

Reflective responses to prompts given by this researcher. Within her e-journaling, Kim's dialogic exchanges additionally illustrated reflection across all three emerging themes in response to prompts given by this researcher. This is Kim's response to a prompt asking her to brainstorm what possible reasons her student "Luke" is

struggling to complete his homework. She was then prompted to reflect critically on what could be done to help this student cope better:

You're right, there could very well be some other factors that may be affecting his homework completion. From what I have observed, he understands content well in school, but maybe he doesn't feel confident enough to do homework alone. He may not get support from his parents or other family members at home with his homework. I'm also thinking of another scenario. I overheard the school counselor saying at lunch last week that she thinks she remembers seeing the family at the beginning of the school year when signing up Luke. She remembered seeing that he had a lot of younger siblings and that he may be the oldest or second oldest child. If the parents are working and not there for the children, Luke may have some major responsibilities at home helping with his young siblings. His homework may be the last thing on his mind on his mind once he gets home. I'm not sure exactly what steps I would take as his teacher. Other than continuing to try to reach the parents and going to the guidance counselor, and talking further with him, I would offer Luke to come to the classroom in the morning before the first bell rings to work on homework. As an intern, I could offer to assist him on the mornings I am there for one-on-one help with his homework in case it is that he doesn't feel confident doing the work on his own.

Critical reflection done independently with no prompting given. By her second week of e-journaling, Kim was beginning to reflect critically with independence and no prompting. Such e-journaling entries from this point included three that illustrated the emerging first theme, two that illustrated the emerging second theme, and four that illustrated the emerging third theme. One week, Kim described in detail her efforts to teach an introductory lesson on decimals to two back-to-back sixth grade resource classes. Unexpectantly, a classroom disorienting dilemma occurred. Despite planning what she believed to be a well-prepared lesson, teaching the concept of decimals proved to be an instructional challenge. However, per van Manen, Kim was "thinkingly attentive" while "living the pedagogical moment" and was able to think on her feet

during the lesson itself to reflect on what was going wrong and make adjustments. She then used what she learned with the first lesson to present a better lesson to the next math resource class. To her relief, the decimals lesson for the second math resource class went more smoothly. This is what Kim had to say about this whole experience:

I spent quite some time last week trying to figure out what I would do for this math lesson. I researcher online how other teachers have done lessons on decimals and thought about all of the different avenues I could've gone. That's when I realized that maybe this wasn't going to be as "easy" as I'd thought. I started with a broad topic, that I didn't know exactly where to go with it. Online I saw examples of lessons where teachers used base ten blocks, styrofoam cups that are put together to make a turn-dial, grids, and all sorts of other ideas. All I knew was what the students should have learned about decimals in fifth grade, but most likely, especially because it's a resource class, students would need a full-on review of decimals and what they actually are. So I could only guess what the students already knew about decimals With that in mind, I tried to make my lesson as if it were to be taught to someone who had never heard of a decimal, with a specific focus on the place value, per request of my OSTE [On-Site Teacher Educator- cooperating teacher]. However, I don't think it was as basic as it could've been.

I finally chose to use grids with my students for the lesson, and once I finally figured that out, I ran with it. I was feeling pretty confident and I felt so wellprepared. Then things went south when I started teaching the first class. I went way too fast, and I was forgetting parts of my lesson plan and leaving out important things! Because of that, I think some valuable connections were missed that the students should have made if I'd scaffolded correctly and slowed down. The good thing though is that I realized that my pacing was off fairly quickly. With some help from my OSTE [On-Site Teacher Educator- cooperating teacher], I was able to slow down a bit, and start to meet the students at their level. I think decimals was also just a really hard concept for me to teach. It's so interconnected with understanding fractions and place value that it was hard for me to make good explanations when the students struggle with place value and fractions in the first place. I had a hard time forming questions that promoted their critical thinking. I also completely underestimated the amount of time the lesson would take. I only got through not even half of the lesson. I think that was probably because the students were lower than I thought they'd be and I really had to slow down. One of the good parts of today, however, was that I had a second chance with the second class for this lesson. I had an opportunity to improve on the same lesson. The second time was better with pacing that matched the student levels. I also did

not get even half of my plan for the lesson finished; however, the second lesson went much smoother than the first. I knew which adjustments I had to make to the lesson. Still though, it was hard for me [to] explain what decimals are and ask those higher-order thinking questions. I am glad that I used grids, however. I printed two 10 x 10 grids for the students and put them in sheet protectors so that the students could use dry erase markers to shade in representations of different decimals. I think was an effective way for students to manipulate the grid, and it was engaging because they love using dry erase markers. My OSTE pointed out that another strength of mine from the lesson was the student involvement and engagement. I would agree because I made sure to include each student.

Table 3
Frequency Chart of Themes for Research Question 2

	Study Participants				
Theme	Vanessa	Amy	Kim	Lisa	Total
Consideration of what occurred <i>before</i> the classroom disorienting dilemma or other situation					
Responding to Prompt	3	1	1	1	6
Independent Reflection	2	2	3	1	8
Consideration of what was done <i>during</i> the classroom disorienting dilemma or other situation					
Responding to Prompt	3	1	2	1	7
Independent Reflection	2	3	2	1	8
Consideration of what needs to be done <i>after</i> the classroom disorienting dilemma or other situation					
Responding to Prompt	3	1	3	3	10
Independent Reflection	1	3	4	4	12

Respondent validation was done via member checks by soliciting feedback on researcher-derived themes for the second research question (Roberts, 2010). The preservice teachers were given a member check chart to peruse and decide whether or not participant comments drawn from the e-journaling documentation aligned accurately with derived themes. Three of the study participants elected to participate in this member check. Each preservice teacher agreed with the presented alignment of e-journal entries to derived themes. Their input to this researcher is as follows:

**Kim:** I believe that the e-journal entries all match the themes and subthemes

correctly.

Vanessa: I feel like the themes derived from the research are correct! You

encompassed not only the variety of issues preservice teachers face,

but also accurately documented the reflective cycle (from my

perspective) extremely accurately!

**Lisa:** I believe the entries fit the categories they are in.

## Content Analysis of Responses to Questions 2 and 3 of the Questionnaire

A review was done of the study participants' answers to questions 2 and 3 of the final questionnaire, one of this study's data sources. Although pseudonyms are used to reference the four preservice teachers in terms of the other two data sources (initial interviews and dialogic reflective e-journaling documentation), the preservice teachers were asked to complete the questionnaire anonymously. Hence, the preservice teachers are referred to here as study participants 1, 2, 3, or 4 rather than by their assigned pseudonyms.

All four study participants found dialogic reflective e-journaling with this researcher to be efficacious. This is evidenced by their responses recorded below to Questions 2 and 3 of the final questionnaire.

**Question 2.** How did critical reflection influence your classroom decisionmaking?

**Study participant 1:** The weekly critical reflection influenced my classroom decision-making because I paid closer attention to the dilemmas that I had journaled about and analyzed them in ways that I do not think I would have without the journaling. I thought about the dilemmas and situations from different sides and views. There was also an instance where the journaling conversation directly affected a decision I made in the classroom that dealt with student behavior. I had reflected on a student's behavior in a journal and through questioning and conversation, I was able to determine a plan of action to address the problem behavior. Even after completing the journaling, my critical reflection in the classroom has increased greatly in that I routinely reflect upon my actions in the classroom and the dilemmas that arise daily.

**Study participant 2:** It really made me think about how I will respond to situations and how I could have handled situations that already happened.

**Study participant 3:** Critical reflection played a huge role not only in my classroom decision-making, but also in how I approached disorienting dilemmas. I was able to gain much insight in both areas.

**Study participant 4:** It helped me realize that I needed to assess the situation and think about what the best reaction would be. It allowed me to think about various options and to critically think of what I can do to improve myself as a teacher.

**Question 3.** What was the overall effect of critical reflection upon the students in your classroom? Referring to your e-journal, what entry provides the best example of a way your critical reflection impacted one or more students in your classroom?

Study participant 1: The critical reflection had impacted the students in the classroom because I was able to make more informed decisions that I had thought about critically before taking action. The instance in the previous question with the problem behavior is an example of how my classroom decisions were affected. I had put in place an evidence-based intervention strategy to address the target behavior that I had journaled about, and t the student's target behavior began to decrease after putting the strategy in place. The e- journaling is what had brought about the idea of using this particular behavior strategy because the professional [the researcher] had used the strategy

**Study participant 2:** Overall critical reflection helped me be a better communicator to my students. The entry that exemplifies this is the first about another teacher embarrassing a child.

suggested it to use for my student.

successfully in their [her] own experience and had

Study participant 3: The overall effect on my own students in my field placement was consistency and authority during reoccurring dilemmas involving student health concerns. Students were more focused and on task than when the incident occurred the first time.

Study participant 4: I had a minor confrontation with a student and because of my e-journaling, I was able to get feedback and try to make amends with the student. I realized the importance of student teacher relations and how they can affect how students perceive me.

