A MIXED METHODS STUDY OF THE RELATIONSHIP BETWEEN DIALOGIC INQUIRY AND ENGAGEMENT IN ACTIVE LEARNING SHAKESPEARE EDUCATION

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ABSTRACT

This study evaluated the relationship between dialogic inquiry and student engagement within the context of active learning Shakespeare education. Active learning is a pedagogical framework that challenges students to experience Shakespeare's literature by embodying the text through voice and movement. A mixed methods approach was designed to gather data from students in sixth to 12th grades, who attended a Shakespeare camp that used active learning. The experimental group had the addition of dialogic inquiry to their learning experience. Surveys, video recordings, and focus groups from both the control and experimental groups were conducted with students to investigate the dialogic inquiry approach and its relationship to engagement. The data revealed that both groups experienced significant increases in engagement, but the amount of change in behavioral, emotional, and cognitive engagement between the two groups was not significantly different. The qualitative elements of the surveys, video recordings, and focus groups helped explain elements of dialogic inquiry and active learning that students found meaningful and provided context for these findings.

Keywords: Shakespeare, active learning, dialogic inquiry, pedagogy, constructivist

DEDICATION

I dedicate this dissertation to my parents, Bill and Phyllis Bryson. They raised their children with love and inspired us to establish the same strong foundation for our children. Their 18 grandchildren carry this legacy and are already making a positive impact in the world. So, to my first teachers, this manuscript is a testimony to your enduring work.

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LIST OF SYMBOLS

BCa 95% CI, The bias corrected and accelerated 95% confidence interval

d, Cohen's d

df, Degrees of freedom

F, Distribution variable

M, Mean

n, Size of a particular group

N, Total sample size

p, Significance

SE, Standard error

t, Test statistic for Student's *t*-test

U, Test statistic for the Mann-Whitney test

CHAPTER I

INTRODUCTION

Background of the Problem

Active learning traces its roots to Dewey (1902), who experimented with a student-centered model of experiential learning (Bonwell & Eison, 1991). Educators apply this model to transform education from lecture-centered to experience-centered modes. Researchers across disciplines have observed that active learning increases engagement and student performance (Bass, 2018; Cherney, 2008; Freeman et al., 2014). Educators have developed strategies that they include under the active learning pedagogy such as case studies, peer instruction, problem-based activities, and role-playing (McConnell et al., 2017), and these approaches utilize various tools.

Dialogic inquiry is one of these tools, and its purpose is to stimulate discourse among students, who collaborate to develop understanding (Wells, 1999); however, active learning practitioners do not universally utilize this tool (Kirschner, Sweller, & Clark, 2006; Klahr & Nigam, 2004). Some instructors cite the need for more transfer of knowledge before dialogic inquiry (Ford, 2010), while other teachers cite large classrooms as a limitation and thus use reflective writing in the place of dialogic inquiry (Prince, 2004). As a result of a proliferating number of interpretations of active learning, researchers are calling for more studies that will identify specific tools that are important within this pedagogy (B. S. Bell & Kozlowski, 2008). This research of dialogic inquiry within the active learning model may help educators acquire concepts that transfer to other learning experiences.

Shakespeare education is a field that has applied active learning effectively, and several studies from longitudinal research in the United Kingdom (UK) formed the initial basis of this study (Irish, 2016; Neelands, Galloway, & Lindsay, 2009; Thomson, Hall, Thomas, Jones, & Franks, 2010). Educators are advocating a new approach to experience these works to increase engagement (Winston, 2015). Engagement is a multidimensional construct that includes behavioral, emotional, and cognitive factors (Fredricks, Filsecker, & Lawson, 2016), and it is considered a marker for student learning since it is a fundamental element in the learning process (Boekaerts, 2016; Chi & Wylie, 2014). An examination of dialogic inquiry in an active learning context may provide insights into how to teach Shakespeare and other forms of literature to the next generation of students.

Statement of the Problem

Active learning has developed as a constructivist methodology that emphasizes student participation in learning. Most of the research has focused on science, technology, engineering, and mathematics (STEM) disciplines, and educators are calling for "a wider range of fields, particularly the humanities" (Educause, 2017, p. 2). Active learning educators are interested in student engagement in response to this pedagogy (Freeman et al., 2014). Also, researchers in the field of engagement have identified the need for further inquiry into the relationship between specific pedagogies and three types of engagement: behavioral, emotional, and cognitive engagement (Fredricks, Filsecker, et al., 2016). Within the active learning research field, dialogic inquiry is considered a potential tool that is not required for the active learning approach (Kirschner, Sweller, & Clark, 2006; Klahr & Nigam, 2004) even though some scholars consider it a foundational practice (Edmiston, 2015). These research foci have led to this exploration into

the relationship between the use of dialogic inquiry within the active learning model and the three types of engagement: behavioral, emotional, and cognitive.

Purpose of the Study

Educators seek approaches to help students grow in literacy skills and master complex texts (Parsons, Malloy, Parsons, & Burrowbridge, 2015), and the active learning approach contributes to effective strategies (Freeman et al., 2014). This pedagogy is considered one of the most important innovations in the New Media Consortium (2018) *Horizon Report*, which includes the term active learning 16 times. Educators have a stake in understanding how active learning works and how to employ it in a range of disciplines; however, most studies investigate the impact of active learning holistically without separating particular elements in the pedagogy (B. S. Bell & Kozlowski, 2008). This mixed methods research examined the particular element of dialogic inquiry within an active learning setting to apply potential findings in the humanities.

The quantitative study queried the changes in student perceptions between pre- and post-tests for each of the three types of engagement to understand whether dialogic inquiry stimulates a significant difference within the active learning model. The research was based contextually within Shakespeare education, and the goal was to study control and experimental groups that were similar in age, gender, and homeschooling as their pedagogy. The researcher synthesized these findings with a qualitative study to investigate whether students indicated through behavior or self-report that particular elements of the dialogic inquiry process or active learning model were meaningful. The purpose of this study was to explore the relationship between dialogic inquiry and engagement in the context of active learning pedagogy with Shakespeare education.

Research Questions and Hypotheses

1. Is there a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)
2. Is there a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)
3. Is there a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)
4. For the sample, is there a statistical difference in the perceptions of total engagement between the pretest before camp and the posttest after camp? (Quantitative research)
5. Are there elements in the active learning or dialogic inquiry process that students indicate through behavior or self-report as meaningful? (Qualitative research)

Hypothesis 1: There will be a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 2: There will be a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 3: There will be a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 4: For the sample, there will be a statistical difference in the perceptions of total engagement between the pretest on the first day of camp and the posttest on the last day of camp.

Definition of Terms

- Active learning: A student-centered pedagogy characterized by learning through experience. It includes a broad range of pedagogies, such as problem-based learning, experiential learning, and collaborative learning (Bonwell & Eison, 1991).
- Behavioral engagement: "Commitment of time, effort, and perseverance" (Guthrie & Klauda, 2014, p. 387).
- Cognitive engagement: A self-regulating investment in learning that engenders a desire to exceed the requirements (Cleary & Zimmerman, 2012).
- Dialogic bid: A technique developed by Nystrand, Wu, Gamoran, Zeiser, and Long (2003) to stimulate dialogic inquiry by reacting to student statements with authentic questions or taking up student ideas and observations to refer them back to the students.
- Dialogic inquiry: A tool for stimulating collaboration among learners to discuss complex ideas and build on basic concepts, or "the tool-kit of discourse in the activity of learning" (Wells, 1999, p. vii).
- Dialogic teaching: An approach to education in which "teachers and students act as coinquirers" (Reznitskaya, 2012, p. 446).
- Emotional engagement: Manifestations of "interest, boredom, happiness, sadness, and anxiety" (Fredricks, Blumenfeld, & Paris, 2004, p. 62).