# **Content Analysis of Data Related to Research Question 3**

This study's third research question was as follows: What contribution does dialogic reflective e-journaling have on undergraduate special education preservice

teachers in terms of benefits and/or challenges? This question was answered via anonymous participant responses to the first question of this study's third data source, the researcher-developed final questionnaire (hence the preservice teachers are referred to as study participant 1, 2, 3, or 4 for this data collection rather than by their assigned pseudonyms). The first question of the questionnaire asked these preservice teachers to share the impact dialogic reflective e-journaling has had upon them in terms of benefits and/or challenges. All participants felt there were benefits to their e-journaling participation, delineating these benefits in their own words as follows:

**Study Participant 1:** The dialogic reflective e-journaling was beneficial to me in that I was able to reflect on my internship experience in an effective manner because I could communicate my thoughts with a professional who challenged me to think critically. Communicating with a professional who has experience teaching was beneficial because my thoughts were extended further than they would have been without the journaling and we could share similarities of experiences. Being able to not only critically think about my experiences, but to simply talk about them with a professional was refreshing and relieving. There were some instances where the journaling had helped me to feel better emotionally about a dilemma that I had come across in my internship. I had also noticed that my awareness of certain things increased while I was at my internship as I had mentioned it in the journals. As a result of weekly critical reflection, I feel that I had grown professionally.

**Study Participant 2:** The impact e-journaling left on me was a good one. I have always loved talking to other education peers about what goes on [in] the classroom, and being able to reflect on the situations that happen in them.

Study Participant 3: Benefits consisted of being able to talk about issues that were occurring in the classroom. To me, I found it to be more comfortable to talk to an "outsider" because I was not worried about what they may think about my true

thoughts. I was able to open up and more importantly receive feedback. In my 350 classes, I have always had to write reflections about my daily activities, but I found it pointless because I never got feedback on it and I never chose to look at it because it was like reading a diary. I already know what I lived . . . I wanted more. I wanted feedback. It was frustrating to see my first 350 class, after having written everything to [have] the professor simply tell me to scan in the last two pages. That was the only thing that would be seen by the teacher and that was without feedback or suggestions. I was happy to talk to someone who could offer help when I had nowhere else I could turn to, being that some of my issues I considered personal and embarrassing at times.

Study Participant 4: The impact of my dialogic reflective e-journaling was not only that I was given the ability to have an "expert" in the field as a source of resource for instruction, behavior management, and dealing with disorienting dilemmas, but also someone in the field to provide a sense of support when dealing with disorienting dilemmas.

In terms of impacting challenges involved with dialogic reflective e-journaling, one study participant mentioned two challenges: (a) she found it challenging to juggle the e-journaling with her other course responsibilities, especially at the end of the semester and (b) she was unsure what to e-journal about during the unusual weeks when a classroom disorienting dilemma did not crop up. The other study participants cited no challenges.

### Content Analysis of Data Related to Research Question 4

Through assistance from this researcher in processing the classroom disorienting dilemma or other situation described by the four study participants from a reflective perspective, it was possible that these special education preservice teachers could experience a positive personal transformation as educators via transformational learning (Mezirow, 1991). Near the end of this study, this researcher thus introduced the concept of transformational learning to Vanessa, Amy, Kim, and Lisa via e-journaling so that these preservice teachers could contemplate which, if any, of the following phases of transformational learning they may have gone through during their field-based experience in the schools (according to Mezirow, a person does not have to experience all phases or experience them in a set order to achieve a perspective transformation): (a) Phase 1 - adisorienting dilemma; (b) Phase 2 - a self-examination with feelings of guilt or shame; (c) Phase 3 – critical assessment of one's own assumptions; (d) Phase 4 – recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change; (e) Phase 5 – exploration of options for new roles, relationships, and actions; (f) Phase 6 – planning a course of action; (g) Phase 7 – acquisition of knowledge and skills for implementing one's plans; (h) Phase 8 – provisional trying of new roles; (i) Phase 9 – altering present relationships and forging new relationships; (i) Phase 10 – building of competence and self-confidence in new roles and relationships; and (k) Phase 11 - a perspective change.

Study participant responses to relevant questions 4 and 5 posed on the final questionnaire were analyzed to answer this study's fourth research question: *How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?* As previously noted, the four preservice teachers of this study were asked to complete the final questionnaire anonymously; hence, they are referred to as study

participants 1, 2, 3, or 4 in the following analysis as this researcher does not know which study participant completed which questionnaire.

## **Question 4 of the Final Questionnaire**

This question required the study participants to describe an instance of transformative learning that they experienced during this study, if any. They were asked to provide details on the particular phases they personally went through during their experience (the eleven phases of transformation as depicted by Mezirow were listed within this question with the notation made that one does not need to go through each phase nor in the set order given to achieve perspective change that brings about transformation).

Study participant 2 shared an instance of transformation learning that she experienced during this study involving the disorienting dilemma of a student displaying out-of-control anger. She did not, however, mention a resulting personal perspective change. The other three study participants did describe an instance of transformative learning which was experienced during this study, noting that it resulted in perspective change (transformation) as noted below.

Study participant 1. This preservice teacher described moving from the disorienting dilemma of a math lesson that was not as successful as hoped to a progression through various phases of transformation, resulting in a perspective change. She explained this transition by noting, "I am now aware of more effective strategies for future lessons."

**Study participant 3.** This preservice teacher additionally described moving from the disorienting dilemma of a student health concern (non-neurological seizure) to a progression through various phases of transformation, resulting in a perspective change. She asserted that she had a "change in self-esteem, more confidence in handling student emergencies involving seizures."

Study participant 4. This preservice teacher also described moving from the disorienting dilemma of a confrontation with a student who did not want to do work to a progression through various phases of transformation, resulting in a perspective change. She stated that her perspective change resulted in her learning the following: (a) how to use the influence peers can have on students in positive manner and (b) the importance of student/teacher relationships.

# **Question 5 of the Final Questionnaire**

This question asked the four study participants to describe their overall personal transformation as preservice teachers within this study, delineating how their perspective changed in terms of being a teacher. If no such transformation occurred, they were asked to reflect on why they thought this was the case. Perusal of responses to question 5 revealed that all four study participants shared that they had experienced an overall positive personal transformation as a preservice teacher within this study. Below, in their own words, are their individual characterizations of such a transformation as it pertains to themselves. Each study participant emerged from this study with a unique and new perspective as a preservice teacher with heightened teacher self-efficacy, ready to embark on the next step in teacher preparation- student teaching next semester.

Study Participant 1: This study has mostly impacted my critical reflection skills. After completion of the journal reflections, I have noticed that I have begun to reflect upon my actions and decisions in the classroom daily and it has become routine for me. I want to continue to grow professionally, and I realize the importance of consistent reflection and analysis to do so. I feel that I had experienced most of the phases of transformative learning through the weekly reflections. The journaling was definitely beneficial to my education.

**Study Participant 2:** My perspective has changed in the sense of always staying positive, find the light in the situation. Try to find the root of the problem first instead of just reacting.

Study Participant 3: Coming out of this experience, I feel more confident as not only a preservice teacher but also as a teacher in general. This study taught me that trusting my gut and taking the lead in crisis is something I do well. Also, I learned that support and guidance is so key to not only being an impactful teacher, but also that it's a huge advantage to have others on your side. Through this study, I was thinking about ways in the future that I could provide this type of experience for my own students/student interns/student teachers.

Study Participant 4: Transformation was the ability to reflect on past experiences in order to use them for future references. I was able to not see it as a failure, rather as a learning opportunity. It also helped me to think about a variety of options before acting.

### **Summary**

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). This study was designed to focus upon this concern via examining how dialogic electronic journaling (e-journaling) between this researcher (a doctoral student with

special education teaching experience) and undergraduate preservice teachers involved in a special education field-based experience in the schools addressed their critical reflection in classroom decision-making as well as their transformative learning the Fall semester of their senior year prior to student teaching in the Spring. The specific purpose of this study was to explore the use of dialogic e-journaling in addressing the preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based placement, possibly experiencing positive personal transformation as teachers in the process. According to Mezirow (1978b, 1991, 1995), a disorienting dilemma is a predicament that may instigate an eventual positive transformation within an individual. Maintaining a reflective perspective enables a teacher to deal consciously and effectively with inevitable classroom dilemmas (Larrivee, 2008b). Valle (1997) asserted that this skill must be acquired at the preservice teacher level as it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience.

Four research questions guided this study:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?

- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

For this study, triangulation (use of a variety of methods to collect data) was employed since this reduces the risk of chance associations or biases due to the use of one specific method (Maxwell, 2013). Data were triangulated through three data sources: initial interviews, documentation of dialogic reflective e-journaling between this researcher and study participants, and a final researcher-developed questionnaire which the four undergraduate special education preservice teachers completed anonymously to reduce the possibility of bias; that is, answering questions in such a way to please this researcher with whom they had developed a relationship during this study.

The purposeful sample for this study consisted of four undergraduate special education preservice teachers who were enrolled in their third field-based experience in the schools (special education placement for all participants) which took place the Fall semester of the preservice teachers' senior year prior to student teaching in the Spring. Once study participants consented to be in this study, this researcher met individually on campus with them to conduct an initial semi-structured interview. The initial interview questions were designed to ascertain the special education preservice teachers' perceptions of their own strengths and weaknesses and level of teacher self-efficacy in terms of teaching as well as their present level of familiarity with the components of

teacher reflection and transformative learning as they began their third field-based experience in the schools. Pseudonyms assigned to the four participants were as follows: "Vanessa," "Amy," "Kim," and "Lisa."