- Engagement: Defined in education research as a multifaceted construct that combines behavioral, emotional, and cognitive elements (Fredricks et al., 2004).
- Ensemble approach: In the theatre discipline, the ensemble approach is an example of active learning, in which students collaborate to find the meaning of their scenes and plays so that they can embody the text with their voices and movements. Based on the research of Irish (2011), active learning and the ensemble approach are used interchangeably.
- Environmental complexity: "The simultaneous presence of environmental challenge and support" (Shernoff et al., 2016, p. 52).
- Flow: In psychology, a mental state of focus, immersion, and enjoyment in an activity (Csikszentmihalyi, 2013).
- Meaningful: A perception that an element is relevant, useful, or important. Often used in educational theory as a factor in learning (Ausubel, 2012).
- Secondary education: The instruction that serves middle and high school grades, which includes students approximately 11 to 19 years old.

Approval Process

The researcher submitted the proposal to the committee, and it was approved with some revisions on July 25, 2019. The revised documents for the surveys and questionnaires were submitted to the Institutional Review Board (IRB) and were approved on July 24, 2019. See Appendix A for Institutional Review Board approval and informed consent forms.

Rationale for the Study

Traditionally, Shakespeare's work has been taught to secondary school students as a piece of literature in the context of a classroom. Some Shakespeare educators, however, are promoting the value of active learning, which is modeled on the research of the Learning Performance Network and the Royal Shakespeare Company in the UK (Thomson et al., 2010; Winston, 2015) and the Folger Shakespeare Library's Teaching Shakespeare Institute and the National Endowment for the Humanities in the United States (E. J. O'Brien, 1984; P. O'Brien, 1995). In the active learning model, students experience a play by performing it (Gibson, 1998). If dialogic inquiry is used as part of the active learning model, the students have the opportunity to master a democratic discourse through the interpretation of Shakespeare as an ensemble (McGrath, 2002; Neelands, 2009).

This dialogic model builds on the work of Freire (1998) with his philosophy of a pedagogy of freedom as well as the research of Christoph and Nystrand (2001), Lyle (2008), and Reznitskaya (2012), who advocate the development of dialogic inquiry. Dialogic inquiry encourages discourse that transcends the traditional repetition of facts queried by the teacher (Lyle, 2008). Instead, students build on basic ideas to explore new knowledge in a learning community (Alexander, Hardman, Hardman, Rajab, & Longmore, 2017). The application of these principles led to this research, in which a homeschool Shakespeare camp provided the opportunity to study active learning in the field to compare a control group with a dialogic group.

The coaches adopted an active learning approach based on the work of Winston (2015) in the UK, in which the students study the play by acting the scenes with voice and movement. Coaches led students in listening to lines, experimenting with delivery, exploring how to move and react, and collaborating to block scenes. This approach differed from the traditional literary,

as opposed to theatrical, study of a Shakespeare text while sitting at a desk. In addition, the intervention group added the element of dialogic inquiry to enable students to construct the meaning of their scenes and plays together. The experience of the researcher with Shakespeare camp stimulated the question of whether the dialogic element within the active learning model would make a difference in engagement and how this difference might be understood.

Conceptual Framework of Active Learning

In the early 20th century, Lewin, Piaget, and Dewey (as cited in Brame, 2016) pioneered research that became the basis of active learning. According to Kolb (2014), their ideas shared common values that learning is not an outcome but rather "a continuous process grounded in experience" (p. 9). Revans (1981) first coined the term action learning in the UK to describe a pedagogical approach in which learners were experientially involved rather than receiving a transfer of information. The term was modified to active learning in the United States (Weltman, 2008). Active learning is inductive, which means that the action precedes the concept (Cooperstein & Kocevar-Weidinger, 2004). Examples of active learning tasks include experiments, enacting plays, discussion, and solving problems (Bransford, Brown, & Cocking, 1999). Active learning is also student-centered rather than teacher-centered, and according to Bonwell and Eison (1991), all students must participate for this model to be effective. This concept aligns with the constructivist theory that social interaction enhances learning.

As students engage in activities, they are challenged to think about the meaning of their experience. This metacognition stimulates critical thinking skills and forms one of the foundational elements of this framework (Bonwell & Eison, 1991). The active learning steps include meaningful reception (Ausubel, 2012), discovery (Bruner, 1961), and construction of

knowledge (Kolb, 2014). Also, this creative approach encourages students to question, predict, and summarize what they are learning (Kolb, 2014). Often this metacognition is stimulated through reflective writing, which is a personal rather than a dialogic process. Metacognition provides for inductive learning that moves students from experience to knowledge construction.

Barnes (1989) reported on active learning for the Technical and Vocational Education Initiative (TVEI) in the UK and described the model as purposive, reflective, negotiated, critical, situation-driven, engaged, and complex. Barnes (1989) considered participation to be the defining characteristic of the first four principles. He concluded that realism summarized the last three principles. Purposive learning is similar to Dewey's (1902) concept that tasks should be relevant to students. Reflective learning encourages students to think about the meaning of what they have learned, and negotiated learning requires teachers and students to work together to determine methods and goals (Bonwell & Eison, 1991). The critical aspect of active learning challenges the students to seek different ways of interpreting knowledge. Learning is situation-driven when "the learning tasks arise out of the needs of the situation" (Kyriacou & Marshall, 1989, p. 311). Engaged learning means that the tasks contain real-life components (Barnes, 1989). Finally, the complexity of this model has been under recent study, both in the concept that students make connections to the complexity of the real world, as well as the stimulus of complexity in the learning space.

The qualities of complexity have given rise to the study of learning environments (Shernoff et al., 2016). According to Grabinger and Dunlap (1995), active learning spaces should promote inquiry through experimentation and scholarly content. This idea highlights the dual values of teacher scaffolding of knowledge as well as the value of teacher facilitation of exploration. According to Klahr and Nigam (2004), not all active learning experiences involve

the element of dialogic inquiry as a necessary factor for establishing a basis of knowledge. This varying opinion about the foundational value of dialogic inquiry was the focus of this research in active learning and formed the basis for this study.

Theoretical Framework: Foundational Theory on Engagement

In education research, engagement is defined as a multidimensional construct that combines behavioral, emotional, and cognitive elements (Fredricks, Filsecker, et al., 2016). In the context of engagement with literary texts, behavioral engagement is participation that is demonstrated through time spent reading (Guthrie & Klauda, 2014), class attendance, and homework completion (Ryu & Lombardi, 2015). The definition of emotional engagement includes responses such as interest, happiness, boredom, sadness, or empathy (Fredricks et al., 2004). Cognitive engagement is defined as an investment in learning that exceeds the requirements through the depth of processing or self-regulated learning (Cleary & Zimmerman, 2012). Though cognitive and behavioral engagement can overlap, cognitive engagement indicates a volitional effort that exceeds the lesson requirements, while behavioral engagement indicates simple participation (Appleton, Christenson, & Furlong, 2008). This distinction was applied to this study.

The foundational definitions impact how engagement is studied. For example, Z. Wang, Bergin, and Bergin (2014) developed a Classroom Engagement Inventory for fourth through 12th grade students and used scale items like “I work with other students, and we learn from each other” (p. 521) for behavioral engagement, “I feel interested” (p. 521) for emotional engagement, and “I search for information from different places and think about how to put it together” (p. 521) for cognitive engagement. Their inventory was based on the work of Watson

and Clark (1999); Bergin and Bergin (2009); Skinner, Kindermann, and Furrer (2009); Painter and Valentine (1996); Stipek and Gralinski (1996); DeBacker and Crowson (2006); and Linnenbrink (2005). The large body of research has grounded the definitions of behavioral, emotional, and cognitive engagement for use in this new research. This study focused on these definitions as they apply specifically to engagement with Shakespeare's literature.

In research with the three constructs of behavioral, emotional, and cognitive engagement, "multiple dimensions … share substantial overlap" (Stefansson, Gestsdottir, Geldhof, Skulason, & Lerner, 2016, p. 476). This aspect of overlap makes delineating separate constructs more complicated. Indeed, most studies that show an increase in one type of engagement demonstrate an increase in the other types, though not to the same extent. For example, Stefansson et al. (2016) observed that behavioral engagement often increased more than emotional and cognitive engagement. Fredricks, Filsecker, et al. (2016) posited that students define engagement through behaviors such as attending class and working hard, and for this reason, their self-report measurements score behavioral engagement higher.

On the other hand, teachers consider cognitive engagement such as critical thinking as the educational goal, and their self-report measures often score cognitive engagement higher (Fredricks, Filsecker, et al., 2016). Stefansson et al. (2016) studied the broader concept of school engagement and concluded that a single factor model demonstrated poor fit. Also, specific behavioral, emotional, and cognitive engagement items were more accurate than general forms of the same factors. Stefansson et al. (2016) recommended identifying "different contexts of the school environment" (p. 477). This concept influenced the specialization of this study to the context of engagement with Shakespeare's literature, which is described in the delimitations of this study. Also, this engagement research prompted the use of the multidimensional model of

behavioral, emotional, and cognitive engagement so that the relationship between engagement and dialogic inquiry could be more thoroughly studied in a particular environment.

Importance of the Study

This study contributes to research on dialogic inquiry in the context of active learning and its relationship to behavioral, emotional, and cognitive engagement. In secondary education, the study may lead to strategies for increasing teacher effectiveness, especially in the humanities. The potential for extending the findings to other literacy endeavors is strong. Taylor, Pearson, Peterson, and Rodriguez (2003), in a study of 88 teachers and their students, concluded that "teachers who emphasized higher-order thinking, either through the questions they asked or the tasks they assigned, promoted greater reading growth" (p. 3). This research on dialogic inquiry and its relationship with engagement may help educators extend student learning in a variety of disciplines.

Methodological Assumptions

The researcher assumed that participants would answer honestly and candidly and that all participants would have experience with active learning in Shakespeare education. Finally, based on the quasi-experimental definition from Gliner, Morgan, and Leech (2009), the researcher assumed that there was a stable baseline of Shakespeare engagement before the intervention of dialogic inquiry at Shakespeare Camp. Demographic data were collected to discern if the control and intervention groups were comparable at the baseline.

Delimitations

The setting of a Shakespeare camp for secondary homeschooled students in the United States delimits this study. Though the study built on the research of the Learning Performance Network in the UK (Thomson et al., 2010) and the Folger Shakespeare Library's Teaching Shakespeare Institute and the National Endowment for the Humanities in the United States (E. J. O'Brien, 1984; P. O'Brien, 1995), the familiarity with Shakespeare may not be as pervasive in the United States (Turchi & Thompson, 2013). The student experience began with an audition followed by four months of independent preparation and ended with a 1-week camp. Students volunteered to participate, and they arrived at camp with most of their lines memorized and costumes and props prepared. The unique nature of this experience and the quality of completing the production of the play in a single week contributed to the delimitations of this study. Though there is a precedence in the 8-year longitudinal study in the UK to query the impact of active learning with Shakespeare's plays on school engagement (Neelands et al., 2009), this relationship was beyond the scope of this research.

Limitations

Threats to internal and external validity included design, impact, and data limitations. The study design was limited by the availability sample from the camp participants, though groups were randomly assigned to the control and intervention variables (Gliner et al., 2009). Though focus group participation was randomized, the voluntary nature of contributing to a discussion could have resulted in more data collected from some participants in comparison to others (Patton, 2014). Another threat to validity was the possibility that the precamp survey educated participants to attitudinal expectations and thus influenced postcamp survey answers

(Gliner et al., 2009). Also, social desirability bias may have led some students to answer in a manner to please others or to report positive behaviors more readily than negative behaviors (Lavrakas, 2008).

There was also the potential impact limitation of querying only camp participants (Patton, 2014). The active learning intervention was unique in that the population comprised home educated students, and they arrived at camp with costumes, props, and lines memorized. This specific population with a particular preparation may limit the generalizability of the findings (Gliner et al., 2009). The researcher risked data limitations in the process of transcribing the focus group sessions and video data (Creswell, 2013), and for this reason, a second outside observer was recruited to describe the focus groups and video data. Limitations also included the Hawthorne effect: the possibility that the observation may have influenced the environment and behavior (Gliner et al., 2009). According to Patton (2014), "observations are also limited in focusing only on external behaviors—the observer cannot see what is happening inside people, what they are thinking and feeling" (p. 389). In this study, random samples of 8-minute intervals of camp limited the videotaped observations. These impact, design, and data limitations were considered in the design phase and discussion phase of this research.

CHAPTER II

LITERATURE REVIEW

Shakespeare Pedagogy as an Emerging Field

Active learning Shakespeare pedagogy has been an emerging field of research through the efforts of the Royal Shakespeare Company and the Learning Performance Network in the UK (Thomson et al., 2010) and the Folger Shakespeare Library's Teaching Shakespeare Institute and the National Endowment for the Humanities in the United States (E. J. O'Brien, 1984; P. O'Brien, 1995). E. J. O'Brien (1984) summarized the theme of active learning techniques in Shakespeare education when she wrote, "the most efficient means of dispensing information is not necessarily the most effective means of teaching" (p. 621). Teachers take risks in using the active approach; however, the results demonstrate an increased depth of understanding of Shakespeare's works and valuable experience with a dialogic process when teachers included this pedagogy in the active learning paradigm (Irish, 2011). Students construct meaning through experiencing a work of Shakespeare as an actor in an ensemble team.

This social constructivism aligns with instructional design principles from Christensen (2008), who advises instructors to use the tools of pedagogy appropriately. In the case of complex literary material like a Shakespeare play, educators make an argument for the physicality of active learning in understanding the text better (Winston, 2015). Whitfield (2015), for example, worked with Shakespeare with dyslexic students and observed that creating visual constructs aided comprehension. Moreover, Strand (2009) studied the program with the Royal

Shakespeare Company and concluded that active learning promotes authentic mastery of the literature. Research in Shakespeare pedagogy has identified the value of active learning to discover the meaning of the text, which includes the potential for cognitive engagement.