For their field-based experience, the four participant undergraduate special education preservice teachers of this study were placed in the schools all day on Monday as well as Wednesday morning of each week, attending a weekly seminar led by their course professor on Wednesday afternoon. As part of this study, they were required to individually e-journal once a week with this researcher, describing a classroom disorienting dilemma or other situation they had encountered during their field-based experience. If no classroom disorienting dilemma or other situation occurred during a week, the study participants were directed to reflect upon an encountered positive experience, noting why success was obtained. There was no set limit as to the number of e-journaling back-and-forth exchanges within each weekly preservice contact with this researcher.

## Content Analysis of Data Related to Research Question 1

The dialogic reflective e-journaling documentation was analyzed to answer this study's first research question: What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers? E-journaling done by the four study participants was carefully perused by this researcher and a second reader. To answer research question #1, the following nine themes delineating classroom situations constituting disorienting dilemmas for one or more of the study participants were derived via content analysis of the e-journaling

documentation: (a) behavior management, (b) concern over the social/emotional well-being of a student, (c) collaboration (two subthemes: collaboration with a parent and collaboration with co-workers), (d) instructional challenge, (e) preservice teacher's lack of content knowledge (f) student health concern, (g) implementation of the Individuals with Disabilities Education Act (IDEA), (h) dealing with specific disabilities (one subtheme: choosing proper modifications for a student), and (i) quality of professional development.

# **Content Analysis of Data Related to Research Question 2**

Within this researcher's response to the first e-journaling contact by the study participants, the real-life context of these initial e-journal entries was used to describe and review the concept of critical reflection. This researcher then proceeded to facilitate the growth of the preservice teachers into reflective practitioners as they practiced critical reflection through their subsequent e-journaling, continually learning from and reconstructing experiences through reflection (Schon, 1983, 1987) and seeking solutions when faced with classroom difficulties, rather than giving up (Valli, 1997). This facilitation was done in two ways. First, this researcher encouraged the preservice teachers to adopt what Dewey (1933) espoused as three attitudes required in the process of reflective thinking: *open-mindedness* (being open to other points of view and willing to change one's point of view), *responsibility* (taking ownership for the consequences of one's actions), and *wholeheartedness* (thoroughly committing oneself to seeking better solutions to perplexing concerns. Secondly, this researcher promoted critical reflection by the preservice teachers as purported by van Manen (1991): the teachers learned to reflect

upon their classroom disorienting dilemma or other situation by considering what occurred before the disorienting dilemma or other situation, what they did or should have done in light of the disorienting dilemma or other situation, and what they might do next in terms of the situation at hand. According to van Manen, this critical reflection perpetuates "mindfulness"; that is, thoughtful, tactful action that is "thinkingly attentive" while "living the pedagogical moment" (p. 516). In 1995, van Manen further maintained that "good teachers 'thinkingly act' and often do things with immediate insight" (p. 36).

This study's second research question was as follows: *How does dialogic* reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma? Two data sources were examined to answer this question. First, three themes were derived from the e-journaling documentation that depicted ways dialogic reflective e-journaling shaped the study participants' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma or other situation. These themes aligned with the critical reflection tenets of van Manen taught to the study participants by this researcher as dialogic reflective ejournaling progressed throughout this study. The three themes were (a) consideration of what occurred *before* the classroom disorienting dilemma or other situation, (b) consideration of what was done or should have been done during the classroom disorienting dilemma or other situation (being "thinkingly attentive" while "living the pedagogical moment"), and (c) consideration of what needs to be done after the classroom disorienting dilemma or other situation. Growth of the four preservice teachers in terms of critical reflection was scrutinized via two levels of reflection competency: (a) the adequacy of study participants' reflective responses to prompts given by this researcher upon submission of a weekly e-journal entry and (b) the adequacy of critical reflection done by study participants independently with no prompting given. All study participants thoughtfully responded with reflection to researcher prompts and progressed to reflecting independently with no prompting given (Vanessa and Kim began to so this by their second week of e-journaling and Amy and Lisa followed suit by their third week of e-journaling). *Secondly*, the second research question of this study was answered via a review of the study participants' answers to Questions 2 and 3 of the final questionnaire, one of this study's three data sources. The preservice teachers were asked to complete the questionnaire anonymously hence for this analysis, they were referred to as study participants 1, 2, 3, or 4 with no alignment to their pseudonyms. All four study participants found dialogic reflective e-journaling with this researcher to be efficacious as evidenced by their responses to Questions 2 and 3 of the final questionnaire.

### Content Analysis of Data Related to Research Question 3

This study's third research question was as follows: What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges? This question was answered via anonymous participant responses to the first question of this study's third data source, the researcher-developed final questionnaire. This first question asked the preservice teachers to share the impact dialogic reflective e-journaling has had upon them in terms of benefits and/or challenges. All participants felt there were benefits to their e-journaling

participation. One preservice teacher shared two challenges she experienced in terms of dialogic reflective e-journaling. The other study participants cited no challenges.

# **Content Analysis of Data Related to Research Question 4**

Through assistance from this researcher in processing the classroom disorienting dilemma or other situation described by the four study participants from a reflective perspective, it was possible that these special education preservice teachers could experience a positive personal transformation as educators via transformational learning (Mezirow, 1991). Near the end of this study, this researcher thus introduced the concept of transformational learning to the study participants via e-journaling so that these preservice teachers could contemplate which, if any, of the following phases of transformational learning they may have gone through during their field-based experience in the schools (according to Mezirow, a person does not have to experience all phases or experience them in a set order to achieve a perspective transformation):

- Phase 1: a disorienting dilemma;
- Phase 2: a self-examination with feelings of guilt or shame;
- Phase 3: a critical assessment of one's own assumptions;
- Phase 4: recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change;
- Phase 5: exploration of options for new roles, relationships, and actions;
- Phase 6: planning a course of action;
- Phase 7: acquisition of knowledge and skills for implementing one's plans;
- Phase 8: provisional trying of new roles;

Phase 9: altering present relationships and forging new relationships;

Phase 10: building of competence and self-confidence in new roles and relationships; and

Phase 11: a perspective change.

Anonymous study participant responses to relevant questions 4 and 5 posed on the final questionnaire were analyzed to answer this study's fourth research question: How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers? Question 4 of the final questionnaire required the study participants to describe an instance of transformative learning that they experienced during this study, if any. The study participants were asked to provide details on the particular phases they personally went through during their experience (the eleven phases of transformation as depicted by Mezirow were listed within this question with the notation made that one does not need to go through each phase nor in the set order given in order to achieve perspective change (transformation). Study participant 2 shared an instance of transformation learning that she experienced during this study involving the disorienting dilemma of a student displaying out-of-control anger. She did not, however, mention a resulting personal perspective change. The other three study participants did describe an instance of transformative learning experienced during this study that resulted in perspective change (transformation). Question 5 of the final questionnaire asked the four study participants to describe their overall personal transformation as preservice teachers within this study, delineating how their perspective changed in terms of being a teacher. If no such

transformation occurred, they were asked to reflect on why they thought this was the case. All four study participants shared that they had experienced an overall personal transformation, having emerged from this study with a unique and fresh perspective as preservice teachers posed to begin student teaching in the upcoming Spring semester with a new level of self-confidence.

#### **CHAPTER V**

#### **DISCUSSION**

According to Roberts (2010), the last chapter of a dissertation, the discussion chapter, is the key chapter of such work. Wiersma and Jurs (2009) concurred, contending that the discussion chapter "is in one sense the most important, because in essence this was the purpose for doing the research" (p. 24). They asserted that the discussion chapter provides the medium for drawing conclusions and implications, an endeavor requiring interpretation, synthesis, and insight. The structure of this discussion chapter is as follows. A summary of the study is first presented with study results delineated and findings related to the literature reviewed. This is followed by a discussion of the implications of the study as well as recommendations for future research.

# **Summary of the Study**

## **Overview of the Problem**

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). The need for a quality teaching force and appropriate preparation of teachers has been the subject of national reform reports for decades (Dykes et al., 2012). It is a particularly challenging task to prepare special education preservice teachers to be confident, instructionally competent, and cognitively capable in the classroom

environment (Roberts, Benedict, & Thomas, 2013). In terms of field-based experiences, preservice teachers benefit from systematic and objective feedback about their performance as this enables them to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom (Wilkins, Shin, & Ainsworth, 2009). According to Cornelius and Nagro (2014), such performance feedback is commonly employed during field-based experiences to improve desired teaching behaviors in preservice teachers.

## **Purpose Statement and Research Questions**

In light of the continued problem of teacher shortage and attrition in the field of special education (McLeskey & Billingsley, 2008) and the need for well-prepared new special education teachers (Boe et al., 2013), the purpose of this study was to examine how dialogic reflective electronic journaling (e-journaling) between this researcher and undergraduate preservice teachers involved in a special education field-based experience in the schools addressed their critical reflection in classroom decision-making as well as their transformative learning the Fall semester of their senior year prior to student teaching in the Spring. Performance feedback was given by this researcher (a doctoral student with special education teaching experience). This dialogic reflective e-journaling was part of the teacher preparation supports already in place for the field-based experience: that is, cooperating teacher support, university supervisor support, and group seminar support led by a university professor. Specifically, this study explored the use of dialogic e-journaling in addressing the preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within

transformation as teachers in the process. According to Mezirow (1978b, 1991, 1995) whose theory of transformative learning constitutes the theoretical framework underpinning this study, a disorienting dilemma is a predicament that may instigate an eventual positive transformation within an individual. Larrivee (2008b) pointed out that maintaining a reflective perspective enables a teacher to deal consciously and effectively with inevitable classroom dilemmas.