Research in youth theatre outside of Shakespeare production has also revealed the value of physical acting to help students mature as they engage with a play. Burton (2002) found that students rehearsed their transition through adolescence both through their interpretation of a dramatic text and through their interactions with other students on stage. Hughes and Wilson (2004) worked with secondary students and observed that playing a role enabled students to experiment with new identities, which contributed to emotional and social development. McCammon and Østerlind (2011), working with secondary school drama groups, confirmed the value of drama for self-identity and social gains. Their study of students in two countries described common acquisition of self-efficacy and belonging among participants. The experience also provided lasting results according to a study that queried adults' perceptions about their high school theatre participation (McCammon, Saldaña, Hines, & Omasta, 2012). Tuisku (2010) also identified that theatre education provided a type of physical work that enhanced the experience of the literary text. In a later study, Tuisku (2015) described embodied acting, in which students attempted to experience their characters. This approach engaged students emotionally through physical action. These concepts support the research in Shakespeare education that active learning increases engagement with the text.

E. J. O'Brien (1984) evaluated Shakespeare education using several examples from her college classroom experience. She described impromptu rehearsals that she used to help students experience the text through voice and movement, as well as planned rehearsals that required students to research ideas in advance of enacting a scene. She suggested the use of reflective

writing to challenge students to process what they learned. Her teaching methods often utilized an inductive approach to a text rather than a deductive approach based on prior lectures. Gibson (1998) wrote a guide to teach active Shakespeare to high school students, and he described an authentic approach that required students to experience plays as actors. Theoretical studies in Shakespeare education continue to support his practical instructional design (Danner & Musa, 2019; Gross, 2014). E. J. O'Brien (1984) concluded that "Performance techniques are praised for fostering an awareness of choices implicit within the texts, for establishing the validity of multiple readings, and for preparing students to be better audiences" (p. 621). Based on decades of research, Thompson and Turchi (2016) wrote a book on teaching Shakespeare and described a practical curriculum that incorporated performance in the secondary classroom. Their research and observations revealed the benefits of active learning not only for engagement but also for cognitive gains. Their practice and experience included the concepts of behavioral, emotional, and cognitive engagement used in this study.

In other disciplines, research revealed that participation in Shakespearean theatre impacted behavioral, emotional, and cognitive engagement. Abel (2014), for example, researched the use of Shakespeare in school counseling and found that empathetic readings resulted in increased self-awareness and the ability to cope with short-term crisis and depression. Neuroscientists such as Lin and Hsu (2012) and Pechter (2016) have uncovered some of the processes in the brain that lead to empathy as a result of exposure to literature. One example is the discovery of neurons that mirror behavior and create a cognitive hook that stimulates engagement with the characters in a narrative (McConachie, 2008). Casey, Tottenham, Liston, and Durston (2005) observed, "Brain regions associated with more basic functions such as sensory and motor processes mature first, followed by association areas involved in top-down

control of behavior" (p. 104). Research conducted by teams in schools indicated that experiences with Shakespearean theatre impacted this top-down control of behavior and imparted psychosocial benefits to students (Palumbo & Sanacore, 2013). Hart (2015) studied the value of belonging stimulated by participating in drama, and found that the element of physical acting in a theatre space contributed to identity and meaning among students. This theatre research suggested that drama experience contributed to empathy and sympathy in community settings. Pelias (2018) suggested that this phenomenon was a result of a type of inquiry that takes place during performance. There is an element of embodiment that introduces the student to a new experience (Pelias, 2018). Perry (2011) studied theatre education and proposed a model of pedagogical spaces that enable a type of emotional knowing that transcends cognitive knowledge of a play. This research from other disciplines highlighted the potential for psychosocial or emotional engagement.

In addition to psychosocial benefits, studies in neuroscience have identified cognitive benefits. An example is the research by Keidel, Davis, Gonzalez-Diaz, Martin, and Thierry (2013), who found that the brain is stimulated when it experiences functional shifts in grammar, such as a noun being used as a verb. Shakespeare's (2005) works contain hundreds of functional shifts such as enjailed in Richard II, cowarded in Henry V, and unsex me in Macbeth. These inventions trigger a surprise effect and elicit "significant activation beyond regions classically activated by typical language tasks" (Keidel et al., 2013, p. 913). As a result, the brain must take an active role in integrating meaning to make new connections. Matthews and McQuain (2003) have written a book describing the impact of Shakespeare on brain function, and a growing body of research has revealed improved test scores in underachieving schools that introduce Shakespearean theatre into the curriculum (Neelands et al., 2009; Thomson et al., 2010). Though

general cognitive development was not the focus of this study, the potential for cognitive engagement with Shakespeare is strong.

Lighthill (2011) wrote from an educator's perspective and made a solid case for reviving the teaching of Shakespeare in light of the "pedagogic added-value that Shakespeare study offers the curriculum, based on the need to make the plays relevant to the student's life world" (p. 36). His research was grounded in active learning and demonstrated the potential of this approach to enhance educational goals. He concluded that in addition to becoming comfortable with Shakespeare's work, students also understand the relevance of Shakespeare to their personal lives and develop deeper relationships. Kelman and Rafe (2013) conducted a study with primary students who acted alongside adult actors to produce King Lear. The script was adapted for the age group with the goal of encouraging children to experience the play. Though the hybrid nature of the dramaturgical approach limited the ownership of the play by the students, the approach illustrated the value of involving young students in a Shakespeare production. The research opened the possibility of evaluating active learning in Shakespeare education for its impact on behavioral, emotional, and cognitive engagement.

Irish (2011) employed the case study of a teacher to research the impact of active learning in an English classroom. The teacher was part of a postgraduate certification program through the Royal Shakespeare Company and the University of Warwick, and Irish (2011) had access to her action research, the education reports from the school, and a master's thesis focused on the same teacher's work. Irish (2011) conducted the case study as a series of interviews with the teacher, her colleagues, and her students for a period of three years while the teacher worked with year 10 students. The research was a strong example of qualitative research with the teacher and student quotes integrated with education theory on active learning. Irish (2011) defined

active learning as the ensemble approach used by actors in theatre to collaborate and find meaning in a play. Irish (2011) concluded that active learning produces a dialogic classroom that stimulates engagement when students find meaning for themselves. Her research raised questions of risk-taking to create discourse-based instruction and the need for teacher training for active learning approaches.

Edmiston (2015) proposed that drama supplies a fertile field for students to discuss meaning through dialogic inquiry. He used Shakespeare's *The Tempest* with two groups for research based on a Vygotskian model of social constructivism in education. He suggested that teachers should develop a playful environment that empowers the students through "dramatic inquiry" (Edmiston, 2015, p. 79). He also recommended that teachers structure activities so that students create understanding through dialogic discourse, a skill that teachers could develop. Edmiston (2015) cited Bruner (1961) and his concept of a possible world that learners utilize to explore, imagine, and create meaning. He built his theoretical model of dramatic inquiry on Vygotsky's (1978) concept that play and imagination are connected and that learners create a shared social meaning when they collaborate through play. One important observation from Edmiston's (2015) study was that learners use dialogic inquiry to make meaning with and for others. The performative aspect of dramatic inquiry implies that students are creating scenes and characters that they will share with each other and their audience.