Four research questions guided this study:

- 1. What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?
- 2. How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma?
- 3. What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges?
- 4. How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers?

## **Study Methodology**

A qualitative research methodology was chosen for this study as it met all eight parameters of qualitative research as delineated by Creswell (2013). As this researcher participated in the study alongside special education preservice teachers via e-journaling

with them from a dialogic standpoint, this study constituted the qualitative research genre of participatory action research (PAR). The purposeful sample for this study consisted of four undergraduate special education preservice teachers who were enrolled in their third field-based experience in the schools (special education placement for all participants) which took place the Fall semester of the preservice teachers' senior year prior to student teaching in the Spring.

**Data collection.** In terms of data collection, study data was triangulated through three data sources. These sources included initial individual interviews (interactive collection), documentation of dialogic reflective e-journaling done between this researcher and study participants (interactive collection) and a final researcher-developed questionnaire (noninteractive collection).

**Data analysis.** Data analysis for this study (the giving of meaning to collected data to yield answered research questions) was derived via content analysis, a categorizing data analysis strategy (Maxwell, 2013). Content analysis was done on data sources to answer each of this study's three research questions.

## **Study Results**

Content analysis of data related to this study's first research question. The dialogic reflective e-journaling documentation was analyzed to answer this study's first research question: What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers? To answer research question #1, the following nine themes delineating classroom situations constituting disorienting dilemmas for one or more of the study participants were derived via content

analysis of the e-journaling documentation: (a) behavior management, (b) concern over the social/emotional well-being of a student, (c) collaboration (two subthemes: collaboration with a parent and collaboration with co-workers), (d) instructional challenge, (e) preservice teacher's lack of content knowledge (f) student health concern, (g) implementation of the Individuals with Disabilities Education Act (IDEA), (h) dealing with specific disabilities (one subtheme: choosing proper modifications for a student), and (i) quality of professional development.

Content analysis of data related to this study's second research question. This study's second research question was as follows: How does dialogic reflective e-journaling shape undergraduate special education preservice teachers' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma? Two data sources were examined to answer this question. First, three themes were derived from the e-journaling documentation that depicted ways dialogic reflective e-journaling shaped the study participants' critical reflection in classroom decision-making upon being confronted with a classroom disorienting dilemma or other situation. These themes aligned with the critical reflection tenets of van Manen taught to the study participants by this researcher as dialogic reflective ejournaling progressed throughout this study. The three themes were (a) consideration of what occurred *before* the classroom disorienting dilemma or other situation, (b) consideration of what was done or should have been done during the classroom disorienting dilemma or other situation (being "thinkingly attentive" while "living the pedagogical moment"), and (c) consideration of what needs to be done after the

classroom disorienting dilemma or other situation. Growth of the four preservice teachers in terms of critical reflection was scrutinized via two levels of reflection competency: (a) the adequacy of study participants' reflective responses to prompts given by this researcher upon submission of a weekly e-journal entry and (b) the adequacy of critical reflection done by study participants independently with no prompting given. All study participants thoughtfully responded with reflection to researcher prompts and progressed to reflecting independently with no prompting given (Vanessa and Kim began to do this by their second week of e-journaling and Amy and Lisa followed suit by their third week of e-journaling). Secondly, this second research question was answered via a review of the study participants' answers to questions 2 and 3 of the final questionnaire, one of this study's data sources. The preservice teachers were asked to complete the questionnaire anonymously hence for this analysis, they were referred to as study participants 1, 2, 3, or 4 with no alignment to their pseudonyms. All four study participants found dialogic reflective e-journaling with this researcher to be efficacious as evidenced by their responses to questions 2 and 3 of the final questionnaire.

Content analysis of data related to this study's third research question. This study's third research question was as follows: What contribution does dialogic reflective e-journaling have on undergraduate special education preservice teachers in terms of benefits and/or challenges? This question was answered anonymously by the study participants as they responded to the first question of this study's third data source, the researcher-developed final questionnaire. This question asked the preservice teachers to share the impact dialogic reflective e-journaling has had upon them in terms of benefits

and/or challenges. All participants felt there were benefits to their e-journaling participation. One preservice teacher shared two challenges she experienced in terms of dialogic reflective e-journaling. The other study participants cited no challenges.

Content analysis of data related to this study's fourth research question.

Anonymous study participant responses to relevant questions 4 and 5 posed on the final questionnaire were analyzed to answer this study's third research question: How does dialogic reflective e-journaling shape the transformative learning of undergraduate special education preservice teachers in terms of their personal transformation as teachers? Question 4 of the final questionnaire required the study participants to describe an instance of transformative learning that they experienced during this study, if any. The study participants were asked to provide details on the particular phases they personally went through during their experience (the eleven phases of transformation as depicted by Mezirow were listed within this question with the notation made that one neither needs to go through each phase nor in the set order given in order to achieve perspective change (transformation). Study participant 2 shared an instance of transformation learning that she experienced during this study involving the disorienting dilemma of a student displaying out-of-control anger. She did not, however, mention a resulting personal perspective change. The other three study participants did describe an instance of transformative learning experienced during this study that resulted in perspective change (transformation). Question 5 of the final questionnaire asked the four study participants to describe their overall personal transformation as preservice teachers within this study, delineating how their perspective changed in terms of being a teacher. If no such

transformation occurred, they were asked to reflect on why they thought this was the case. All four study participants shared that they had experienced an overall positive personal transformation through their participation in this study.

## **Findings Related to the Literature**

Study results yielded five major findings which have a research base within the literature (Wilkins et al., 2009; Valli & Rennert-Ariev, 2000; King & LaRocco, 2006; O'Connell & Dyment, 2000; Hubbs & Brand, 2005): (a) benefits of performance feedback for preservice teachers, (b) efficacy of reflective teacher education, (c) dialogic e-journaling as a tool for reaching skills of reflection to preservice teachers, (d) benefits and challenges of dialogic reflective e-journaling, and (e) dialogic reflective e-journaling to facilitate transformative learning.

## **Benefits of Performance Feedback for Preservice Teachers**

The four special education preservice teachers who participated in this study felt that they benefited from the support of performance feedback provided to them via the dialogic aspect of e-journaling about classroom disorienting dilemmas with this researcher. Wilkins, Shin and Ainsworth (2009) reported research that indicated that preservice teachers enrolled in initial teacher preparation programs need performance feedback; that is, systematic and objective feedback about such teachers' performance enables them to reflect on strengths and weaknesses and devise strategies to be more effective in the classroom. According to Cornelius and Nagro (2014), such performance feedback is commonly employed during field-based experiences to improve desired teaching behaviors in preservice teachers. These two researchers reviewed eight research

studies pertaining to performance feedback and found that all the studies supported the use of such feedback in preservice training. In light of their review, they concluded that immediate, specific, positive, and corrective performance feedback should be included in every special education teacher training program to increase preservice teachers' correct implementation of evidence-based practices while teaching. Thus, the outcomes of this study suggest that preservice teachers may benefit from performance feedback.

# **Efficacy of Reflective Teacher Education**

Findings from the literature suggest the efficacy of reflective teacher education. Leko and Smith (2010) asserted that focused and individualized attention on beginning special education teachers, who are most vulnerable to attrition, can improve the retention of these particular educators over a long period of time, ultimately improving services for students with special needs. One type of specialized attention that can begin at the point of preservice training is reflective teacher education, i.e., helping prospective teachers become reflective practitioners able to critically reflect. Reflection is a vital component in teacher programs nationwide (Broyles, Epler, & Waknine, 2011). Indeed, results drawn from this study illustrated this contention as the four study participants benefited from the reflective teaching embedded in the dialogic reflective e-journaling done with this researcher. These preservice teachers learned to rely on the tenets of reflection to help them successfully deal with encountered classroom disorienting dilemmas or other situations.

**Features of reflective teacher education.** The idea of reflection in teaching originated with the use of the scientific method to analyze how people think and learn

(Dewey, 1933). Dewey contrasted reflective thinking (active consideration based upon evidence) with habits of thought that are unsystematic, lack evidence, are based upon false assumptions, or mindlessly conform to tradition and authority. He espoused that three attitudes are required in the process of reflective thinking: (a) open-mindedness (being open to other points of view, willing to change one's own point of view), (b) responsibility (taking ownership for the consequences of one's actions), and (c) wholeheartedness (thoroughly committing oneself to seeking better solutions to perplexing concerns). Upon review of Dewey's work, Ostorga (2006) decided that open-mindedness is the most significant attitude in the process of reflective thinking since open-minded teacher continuously analyzes the efficacy of routines and practices, not believing in one single truth or in one right way to teach.

A discussion of reflective teacher education would not be complete without the mention of van Manen, one of the pioneers of reflectivity. Van Manen (1977) espoused three sequential levels of reflectivity as follows: (a) first and lowest level of reflectivity-technical rationality (concerns the technical application of educational knowledge and basic curriculum principles), (b) second level of reflectivity- practical action (occurs when the teacher becomes more concerned with clarifying assumptions and predispositions while assessing educational consequences in order to reach interpretive understanding), and (c) third and highest level of of reflectivity- critical reflection (teacher is concerned with the worth of knowledge and social circumstances as useful to students). Van Manen (1991) was particularly interested in the application of reflectivity to pedagogy, noting that "pedagogy refers to our reflective sense-making or theorizing

about concerns of education or child-rearing" (p. 510). He explained that reflection occurs in those moments when we are able to think about our experiences, about what we did or should have done, or about what we might do next. (This is the reflection tenet that was used in the dialogic reflective e-journaling with this study's four preservice teachers.) According to van Manen, four forms of reflection exist. Anticipatory reflection enables one to deliberate possible alternatives, decide on courses of action, plan what needs to be done, and anticipate the results of our planned actions. Active or interactive reflection (reflection-in-action) is a stop-and-think type of reflection that allows one to make needed decisions on the spur of the moment. Recollective reflection facilitates sense-making of past experiences which enables one to gain new or deeper insights into the meaning of experiences with children. Van Manen noted that teachers become more experienced practitioners as a result of recollective reflection. The final form of reflection according to van Manen (1991) is mindfulness which is thoughtful, tactful action that is "thinkingly attentive" while "living the pedagogical moment" (p. 516). According to van Manen (1995), "good teachers 'thinkingly act' and often do things with immediate insight" (p. 36). This particular tenet of van Manen was also emphasized to the participants of this study.

Within his seminal works, Schon (1983, 1987), a cognitive psychologist, popularized the notion of reflective practice by criticizing the portrayal of teachers as technicians and replacing this view with the concept of teachers as committed, autonomous decision-makers, i.e., "reflective practitioners" who continually learn from and reconstruct experience through reflection. He delineated between reflection-in-action

and reflection-on-action, maintaining that reflection-in-action enables the practitioner to detect a problem as it occurs, consider alternatives, and shift the course of action to solve it while reflection-on-action is the careful consideration of an incident after it has happened.

Concerned about the social, cultural, and political aspects of reflective approaches, Smyth (1992) conceded that "there can be merit in a reflective stance towards teaching if it is construed in a way that permits and requires broader questions to be asked about what is worthwhile in teaching and why" (p. 294). He maintained that if teachers are to discover the forces that inhibit and constrain them and work at changing those conditions, they need to engage in the following four forms of action in terms of their teaching: (a) describing (teachers reflect and develop a discourse about their own and others' teaching, describing specific teaching events either orally or through journaling, (b) informing (teachers analyze their descriptions to capture the pedagogical principles of what it is they do), (c) confronting (teachers situate teaching in a broader cultural, social, and political context by engaging in critical reflection about the assumptions that underlie methods and classroom practices), and (d) reconstructing (teachers begin to link consciousness about the processes that inform the day-to-day aspects of their teaching with the wider political and social realities within which it occurs).

Valli (1997) concurred with Schön's contention, asserting that reflective teachers are able to consider their own teaching behaviors and the context in which they occur by looking back on events with the intention to make judgements, altering their teaching

behaviors in light of craft, research, and ethical knowledge as needed. According to Valli, teachers as reflective practitioners link theory to practice as they contemplate with deliberation, infusing instruction with careful thought. Faced with difficulties in the classroom, reflective teachers are more likely to seek out solutions, rather than simply giving up. Valli cautioned that it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience. Indeed, as of 2002, the National Council for the Accreditation of Teacher Education (NCATE) began promoting reflective practice as an essential component of teacher education programs in terms of teacher quality (Ostorga, 2006).

Hutchinson and Allen (1997) developed the Reflection Integration Model to help preservice teachers become reflective learners in their field-based placements. The model is composed of four components: (a) pre-experience (preservice teachers are told the purpose of the experience so that a connection is made between the purpose and the activities they will be completing), (b) experience (the goal of the experience determines the setting), (c) reflection (in order to make the experience meaningful, the preservice teachers learn to think reflectively about the experience to reconfigure their thought processes and find a connection between theory and practice), and (d) integration (to achieve successful integration, the preservice teachers are guided through personal introspection). The Reflection Integration Model enables teacher educators and preservice teachers to develop a strategy for devising a more reflective approach to processing experiences.

Larrivee (2008a) pointed out that there are escalating accountability pressures on teachers which require them to assure that students are reaching set standards of performance. Such demands, she explained, can leave teachers feeling powerless. Yet, she noted, the best remedy for this sentiment is for teachers to develop the habit of engaging in systematic reflection about their work. Larrivee (2008b) asserted that "perhaps the most important reason for teachers to develop as reflective practitioners is to be skilled at dealing more consciously with the inevitable dilemmas and tradeoffs involved in everyday decisions that affect the lives of students" (p. 88). She maintained that the dissonance created in realizing that a problem exists requires the reflective thinker to be an active inquirer, both in the critique of current conclusions and the generation of new hypotheses. According to Larrivee (2008a), a continuum of three levels of reflection has evolved over several decades. These levels include surface reflection (focus on strategies and methods used to reach predetermined goals), pedagogical reflection (connecting theory and practice), and finally critical reflection (consideration of moral and ethical implications and consequences of classroom practices on students). She stressed that it is important for teachers to progress along this continuum of reflective practice so that they can be critically reflective, able to focus their attention both inwardly and outwardly in light of the social conditions in which these practices are situated.

Broyles et al. (2011) asserted that reflective teaching incorporates not only the cognition involved in teaching but also metacognitive processes as well. They emphasized that teacher preparation programs should encourage preservice teachers to

critically reflect in a metacognitive way, enhancing their teaching by generating and testing hypotheses related to individual teaching experiences. Such critical reflection encompasses the practitioners' past experiences, ideological beliefs, and social contexts (Meierdirk, 2016). Bates, Ramirez, and Drits (2009) contended that the ultimate goal of critical reflection is change or transformation.

Research base for the implementation of reflective teacher education. There is a strong research base for the implementation of reflective teacher education. Valli and Rennert-Ariev (2000) reviewed nine national reform reports that targeted teacher education and found, among other factors, ardent consensus for reflection and inquiry in teacher education programs. Brownell, Ross, Colon, and McCallum (2005) compared critical features of effective general education teacher programs with special education teacher programs. Both programs included reflection as a vital element to address with preservice interns and student teachers. Middleton, Abrams, and Scaman (2011) acknowledged that past research suggests that teachers who engage in reflective practice are better able to recognize the complexity of teaching, use judgements to choose appropriate strategies for teaching and learning in their specific contexts, and experience improved self-confidence. Results of their own case studies on reflective teacher education with two preservice interns yielded, however, the implication that preservice teachers benefit from continued guidance and mentoring as to the value of reflective practices so that they are sure to apply what they learned and experienced in field-based placements to their future as educators in the workplace. Nelson, Miller, and Yun (2016)

concluded that indeed, reflective teacher education is universally accepted as a worthy outcome of teacher education.

# Dialogic E-Journaling as a Tool for Teaching Skills of Reflection to Preservice Teachers

Results of this study indicated that the four preservice teacher participants benefited from dialogic reflective e-journaling with this researcher. The literature appears to affirm this benefit. According to King and LaRocco (2006), "journal writing adds energy and synergy to the learning process" (p. 2).

Garmon (2001) asserted that there are two types of reflective journaling: (a) response reflective journaling (preservice teachers reflect independently from teacher educators with only rare feedback given to them) and (b) dialogue (now called dialogic) reflective journaling (preservice teachers engage in written discourse with teacher educators for an extended period of time). Dialogic reflective journaling is often cited as a powerful tool for promoting reflection in teacher education (Lee, 2004). According to King and LaRocco (2006), continuing dialogic exchange between teachers and teacher educators helps students deepen their learning and reflection. In terms of dialogic reflective journaling, Thorpe (2004) cautioned that "reflective thinking requires a trusting relationship if one is to write about individual thoughts, feelings, and experiences honestly . . ." (p. 329). According to Hubbs and Brand (2005), journaling provides students practice in the art of reflection that is important in learning new material and is essential for transformative learning, especially when the instructor engages the student in mutual dialogue through written discourse. It thus appears that dialogic e-journaling

like that done in this study may be a tool for teaching skills of reflection to preservice teachers.

## Benefits and Challenges of Dialogic Reflective E-Journaling

O'Connell and Dyment (2011) reviewed over 75 articles on dialogic reflective journaling. They learned that for students and instructors, dialogic reflective journaling has benefits and challenges.

Benefits. In terms of benefits, O'Connell and Dyment asserted that "the literature is unequivocal in its contention that students profit from journaling" (p. 48), noting that the acquired dividends include providing data as a starting point for learning, centering students in the learning process, promoting creativity in learning, and encouraging critical reflection. Garmon (2001) noted also that dialogic reflective journaling promotes self-understanding and provided instructor feedback for students. O'Connell and Dyment found the following benefits for instructors: (a) journaling encourages "discussion" between instructors and students thus creating an atmosphere for dialogic teaching, (b) through reading students' journal entries, instructors are able to gauge how well students are comprehending topics or skills, and (c) journaling enables instructors to get to know their students individually, particularly if the instructors provide authentic, consistent, and meaningful feedback to students. Hubbs and Brand (2005) concurred, noting that "the reflective journal holds potential for serving as a mirror to the student's heart and mind . . . allowing access to the student's making of meaning" (p. 61).