Another element of dialogic inquiry is Vygotsky's (1978) finding that people have unique observations and different levels of understanding so that dialogue encourages sharing and building on the ideas of others whereas monologue stifles these processes. Edmiston (2015) qualitatively analyzed an elementary school class studying *The Tempest* and concluded that learners must have the authority to act, inquire, and interpret. Edmiston (2015) also applied

Bakhtin's (2013) teaching that dialogue involves the positioning of inquirers who respond to one another. In theatre, especially, physical positioning becomes another type of dialogue as actors respond to one another in a scene. According to Edmiston (2015), the facilitator aims for polyphonic dialogic inquiry with many voices and viewpoints, rather than Platonic inquiry in which participants aim for a monologic viewpoint. The theoretical connections between Bruner (1961), Vygotsky (1978), and Bakhtin (2013) made Edmiston's (2015) study a useful grounding for investigating active learning and dialogic inquiry in this study. Active learning techniques continue to be developed within Shakespeare education, and many researchers are identifying the need for examining specific elements in the process (Irish, 2016; Schupak, 2018; Thompson & Turchi, 2016). The emerging field of scholarship in Shakespeare education has developed to the point that deeper investigation of specific practices may add knowledge to the field.

The Development of Active Learning

The term for active learning was developed in the 1980s, and since that time, several research studies have queried the process and impact of active learning (Brame, 2016). Anthony (1996) observed that active learning requires successive steps to attain mastery, unlike the more direct transmission of knowledge through a lecture so that instructors must consider the time required for active learning. Proponents of active learning, however, maintain that the slower process of active learning results in authentic knowledge acquisition, whereas studying lecture material often results in short-term memory (Freeman et al., 2014). In a large meta-analysis, Freeman et al. (2014) calculated a 55% decrease in failure rates when active learning was used. According to Cherney (2008), the success of active learning derives from how the brain functions to form knowledge networks because knowledge is stored through levels of processing,

and the deeper levels result in long-term retention. Active learning tasks produce deep levels of processing through the elements of making connections, interpreting information, and referencing it to the self (Cherney, 2008). Self-reference builds on the network of knowledge that each person possesses (Cherney, 2008), which suggests the element of personal experience in active learning is important.

Kosslyn and Nelson (2017) developed the Active Learning Forum to apply the conceptual framework of active learning. They observed that the instructional designer focuses on the learning process rather than on motivating students to learn. They explained, "the reasons why they [students] are engaged will make little difference; the key is to lead them to perform the relevant cognitive processing and to pay attention while they are doing so" (Kosslyn & Nelson, 2017, p. 153). Based on their research into the science of learning, their first maxim is "think it through" (Kosslyn & Nelson, 2017, p. 153). For example, metacognition stimulates deep processing and the memory of relevant knowledge. This method stimulates reflection on content as well as a reflection on errors and emotions, which are productive sources for constructing knowledge (Smith & Henriksen, 2016).

Active learning also encourages dual coding, which is the technique of using more than one form of expression, such as verbal and visual (Mayer, 2003). Several studies have demonstrated the effectiveness of dual coding in learning due to the strength of layering ideas from different cognitive centers (Kosslyn & Nelson, 2017). The second maxim from Kosslyn and Nelson (2017) involves making and using associations, which builds on the brain's ability to organize information, make connections across contexts, develop principles, and create stories. Bonwell and Eison (1991) described examples of active learning such as simulations, role-playing, debate, and games to illustrate this brain stimulation. These tools tap into imagination,

personal reflection, action, invention, hypothesizing, and interaction to leverage brain functions for effective learning (Bonwell & Eison, 1991). Though active learning brings together a broad set of learning tools, the term continues to be useful in education research that queries the different outcomes between direct transmission methods and active learning methods.

Some educators question the value of active learning since it places student inquiry before discipline-specific knowledge. Active learning instructors are styled as facilitators or coaches, who guide students toward disciplinary concepts. A tension may exist between "allowing students to construct their own sense of disciplinary ideas and ensuring that the sense they make is correct" (Ford, 2010, p. 265). On the other hand, higher education and the marketplace seem to be advocating for more communities of practice and increased argumentation in learning (Ford, 2010). The constructivist value that learning is an active process means that student-generated knowledge is meaningful.

Ford (2010) makes an argument that "lay knowledge is private and develops in response to insufficiency of current concepts, or implicit critique, [and] disciplinary knowledge is public and develops through explicit critique" (p. 266). The teacher may choose the role of facilitating implicit critique or explicit critique. In some disciplines and course levels, one type of critique may be more appropriate. For example, Ford (2010) works in the science field and suggests that "a crucial aspect of active learning is challenging or questioning [a] claim in the ways that the discipline does" (p. 266). The fact that the preponderance of active learning research in the last decade has focused on STEM fields illuminates the tensions involved in active learning. STEM disciplines encourage orthodox scientific method built on established theories or principles, and this aspect of STEM disciplines is factored into active learning models. Thus, problem-based learning and collaborative case studies are common in these fields. On the other hand, disciplines

in the humanities have a history of questioning current concepts through implicit critique and disciplinary concepts through explicit critique (Ford, 2010). In the discipline of Shakespeare education, the interpretation of literature is part of the educational process (Thompson & Turchi, 2016). For this reason, teachers of the humanities may experience less dissonance in adopting an active learning approach to their subject. The cognitive conflict required for authentic active learning is often part of the course objectives in literature studies.

This broad conceptual foundation for active learning means that educators interpret the model by utilizing a wide spectrum of tools (McConnell et al., 2017). While metacognition is an essential element of this paradigm, sizeable active learning classrooms often utilize reflective writing rather than a dialogic model to process ideas (Freeman et al., 2014). Also, many active learning educators utilize experiences such as problem-solving or group projects without making dialogic inquiry a necessary element of the learning process (Prince, 2004). Several researchers such as Kirschner et al. (2006), Klahr and Nigam (2004), and Mayer (2004) have advocated the use of facilitated discussion, which differs from dialogic inquiry by retaining the authority of the instructor to present information and guide discourse to the target concept. On the other hand, some active learning theorists consider the dialogic element to be essential for harnessing cognitive conflict in the learning process (Carr, Palmer, & Hagel, 2015; Ford, 2010; King, 1993). Dialogic inquiry is still under investigation as a foundational element of the active learning framework (Kosslyn & Nelson, 2017).

Research on Active Learning

The research in the field of active learning is making progress in developing measurement tools and research methodologies, which were instructive for formulating the

current study. The overview of 90 years of meta-analyses by Prince (2004) provided a background for research on active learning up to 2004. Prince (2004) described types of active learning in engineering education, including collaborative, cooperative, and problem-based learning. He defined active learning as a pedagogy that involves students in the learning process. Prince (2004) concluded that active learning works, but often in unexpected ways. For example, some engineering practices such as problem-based learning teach students how to study material and solve problems, but in the studies reviewed, this method did not increase average grades (Prince, 2004). On the other hand, all types of active learning increased engagement, which was previously correlated with increased performance over time (Prince, 2004). After reviewing the credibility of active learning as a pedagogy, Prince (2004) suggested that there is a need for more research that narrowly defines the pedagogy and holds extraneous variables constant. For example, "different implementations of [problem-based learning] PBL emphasize different elements, some more effective for promoting academic achievement than others" (Prince, 2004, p. 224). The observations in this meta-analysis helped frame the field of research for this study.