**Challenges.** Upon their review of the literature on dialogic reflective e-journaling, O'Connell and Dyment discovered the following challenges: (a) the need to train students

how to journal and how to critically reflect, giving specific guidelines on effective journaling, (b) helping students feel comfortable writing honestly despite the reality that their instructors will be reading their entries, (c) the overuse of journaling by instructors, leading to apathy from some students toward reflection, (d) students and even some instructors are unfamiliar with and wary of the journaling medium, (e) journals are not a good fit for all students' learning styles, (f) female students generally have more positive attitudes toward journaling and keep journals more often than male students, (g) journals can blur the boundaries between the lives of students and instructors, (h) some instructors who grade student journals note challenges assessing them in a fair and consistent manner, (i) there is a possibility that what is written in a journal by either students or instructors may be revealed in court, (j) journals can be time-consuming, and (k) student entries tend not to be highly reflective. Garmon (2001) also suggested that some students find the requirements and procedures for journaling to be arduous.

## Use of Dialogic Reflective E-Journaling to Facilitate Transformative Learning

This study explored the use of dialogic reflective e-journaling in addressing preservice teachers' ability to cope with a classroom disorienting dilemma or other situation from a reflective perspective within their special education field-based placement, possibly experiencing as teachers a positive personal transformation via transformational learning (Mezirow, 1981, 1991, 1995). Hubbs and Brand (2005) attested that "reflective journals can be significant adjuncts in the transformative learning process" (p. 63). Indeed, this was the case for all four study participants as they attested on this study's final questionnaire that they did experience a positive personal

transformation as teachers via engaging in dialogic reflective e-journaling with this researcher.

The process of critical reflection is a fundamental element of transformative learning theory (Mezirow, 1991). Mezirow stated that learners must engage in critical reflection of their experiences in order for transformation of meaning perspectives to subsequently occur and explained that a shift in outlook through critical self-reflection fosters transformative learning (Mezirow, 2000). Russell (2005) definitively asserted that "fostering reflective practice requires far more than telling people to reflect and then simply hoping for the best . . . reflective practice can and should be taught- explicitly, directly, thoughtfully, and patiently . . ." (p. 203). According the Lambe (2011), the art of reflection provides a valuable learning framework in which preservice teachers can be helped to scrutinize and self-evaluate their own development and progress.

Mezirow (1991) emphasized that critical self-reflection is the central element to perspective transformation, noting its meaning becomes significant to the learner through critical discourse with others. As dialogic reflective e-journaling constitutes written critical discourse with others, this medium served to further propel the participant preservice teachers toward the perspective transformation they each described on this study's final questionnaire.

## **Study Implications**

In light of the appreciation and acknowledgment of the value of dialogic reflective e-journaling and transformative learning in terms of pedagogical growth expressed by all study participants and the improved participant reflection skills seen by this researcher, there are several implications of this study. First, dialogic reflective e-journaling may be a worthwhile endeavor for a university teacher preparation program to offer to special education preservice teachers as this medium provides extra performance feedback to preservice teachers in addition to the feedback given by the university supervisor, cooperating teacher in the field, and the university professor leading the field placement seminar on campus. Preservice teachers enrolled in initial teacher preparation programs need performance feedback; that is systematic and objective feedback about their classroom performance that enable them to reflect on strengths and weaknesses and devise more effective pedagogical strategies (Wilkins, Shin, & Ainsworth 2009). According to Leko, Brownell, Sindelar, and Kiely (2015), "critical to the development of effective performance is corrective feedback that highlights well-executed aspects of performance and those that need to be changed" (p. 33). Leko and Smith (2010) asserted that focused and individualized attention on beginning special education teachers, who are most vulnerable to attrition, can improve the retention of these particular educators over a long period of time, ultimately improving services for students.

Second, according to Boe et al. (2013), there is a need for well-prepared new special education teachers in light of the continual problem of attrition in the field of special education. The reflective aspect of dialogic reflective e-journaling may be crucial for such preparedness as research suggests that teachers who engage in reflective practice are better able to recognize the complexity of teaching, use judgements to choose appropriate strategies for teaching and learning in their specific contexts, and experience improved self-confidence (Middleton, Abrams, & Scaman 2011). Faced with difficulties

in the classroom, reflective teachers are more likely to seek out solutions, rather than simply giving up (Valli, 1997).

Third, critical reflection as evoked via dialogic reflective -journaling, is a process that constitutes a fundamental element of transformative learning theory (Mezirow, 1991). Mezirow explained that learners who engage in critical reflection of their experiences (particularly if coupled with dialectical discourse such as takes place given dialogic reflective e-journaling) may have transformation of their perspectives occur. Transformative learning fosters a shift in outlook through critical self-reflection (Mezirow, 2000). Embracing Mezirow's view, Gregson and Sturko (2007) agreed that reflective teachers may experience transformative learning as they open up their frame of reference to new ways of teaching and learning. Hickson (2011) concurred, noting that critical reflection is "a powerful technique that has the potential to invigorate and energize practice" (p. 837).

Fourth, this study's result that all four participants found dialogic reflective ejournaling with this researcher, a doctoral student with special education teaching
experience, to be efficacious has an additional implication for teacher preparation.

Doctoral students with special education teaching experience assigned to be graduate
assistants for faculty members could possibly serve in the capacity this researcher did for
this study, providing support, guidance, and reflective teacher education to preservice
teachers via dialogic reflective e-journaling. As this would be part of the doctoral
students' graduate assistantship assignment, there would be no extra cost to the university

for this provided support. The e-journaling would not be graded and its content would have no impact on other grades earned by participating preservice teachers.

Finally, a crucial implication of this study is that the classroom disorienting dilemmas faced by the undergraduate study participants mirror dilemmas encountered by many early career teachers (Billingsley, Griffin, Kamman, & Israel, 2009). As the special education preservice teachers of this study grew in their ability to cope with encountered dilemmas via learning to become reflective teachers, one wonders if the implication may be suggested that if given similar reflective education, early career teachers may meet greater success dealing with classroom disorienting dilemmas themselves. Several special education early career teacher challenges delineated by Billingsley et al. (2009) constituted themes derived within this study. These challenges include: (a) learning to interact positively and productively with co-workers, (b) interacting with parents, (c) lack of content knowledge when serving as an inclusion teacher, (d) teaching reading successfully, (e) lack of needed materials, (f) dealing with student behavior, (g) implementation of the Individuals with Disabilities Education Act (IDEA), and (h) role ambiguity. Billingsley et al. maintained that "understanding the challenges new special educators encounter in their first years provides important information for administrators, mentors, and teacher educators as they consider ways to better prepare and induct new teachers into the profession" (p. 16).

## **Recommendations for Future Research**

Through the execution of this study, several recommendations for future research evolved. First, viable future research could include an examination of the impact of

dialogic reflective e-journaling and subsequent transformative learning upon other special educators in addition to undergraduate preservice teachers at the internship level of their teacher preparation. This impact could be scrutinized in terms of undergraduate special education preservice teachers involved in student teaching, career changers studying for special education certification, or early career special education teachers already in the field.

Second, comparative studies could be done to discern the efficacy of dialogic reflective e-journaling and subsequent transformative learning upon these three groups of special educators. Is one group more receptive to dialogic reflective e-journaling? If so, why?

Third, a comparative study of undergraduate special education interns, undergraduate special education student teachers, career changers studying for special education certification or early career special education teachers who have had the benefit of dialogic reflective e-journaling could be done. Such a study would investigate their pedagogical performance and coping ability when faced with a classroom disorienting dilemma versus those in these four groups who have not participated in dialogic reflective e-journaling.

Fourth, research involving input from cooperating teachers could be obtained on the pedagogical performance and coping ability when faced with a classroom disorienting dilemma of undergraduate preservice teachers at the internship or student teaching level as well as career changers studying for special education certification who have had dialogic reflective e-journaling experience. Similarly, school system mentors could be

consulted to gain such data on early career special education teachers who have also had the opportunity to participate in dialogic reflective e-journaling.

Fifth, research could be done to examine moderating variables affecting dialogic reflective e-journaling. How does gender, writing ability, and comfort level with the e-journaling medium affect the efficacy of this additional pedagogical support for preservice or inservice teachers?

Sixth, the benefit of dialogic reflective e-journaling versus face-to-face reflective teacher education could be studied. Which context is more worthwhile for preservice or inservice teachers?

Seventh, research could be done to examine the contribution of feedback, the use technology, and effective writing skills to the success of dialogic reflective e-journaling. Which of these elements shapes the outcome of such e-journaling to the greatest extent? Longhurst and Sandage (2004) contended that e-journaling enables learners to ask asynchronous, individualized questions and pursue specific feedback. According to Banker (2004), the immediacy of feedback that the use of e-journaling technology can provide can be a benefit to students. King and LaRocco (2006) asserted that effective writing skills are critical for learners as this results in important synthesizing of ideas, experiences, and opinions after instruction.

Finally, a longitudinal study could be done to follow preservice teachers who participated in dialogic reflective e-journaling into their early careers as special education teachers. Are they more successful as beginning special educators than their peers who did not experience this extra support at the preservice level? Are the skills of reflective

teaching learned via dialogic reflective e-journaling as preservice teachers sustained when they move into their first special education teaching positions? Was Valli (1997) correct to caution that it cannot be taken for granted that preservice teachers will become reflective practitioners once they are in the field and gain experience?

## Conclusion

The challenges of being a special educator can be overwhelming, a reality that has resulted in a shortage of special education teachers as well as a high level of attrition from the field in terms of both early career and seasoned special education teachers (McLeskey & Billingsley, 2008). According to Smith and Ingersoll (2004), newly hired special educators are 2.5 times more likely to leave their teaching positions than other beginning teachers. Educational productivity is reduced as beginning teachers who leave the profession never have the opportunity to grow in teacher effectiveness through years of experience (Darling-Hammond, 2003). Billingsley and McLeskey (2004) further asserted that "the shortage of fully certified special education teachers, which has been described as severe, chronic, and pervasive, threatens the quality of educational services that students with disabilities receive" (p. 2). This "revolving door" of changing teachers shortchanges students and impacts their educational outcomes, resulting in (a) significant instability in the special education profession that makes it difficult to reduce the research-to-practice gap and develop evidence-based special education programs in the schools and (b) interference with established collaborative and co-teaching relationships and the sustainability of inclusive school reform (McLeskey & Billingsley, 2008). Fully certified special education teachers are often replaced with teachers who are less than

fully qualified; these replacement teachers then often leave their positions as well before becoming fully certified, resulting in students with special needs receiving possibly years of low quality instruction, thus reducing their learning potential (Connelly & Graham, 2009).

In light of the continual problem of attrition in the field of special education and the need for well-prepared new special education teachers (Boe et al., 2013), the intent of this study was to examine the efficacy of dialogic reflective e-journaling as an extra support for undergraduate special education preservice teachers at the internship level in addition to the support they were already receiving from their university supervisor, cooperating teacher, and university professor leading the field placement seminar course on campus. Study findings revealed that the dialogic reflective e-journaling enhanced the reflective skills of the study participants when faced with classroom disorienting dilemmas and resulted in perspective changes that instigated a positive personal transformation as teachers in the process. It is hoped that having been provided with the extra support of dialogic reflective e-journaling at the internship level, these undergraduate special education preservice teachers will complete student teaching as well as begin their careers as special education teachers with greater self-confidence and enhanced pedagogical skills, armed with sufficient coping strategies when classroom disorienting dilemmas occur as well as an assurance that they are indeed capable special educators with much to offer the students entrusted to their care.

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# APPENDIX A

# INTERVIEW PROTOCOL SCRIPT

My name is Pam Carter. I am a doctoral student in special education. My research interest is teacher preparation. Thank you for your willingness to participate in my study. Your participation will not affect your grades in any way as a university student.

I would like to ask some pre-interview questions before I proceed with the interview itself. With your permission, I would like to record your responses to both the pre-interview questions and the interview itself. Your identity will be held strictly confidential. I will stop recording or end the questioning at any time if you request me to do this. May I record your responses to the pre-interview questions and the interview itself?

# **Pre-Interview Questions:**

- 1. What is your age?
- 2. Why did you decide to study to become a special education teacher?
- 3. What are your feelings concerning the field of special education?
- 4. In terms of field-based experiences, what is your view of performance feedback given to you by your university supervisor or cooperating teacher?
- 5. In terms of your field-based experience this semester, what is your present classroom setting?

**Probe:** Are you teaching at the elementary, middle, or high school level? Are you in a self-contained or resource setting? If you are in a resource setting, are you doing pull-out, inclusion, or both?

- 6. What classroom setting do you prefer for your upcoming student teaching experience?
- 7. What is your job preference upon graduation?

# **Interview Questions:**

- 1. What do you view as your strengths and weaknesses as a special education preservice teacher at this point in time?
- 2. What does being a reflective teacher mean to you?

  Probe: Have you studied reflective teaching within any of the

  undergraduate university courses you have taken?
- 3. When confronted with a disorienting dilemma or other situation when teaching, what is your usual response?
- 4. What components of transformative learning are you familiar with? **Probe:** Has transformative learning been addressed in any of your university courses?
- 5. Within your university coursework, have you had any experience with electronic journaling (e-journaling)?
- 6. At present, how would you describe your overall level of teacher self-efficacy in terms of teaching?

#### APPENDIX B

# FINAL QUESTIONNAIRE

Please answer the following questions in light of your study participation during your final field-based experience prior to student teaching.

- 1. What impact did dialogic reflective e-journaling with this researcher have on you in terms of benefits and/or challenges? Describe these benefits and/or challenges in detail.
- 2. How did critical reflection influence your classroom decision-making?
- 3. What was the overall effect of critical reflection upon the students in your classroom? Referring to your e-journal, what entry provides the best example of a way your critical reflection impacted one or more students in your classroom?
- 4. Referring to your e-journal, describe an instance of transformative learning that you experienced, if any. Provide details below of the particular phases that you personally went through. (You do not need to have gone through each phase nor do you need to have gone through phases in the set order given here.)
  - 1) Phase 1—a disorienting dilemma
  - 2) Phase 2—self-examination of your personal feelings in light of dilemma
  - *3) Phase 3—critical assessment of your own assumptions*
  - *4) Phase 4—recognition that others have negotiated a similar change*
  - *5) Phase 5—exploration of options*

- 6) Phase 6—planning of a course of action
- 7) Phase 7—acquisition of knowledge and skills for implementing one's plans
- 8) Phase 8—trying out planned course of action
- 9) Phase 9—altering what is going on presently
- 10) Phase 10—building of competence and self-confidence
- 11) Phase 11—a perspective change (transformation)
- 5. Describe your personal transformation as a preservice teacher within this doctoral study, if this occurred. How has your perspective changed in terms of being a teacher? If no transformation occurred, why do you think this was the case?

# **APPENDIX C**

# **MEMBER CHECKING CHART 1**

# Themes/Subthemes for Data Related to Research Question 1

**Data Source:** E-Journaling Documentation

**Research Question 1:** What encountered classroom situations may constitute disorienting dilemmas for undergraduate special education preservice teachers?

Nine themes were derived from the e-journaling documentation to answer Research Question 1.

	Comments from Data That	
Theme	Support Theme	
Behavior management of	I have an 11th grade student who refuses to do any	
students	work.	
	So we had multiple behavior issues today in our classes.	
	In the first lesson, I had to remind the students to raise	
	their hands, though, because they all started talking over	
	one another.	
Concern over the	"Jill" was very upset because she knew she would no	
social/emotional well-	longer be with her friends in her current classes or with	
being of a student	the teachers that she has grown to like so much. It just	
	broke my heart seeing Jill sob that day because she is	
	such a sweet young lady and I felt so sad for her.	
	During my resource period, "Heath" apparently punched	
	a locker in the hallway. I took a chair and sat directly	
	beside him and showed concern for his hand because it	
	was bleeding, and allowed him to vent to me.	
	I had a student who was getting stressed out with a	
	timed computer math game. He was getting to the point	
	where he was banging on the table. I went to him, we	
	did a couple untimed inequality examples and we talked	
	out how to solve the problems.	
Collaboration	The fact that it was Monday and students had a sub-	
	they were acting upon many undesirable behaviors that	
	would not have been allowed if my teacher was present.	
	I tried my best, in my scope of knowledge, to try to keep	

	Comments from Data That	
Theme	Support Theme	
	as much of the normal structure and expectation for the	
	students. However, the substitute kept going against my	
	directions and allowing students to not follow	
	procedures.	
	Subtheme: Collaboration with a co-worker	
	Teachers have asked about why he hasn't done	
	homework, and have gotten responses like "my brother	
	took it out of my backpack" and not much else of a	
	response after that, according to the other EC teacher	
	that he has class with. The other EC teacher said at	
	lunch that she was able to get a hold of the mother when	
	she called once, and she said exactly, "She [the mom]	
	sounded high as a kite."	
	Subtheme: Collaboration with a parent She blatantly called out this kid in front of his fellow	
	students, showed that she doesn't believe he is actually	
	one of her own students and she doesn't have full	
	control of the students in her class. I thought this is a	
	dilemma that probably happens more than I think with	
	Gen Ed teachers and EC teachers.	
	<b>Subtheme:</b> Collaboration with a co-worker	
Instructional challenge	I noticed when asking the students comprehension	
	questions that they were answering with answers that	
	had nothing to do with the question. They were simply	
	repeating things from background knowledge.	
	This week, while teaching a mathematics concept in my	
	placement, my students just didn't get it. I tried to	
	scaffold the instruction to the best of my ability as well	
	as present the material a variety of different ways which	
	has worked in the past for these specific students. I kept	
	trying to bring it back to the basics and then build in	
	small incremental steps, but it seemed like nothing I did	
D	helped them.	
Preservice teacher's lack	I am in a high school Math 3 class and for the first time	
of content knowledge	this year, I was unable to grasp the concept that the	
	teacher was teaching (logarithms). I have been able to build a rapport with the students and they feel	
	comfortable to come and ask ne for help if needed. I	
	usually am able to walk around the room, spot the	
	confused looks, and provide the extra support. So far, I	
	was understanding the material.	
	was understanding the material.	