Research after 2004 has continued to query the efficacy of active learning, especially in light of the controversy over effect size and long- and short-term gains. Cherney (2008) studied the effects of active learning on student memory for course content in an undergraduate environment with all courses taught by the same instructor. On the last day of class, she asked 250 undergraduate students to list 10 items they recalled from introductory courses. The items were coded in three levels: irrelevant, low/medium content, and high content. High content indicated "a clear understanding of the concept or principle… and reference is made to an abstract or specific concept" (Cherney, 2008, p. 156). A second study added a level of medium content to the coding, and the population comprised 64 students in advanced courses. Students

across course levels cited concepts taught through active learning most frequently. Concepts from videos and lectures were the second and third most cited, respectively. For introductory courses, video clips scored higher than lecture for mean relevance score, but the opposite results were found for advanced courses. The author suggested that this phenomenon may be due to the knowledge base of students in upper-level courses, which allows for making connections and learning abstract concepts without the benefit of active learning. The utilization of free response to measure memory of course content was a creative idea from this study. The researcher noted that the second study included student identifiers in order to correlate memory with grades. Cherney (2008) found that higher memory correlated with higher course grades, but the results were not significant. The author noted that memory of learning activities might not align with knowledge.

Goldstein, Leisten, Stark, and Tickle (2005) used a simulation tool built on active learning principles to investigate the impact on learning complex ideas. The simulation was "structured to promote active learning by progressively leading the student through the concepts presented in an incremental manner that challenged the student and forced them to synthesize, interpolate and apply knowledge already learnt" (Goldstein et al., 2005, p. 6). Though the researchers did not use a control group, they found consistent improvement in their sample using a pre- and post-test. The research illustrated how active learning principles could be implemented in designing learning tools such as simulations for classroom use.

Weltman (2008) compared active learning with traditional instruction utilizing a linear mixed model to understand which types of students benefitted most from active learning methods. The participants were business school students, and data were collected for grade point average, learning style, age, gender, and ethnicity. Five instructors employed different teaching

methods in seven class sections for three randomly assigned topics with the goal that each student would experience all three methods. The linear mixed model analysis found that gender, learning style, and ethnicity did not impact the effect of the teaching method on the score. The student scores were significantly higher for students with high and midrange grade point averages, who experienced traditional instruction. Otherwise, the effect of active learning on performance of students at all levels converged around the overall mean. This study focused on business majors in introductory courses, which raised the question of whether these findings would apply to other disciplines or higher level of course work. This research was one of the few studies that identified traditional instruction as more effective than active learning for certain populations.

B. S. Bell and Kozlowski (2008) attempted to create an integrated theory of active learning by identifying specific elements of active learning to examine their impact. They recruited 350 students to participate in an experimental design with "2 (exploratory learning vs. proceduralized instruction) x 2 (error-encouragement framing vs. error-avoidance framing) x 2 (emotion-control strategy vs. no emotion-control strategy) fully crossed between-subjects design" (B. S. Bell & Kozlowski, 2008, p. 310). They created a set of nine trials of a computer simulation to measure the effects on learning and transfer and also took into account individual differences of cognitive ability, trait goal orientation, and trait anxiety. They found that error encouragement framing and exploratory learning positively impacted adaptive transfer performance. These elements also interacted with dispositional goal orientation and cognitive ability to result in increased metacognition and state goal orientation. Emotion-control strategy correlated with lower levels of state anxiety. The authors recommended further research that focuses on intervention design by "identifying core training design elements, mapping their

interaction with individual differences, and modeling the distinctive self-regulatory process pathways by which the core design elements and learner characteristics exert effects on learning, performance, and adaptability" (B. S. Bell & Kozlowski, 2008, p. 316). Their research was instructive for identifying specific elements of the active learning approach and for proposing that some elements are more meaningful than other elements.

Scherr and Hammer (2009) created a methodology to study behaviors among groups working together on physics worksheets in order to discover behaviors that indicate active learning. They observed four dynamics: 1) students focused on text, which they defined as heads down or reading in a singsong voice; 2) students discussing, which they identified by the behaviors of eye contact or louder voices; 3) students interacting with the teaching assistant; and 4) students taking a break to interact off-topic. Notably, Scherr and Hammer (2009) observed that students transitioned from the active learning task when the teaching assistant interacted with the group. The students reverted to behaviors indicating passive learning. Their research provided examples for creating a rubric to describe behavior and describing video recordings in the current study.

Chi (2009) created a model for comparing learning activities that are often conflated under an active learning approach. Chi (2009) proposed that activities become more engaging and productive as they move from passive, to active, to constructive, and finally to interactive tasks. Under this taxonomy, passive lectures are less engaging than activities such as performing a play. Chi (2009) defines constructive behaviors as personal development of ideas or cognitive restructuring in contrast to interactive behaviors that develop ideas in a group or pair. For this research study, the differentiation of personal and group behaviors helped frame the various activities involved in Shakespeare Camp. The coaches use active learning with the students to

perform the play, but the students independently memorize lines and plan their costumes for the four months preceding camp. These latter activities could be constructivist under this model. At camp, the students act together in scenes, which is a type of interactive learning. In addition, Chi (2009) proposed that dialogic inquiry is the most common, observable activity in classrooms, and this type of discourse is the subject of this study. Chi (2009) described the need to code for different types of discourse including instructional discourse, which does not indicate interactive learning, and joint discourse, in which students build on the ideas of one another. Joint discourse may be sequential as students take turns or coconstructive as students synchronously develop ideas during a conversation (Chi, 2009).

In a later study, Chi and Wylie (2014) elaborated on the their model by proposing that passive, active, constructive, and interactive modes of behavior reflected increasing levels of cognitive engagement. They associated each mode with knowledge-change processes of store, integrate, infer, and co-infer. The researchers operationally defined two words, which effectually detached them from their meaning in educational literature: The first was *active*, which was defined as simple motoric action, and the second was *constructive*, which was defined as a personal process of inferring (Chi & Wylie, 2014). Also, they considered interactive modes to be manifested by dialogue alone. Though these definitions were artificial, their framework drew useful observations for the current study:

> Because being interactive requires that each person of the group contributes constructively, this means that if two people interact only in some physical or motoric way without discourse, such as two students copying each other's homework solutions, then they are interacting only actively and not constructively. The available evidence agrees with our interpretation, in that when two people work together, learning seems to occur when there is verbal discussion rather than only motoric or physical interactions (Milrad, 2002). Therefore, for now, we restrict our definition of interactive behaviors to discourse or dialoguing. (Chi & Wylie, 2014, p. 223)

They proposed methods for studying their hypothesis that increased cognitive engagement correlates with increased deep learning. Their caveats and limitations for evaluating laboratory findings provided insights for the current study, specifically in choosing control conditions.

Several researchers used creative means to study active learning. Cavanagh (2011) administered open-ended questionnaires to 113 students who attended a course with a mix of traditional and active learning tasks. The researchers found that students valued the addition of active learning for the opportunity to interact in small and whole-class groups and for the focus on important concepts. The tasks helped with comprehension and increased attention. Students especially valued the authenticity of the collaborative tasks. Carr et al. (2015) conducted a study to query how to construct a measure of active learning in light of technological advances. The existing active learning scale included only tasks associated with a physical classroom, and as a result, online students scored lower for active learning opportunities. The most useful observation from this study was the importance of content validity in designing survey questions that will accurately measure a concept. Without content validity, an instrument has limited use. In the study, active learning was broadly defined as the effort to construct knowledge (Carr et al., 2015). For this reason, the addition of statements regarding active learning methods from online learning environments was beneficial to understanding the full experience of the population of college students.