	Comments from Data That	
Theme	Support Theme	
	On Monday, however, the table turned and when it was time for students to do their independent work, I was lost. On top of that, I was left alone with a class of 25+ students. I felt so useless. The regular education teacher was pulling students one by one in the hall to discuss grades and work that needed to be made up. My cooperating teacher had been called to the office for something so she was not there either. Here I was standing at the podium trying to do the worksheet myself and figure out how to do these problems.	
Student health concern	On Monday, I had a disorienting scenario in my	
	placement- involving a student who had a major seizure in our classroom. The student was all okay and then suddenly he started to shake uncontrollably and was not responding to my cooperating teacher and I. I immediately called the front office to get a first responder (as part of our school's protocol, a faculty member who is trained in basic first aid/CPR and then if it is a severe case then EMS is called), and then proceeded to escort the rest of our class to the small computer lab down the hall while my teacher took care of the scenario in the classroom.	
	We had a similar situation today in which the same	
	student had another seizure, this time in the bathroom. Luckily, we had sent another student with him and the other student ran back to our class and said he was on the floor shaking. My teacher then proceeded to grab one of the male administrators and took care of the scenario. I was in the classroom with the students this time and the neighboring teachers popped their heads in to ensure that things were going okay.	
	One of our students has been having absent seizures in his classes and no teacher has caught up to it yet. The only reason why we know is because his mom alerted school about him having them more frequently at home. Because of his classification, teachers believed the "staring into space" was a part of his processing speed as well as his productivity in general.	

Theme	Comments from Data That Support Theme	
Implementation of the Individuals with Disabilities Act (IDEA)	During the first week, I journaled with about this same student "Heath," he was accused of bullying a boy on the bus. After all this happened, Heath is now in all resource classes except for his electives. He is fully capable of being in an inclusion and should be. They only moved him to resource because of his behavior.	
Dealing with specific disabilities	I'm just not sure this is okay.  All of my students were quite engaged in the lesson and were writing diligently. I walked around and	
	All of my students were quite engaged in the lesson and	
	be some writing practice as well for him. <b>Subtheme:</b> Choosing proper modifications for a student	
Quality of professional development	The important point that was addressed during the presentation/meeting was that someone's perception is their reality. The county took a survey done by the students at the school to collect data. There were a handful of teachers that became upset thinking the information was skewed and the students did not report correct data, but the presenter explained that they reported based on how they felt. So their data is their	

Theme	Comments from Data That Support Theme	
	perception of how bullying occurs/is handled etc. and whatever their perception is is their reality. It is how they see their world while at school. I feel, based on this point, the presenter should have further addressed these	
	concerned teachers.	

# APPENDIX D

# **MEMBER CHECKING CHART 2**

# Themes for Data Related to Research Question #2

**Data Source:** E-Journaling Documentation

**Research Question 2:** How does dialogic reflective e-journaling shape special education preservice teachers' critical thinking in classroom decision-making upon being confronted with a classroom disorienting dilemma?

Three themes were derived from the e-journaling documentation to answer Research Question 2: (a) consideration of what occurred *before* the classroom disorienting dilemma, (b) consideration of what was done or should have been done *during* the classroom disorienting dilemma, and (c) consideration of what needs to be done *after* the classroom dilemma.

Growth of study participants in terms of critical reflection was examined via two levels of reflection competency: (a) the study participants' reflective response to prompts given by this researcher upon submission of a weekly e-journal entry and (b) critical reflection done by study participants with no prompting given.

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
Consideration of what occurred before the classroom disorienting dilemma	The county took a survey done by the students at the school to collect data.	So today was the day that my students received their tablets, which starting next week, they will be taking home to do homework/projects on them. So this morning, we spent

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
		over two hours in our classroom helping the students get their tablets set up and take the quizzes needed in order to pass to take their tablets home next week. While this was going on, certain children on different teams (we have three teams in seventh grade) were moving to classes at different times, which meant that we had some students for longer than others and my OSTE and I were trying to find activities for the other students to do during regular instruction for others. Of course, this lack of structure caused chaos.
	I can allow him to type his assignment and allow others as well so he will not be singled out.	I was left alone with a class of 25+ students the regular education teacher was pulling students one by one in the hall to discuss grades and work that needed to be made up. My cooperating teacher had been called to the office for something so she was not there either.
	I tried to activate background knowledge for the students to connect decimals to the real world. I had a chart on the board that was split in two parts: one part was labeled "everyday uses of fractions" and the other "everyday uses of decimals."	Something that I got to participate in was an antibully meeting. Someone from the county came to the school and gave a presentation along with data about the school this all came about due to the situation involving "Heath," which by the way, his mom pulled him out last Friday (I learned of this Monday

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
		morning).
	Having clear and concise expectations and rules from the beginning set up for the students of what was appropriate and inappropriate behavior as well as how I expected them to participate.	So on Monday, I collected the homework of our first math class. I noticed that one of the students did NONE of the homework. I asked my OSTE if this happens consistently and she said it does. She said she has tried various consequences like verbal warnings and lunch detentions. She tried to contact home but has gotten no response. There is no other given contact for parents like e-mail either. She has suspicion that there are problems at home for Luke.
Consideration of what was done or should have been done during the disorienting dilemma	Something that I could have also done was instead of working out the problems and stand in front of the class, was to walk around. The close proximity would have signaled students to focus and continue working.	On Monday, this child acted phenomenal in class. He was absolutely fantastic and I even told him how proud I was of him, he responded with "I took my medicine today." As the day went on to lunch, which he has with a different teacher, he apparently made the teacher upset because she asked him to put up his chair and supposedly he wouldn't. So she marched over to my OSTE with him and in front of the rest of the staff and students said very angrily, "Since this is your baby, maybe you can make him put up his chair!" My OSTE asked him to do it and he did. The other teacher walked off with a huff and rolled her

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
		eyes. I just can't help to think how embarrassing that must have been for this student.
	Thinking reflectively about the disorienting dilemma, something that I could have done better to prepare for Monday was catching the student's behavior before it escalated (seeing the warning signs and acting upon the small undesirable behaviors).	I had a student who was getting stressed out with a timed computer math game. He was getting to the point where he was banging on the table. I went to him, we did a couple untimed inequality examples, and we talked out how to solve the problems. We took key notes on a notecard for him to use as a resource during his computer usage. By this time, he felt confident enough to try some of the timed examples. Getting extra practice helped him and luckily he did not get to the point of frustration anymore during that class period. It may have helped that I was walking around occasionally to give him a thumbs up as well.
	In response to your questions about "Andy," I don't think his disengagement in the lesson had to do with him not understanding decimals. Thinking about that now, I could have handled that by having the students pair up and he could have acted as a sort of "tutor" with one of his peers who did not understand the concept.	I noticed that repeating the expectations throughout my lesson, that students were not only more engaged, but also there were less off-task behaviors during the lesson.
	I was able to deescalate an angry student while making	The dilemma I want to e-mail you about this week is

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
	him feel like his voice is important. Anytime a student confides in you or tells you personal information is always a good moment to me.	specific to a student's behavior. I'll this student "Aron. The word I would use to describe Aron's behavior is impulsive. It appears to me that he acts and talks before thinking. I suspect he may be ADHD from my observations of his behavior (but I'm not an expert, I may be wrong). He consistently speaks out of turn and he is always wanting to move around by getting out of this seat without permission. Although I don't like using this term (it's the only word I can think of right now), I would describe Aron to be sort of the "class clown." He does things for attention from his classmates and his teachers, even when I know he knows he shouldn't do it.
Consideration of what needs to be done <i>after</i> the classroom dilemma	if I was in my OSTE's position, I think I would talk to that teacher [who embarrassed my student] privately later on in the day, maybe when school is over. I would first talk to her and get her side of the story, allow her to vent about her frustration with that child not listening. I would then relate to her that the way she handled the previous situation was not helpful for the student's behavior or his respect for her. I would give her some	I consider allowing him [a high school student with dysgraphia] to type his assignments, but I debate on this because there should be some writing practice as well.

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
	strategies to use with this child in the future and let know that she can always come to me with questions.	
	In regards to the sub folder, I would not only include the mandatory items (schedule, rosters, emergency plan, etc.) but would also inform the substitute of the expectations that I have set in my classroom, that my intern is 100% aware of and would be the go to person to ask questions about the expectations. Making it clear to the sub not only of the expectations but also the specific children who might test the expectations as well as procedure plan for dealing with their specific behaviors.	how I would have handled that situation ["Jill" is a high school student who is upset that she is being switched from resource to the OCS program]. I probably would have tried to comfort her in the same way, explaining it was the best decision for her because she would be able to follow the class better because it would be slower and more at her pace. I would definitely offer to visit her or allow her to visit my classroom too. I would maybe suggest other times during the day she can visit her [resource] friends too.
	Other than continuing to try to reach the parents and going to the guidance counselor, and talking further with him, I would offer "Luke" to come to the classroom in the morning before the first bell rings to work on homework. As an intern, I could offer to assist him on the mornings I am there for one-on-one help with his homework in case he doesn't feel confident doing the work on his own.	During my resource period, "Heath" apparently punched a locker in the hallway (My OSTE was out there with him while I was in the class so I didn't see him.) When he came in, he was really upset I took a chair and sat directly beside him and showed concern for his hand, because it was bleeding, and allowed him to vent to me.
	I could speak to him [the regular education teacher in	The disorienting dilemma for me came when my teacher

Theme	Reflective Response to Researcher Prompt by Study Participants	Independent Reflection by Study Participants
	the inclusion setting] directly, I suppose, and ask him to tell me what we will work on for the next couple weeks or active week prior.	was trying to address another student's behavior outside of the classroom and a student got upset at me for not allowing them to come to the board to put up a practice math problem from their daily math focus, and then proceeded to get very angry and start throwing papers and pencils and proceeding to use his inappropriate mouth to express his anger towards me. I told him that this was not appropriate behavior and that this is not how we talk to anyone. He then continued to proceed using inappropriate behavior so I called for an administrator to escort him out of the classroom and deal with discipline issues.