Freeman et al. (2014) conducted a meta-analysis of 225 studies that compared active learning and traditional instruction in STEM fields. The studies were evaluated for methodological rigor based on controlling for instructor identity and student quality. The effect sizes for 158 studies, which gathered data on student course examinations and concept inventories under active learning, showed an increase of 0.47 standard deviations. Freeman et al.

(2014) applied heterogeneity analyses and determined that concept inventories increased more than course examination scores. They also found that active learning increases performance across all class sizes, though classes with fewer than 50 students showed the most benefit. Also, the meta-analysis calculated a 55% decrease in failure rates when lectures were replaced with active learning. The authors questioned the continued dominance of traditional lectures in STEM fields.

Eddy, Converse, and Wenderoth (2015) iteratively developed and validated a 16 item coding instrument (PORTAAL) for measuring active learning in life science classes of various sizes. The researcher coded video recordings of 25 instructors' classes with the stated goal "to reliably evaluate the alignment between instructor implementations of active learning and research-supported best practices in the classroom" (Eddy et al., 2015, p. 13). The process of creating and validating the tool revealed interesting ideas for documenting active learning strategies. For example, confirmation of student behaviors as well as "framing 1) student mistakes as natural and useful and/or 2) student performance as a product of their effort rather than their intelligence" (Eddy et al., 2015, p. 8) were coded behaviors in PORTAAL. The study also demonstrated a rigorous process for developing the instrument from content validation through measurement reliability.

Wiggins et al. (2017) developed a 16 item survey to give a holistic view of students' experiences in active learning courses. The mixed methods approach utilized exploratory factor analysis to discover three factors: the value of the activity, the personal effort, and the instructor's contribution. An active learning classroom is a pedagogical tool: a space designed to facilitate student interaction, often through clustered groupings and whiteboards or shared monitors for brainstorming (Baepler, Walker, Brooks, Saichaie, & Petersen, 2016). This

innovative architectural space has engendered several studies to explore the unique contributions of the learning space as well as the potential for scaling the concept. Wiggins et al. (2017) suggested that feedback from the tool will sharpen strategies for learning in this environment. The study also provided insights into factors that contribute to the success of active learning, especially the students' perceptions of value and effort. The use of the instrument for feedback of effective practice also demonstrated learning tasks that increased engagement.

The popularity of active learning and the need for research in the humanities prompted an article by Lucas and Radia (2017) to describe the pedagogical outcomes of two service learning projects for English majors: an afterschool Shakespeare program and an online journal. For the Shakespeare element of the article, Lucas and Radia (2017) discussed the advantages of service learning for college volunteers who directed an extracurricular program for students in elementary and middle school at the public library. The college students abridged a Shakespeare play to 30 minutes and added narration to connect scenes. They were also responsible for producing the play with the children. The authors cited the element of multivocality provided by the experience in addition to collaborative learning processes.

Though the authors focused on the benefit to the college students, they also mentioned the literacy value of the experience for the children. Since the college students directed the play, the dialogic classroom was not the goal of this experience. However, the younger age group may have needed the more coach-directed learning approach adopted by the college students. The article focused on practical implementation with some discussion of the reason for these activities as a response to the commercialization of university education and the need to provide practical experience to students. The observed results included the value for college students of transforming theory into practice and serving the community. The study did not attempt to gather

quantitative data, and the qualitative data were limited to a few anecdotes. This study would benefit from a more in-depth investigation of the experience for the college students and their intended audiences.

Cooper, Ashley, and Brownell (2017) described an active learning experience in a Summer Bridge program and compared eligible students who did not participate to those who participated. The participants learned how to work better in groups, approach learning activities more effectively, and maximize a variety of strategies for learning compared to the control group. The findings suggest possible areas of exploration for this study since the setting is a camp experience, in which learning gains may extend to the students' other educational pursuits. This qualitative study listed seven student active learning strategies that were evaluated for meaning by the participants. Examples were students asking questions for clarification, encouraging participation, intentionally sharing thoughts, or leading within groups. These strategies inform possible behaviors that could be identified in the qualitative portion of this study. The foci of the study were student attitudes and self-report behaviors, which provided a useful example for this investigation.

McConnell et al. (2017) evaluated specific active learning strategies to determine the utility and efficacy based on a rubric. The analysis took into account the costs and benefits for instructors and students, which was a novel consideration in this field of research. Utility included preclass preparation, student strategy use, and task characteristics based on the research literature (McConnell et al., 2017). Efficacy was also based on active learning research and cognitive theory. Strategies included "case studies and problem-based activities, concept maps, concept sketches, gallery walks, jigsaw activities, lecture tutorials, minute papers, peer instruction, role playing, teaching with models, and think–pair–share" (McConnell et al., 2017,

p. 606). The methodology was instructive to extending the principles of this pedagogy to other settings, such as humanities courses.

R. Bell (2018) created a series of research studies to query how constructivist education can increase entrepreneurial skills that future employers seek. This study listed skills to identify possible outcomes of active learning: "developing a proactive disposition, achievement motivation, self-efficacy, interpersonal skills, team working, communication skills, planning, attitude to risk, leadership and a preference for innovation" (p. 6). This list provided insights into understanding the survey results for this Shakespeare study. Another interesting observation was "the importance of adequate temporary scaffolding, where appropriate, to ensure access to learning for all students" (p. 6). In active learning pedagogy, the balance between the facilitator's guiding discovery and scaffolding foundational knowledge needs further research. These active learning research studies from the literature review provided models for research and potential approaches to gathering data. The next important topic was dialogic inquiry.

Dialogic Inquiry within the Active Learning Model

Skidmore (2006) evaluated the concepts of dialogic inquiry and described it as a tool that "stresses the potential of collaborative group work and peer assistance to promote mutually responsive learning in the zone of proximal development" (p. 203). According to Haneda (2017), dialogic inquiry is a discourse that includes at least two people who respond to one another as well as the need for the teacher to transfer power to the learners. Though some models stress one element over another, as in the case of Skidmore's (2006) focus on narration practices, Haneda (2017) made a case for unifying the research on dialogic practices.

McElroy (2017) researched the understanding of dialogic inquiry among in-service and pre-service English teachers and discovered that none of his participants were taught this approach in college. He wrote:

> The challenge facing educators is to move beyond the typical teacher-centered initiate-respond-evaluate approach and adopt a more generative approach to discussion that not only allows students to develop a voice but also one that builds content knowledge and critical thinking. (McElroy, 2017, p. 10)

After reviewing data from his participants, McElroy (2017) proposed that teachers practice reflection on their discussion style so that they can grow in dialogic discourse skills. The study of discussion skills has become an important discipline for educators.

Reznitskaya (2012) researched dialogic inquiry using a dialogic inquiry tool in elementary classrooms and drew important observations from her study. The tool she developed functioned like a rubric with six indicators that were rated on a scale from one to six, reflecting the spectrum from monologic inquiry to full dialogic inquiry. The indicators were authority, questions, feedback, connecting student ideas, explanation, and collaboration (Reznitskaya, 2012). The authority indicator measured whether authority rested with the teacher or students. In a fully dialogic mode, students would ask questions, respond to each other's ideas, and manage shifts in the topic (Reznitskaya, 2012). The questions indicator measured the openness of questions. Simple recall of facts rated a one while higher order questions that stimulated analysis and evaluation rated a six (Reznitskaya, 2012). The feedback indicator evaluated how often the teacher used feedback to stimulate deeper thinking and encouraged a focus on the reasoning process rather than a specific answer (Reznitskaya, 2012). The indicator for connecting student ideas measured how often the teacher connected the student responses to one another and challenged students to comment on other students' statements (Reznitskaya, 2012). The explanation indicator measured how often students made statements of personal opinion and

supported their reasoning with detailed explanations (Reznitskaya, 2012). Finally, the collaboration indicator measured how often students chained their ideas to one another and experienced coconstruction of ideas (Reznitskaya, 2012). One of the observations from the study was that power should be shared among the teachers and all students so that group members control the flow of conversation and actively judge the content of the discussion (Reznitskaya, 2012). This type of group meta-analysis demonstrated higher order thinking in both evaluation and analysis.

Reznitskaya (2012) analyzed scripts of class discussions and made observations on the use of dialogic inquiry with students. This research study impacted the current study by providing a useful guide for constructing full dialogic inquiry. This type of process would require explaining to the students that they should respond to one another's ideas. The facilitator needs to share that the group is not looking for one correct answer; instead, they want to explore Shakespeare's stories and characters to build on the insights that various troupe members share. To help students think of the questions to ask, the facilitator needs to ask whether there are questions that students would like to ask the group.

Wilkinson et al. (2017) studied elementary school teachers in a 30-hour professional development program. They queried their use of dialogic inquiry and their attitudes towards the tool through a pre- and post-test design. After a year of training, teachers increased the use of the tool, but the teachers considered the tool itself to be neither worse nor better than traditional teaching with a lecture. The researchers developed the idea of the "big question" (Wilkinson et al., 2017, p. 66). This study illustrated how to evaluate video data for analysis of monologic and dialogic inquiry.

Shakespearean educators such as Winston (2015) and Franks, Thomson, Hall, and Jones (2014) consider dialogic inquiry to be foundational to the active learning approach with Shakespeare education. Dialogic inquiry is built on discussion to find meaning (Lyle, 2008), and "teachers and students act as coinquirers, collaboratively engaging in a generation and evaluation of new interpretations of texts" (Reznitskaya, 2012, p. 446). The dialogic inquiry model has been defined by several behaviors and attributes including shared authority among group members, open questions for new understandings, meaningful feedback from facilitators, metacognition among group members to connect ideas, elaborate explanations from students, and coconstruction of knowledge (Alexander, 2010; Christoph & Nystrand, 2001; Lyle, 2008; Nystrand et al., 2003; Reznitskaya, 2012). Although dialogic inquiry is not utilized in all active learning environments (Prince, 2004), the majority of practitioners with the Learning Performance Network considered it essential (Neelands et al., 2009; Strand, 2009; Thomson et al., 2010). An overview of research with dialogic inquiry with secondary students in English or Shakespeare helped frame this study.

Christoph and Nystrand (2001) experimented with a dialogic process in a ninth grade English class in a midwestern inner-city school with a large Hispanic population. They discovered that this pedagogy engendered an "ethos of involvement and respect" (Christoph & Nystrand, 2001, p. 249). The teacher encouraged discussion by phrasing questions that challenged students to explore ideas for themselves. An interesting outcome of the dialogic process was the quality of interpersonal relationships developed among students. Christoph and Nystrand (2001) concluded that "this study shows that dialogic discourse can happen when teachers are adept at linking and at enabling links between academic objectives and student concerns that often originate beyond both the classroom and the school" (p. 249). These

conclusions reveal the potential emotional and cognitive engagement that students develop through the dialogic element included in active learning, and the application for Shakespeare education merited further study.

Nystrand et al. (2003) studied how to transition from monologic discourse to dialogic discourse and identified the concept of dialogic bids. Dialogic bids are responses such as reacting to student statements with authentic questions or taking up student ideas and observations to encourage student responses. Implementation of dialogic bids correlated with productive discourse (Nystrand et al., 2003). Soter et al. (2008) found that productive dialogue included several characteristics: students talking for extended periods, teachers prompting with open-ended questions, and students taking up ideas from each other. Elaboration led to higher level reasoning, which they measured with reasoning words such as because, agree, disagree, why, and think. The methodology from these two studies of coding transcripts for the density of productive behaviors provided strong models for the analysis of the qualitative data in this study.

Neelands (2009) worked with Shakespeare in UK schools and confirmed the foundational significance of dialogic inquiry in active learning. He considered the process of social and artistic engagement to be more valuable than the theatre performance. He described the ensemble pedagogy as prosocial, while traditional approaches to Shakespeare's texts are protechnical. Protechnical approaches limit knowledge to information about literature, history, and plays, while prosocial pedagogy promotes a model of democracy that challenges students to discuss ideas to find meaning (Neelands, 2009). Democratic discourse teaches students that knowledge is attainable when it is socially constructed and negotiated (Neelands, 2009). Neelands (2009) emphasized that every member should participate in the dialogic process.

In Shakespeare education, active learning is also termed the ensemble approach, and it includes aspects of experiential acting, collaboration on producing scenes, and constructivist discussion. This pedagogy has stimulated research on the impact on teachers who use this model. Franks et al. (2014) queried the teacher development for those using the ensemble approach with Shakespeare and observed increased confidence in conducting discussions to explore the text. Franks et al. (2014) concluded that teacher training or internships with the active learning model might help to prepare teachers for dialogic inquiry. Thus, the research question from this study about elements that students find meaningful may contribute to practical applications for educators. The variety of definitions for active learning were an important element in this study. The potential addition of dialogic inquiry within this model is a result of this literature review. The summary in Appendix B of the various attributes that describe active learning also illustrates the contrast between the control and dialogic inquiry groups in this study.

Research on Factors that Increase Engagement

This study investigates the relationship between dialogic inquiry and engagement in the context of an active learning environment. Research on behavioral, emotional, and cognitive engagement has revealed some of the factors that increase engagement. Parsons et al. (2015) observed that enhanced engagement is related to "the degrees to which activities are authentic, collaborative, challenging, student-directed, and sustained" (p. 225). They created an openness scale that they correlated to student engagement to understand the types of learning tasks that increased engagement. Parsons et al. (2015) conducted research in a sixth-grade classroom. The teacher identified six students who would be followed: "two low-, two average-, and two high-performing students" (Parsons et al., 2015, p. 225). Researchers recorded observations of

assigned activities and students' behavioral engagement. They also interviewed students after the activities to collect data on affective and cognitive engagement. Learning tasks were classified by a rubric as closed, moderately open, or open, and students' behavioral, affective, and cognitive engagement were rated using a predetermined scale. Open task attributes included authenticity that mimics outside school activities, collaboration, high challenge level, student direction, and sustained effort. The engagement scale utilized observable behaviors such as focusing on the activity or enthusiasm to measure high engagement and behaviors such as "not interested" or "no awareness of thinking" (Parsons et al., 2015, p. 231) for low engagement. In their work with sixth-grade literacy, they advocate equipping teachers with skills that help students read for meaning.

Ryu and Lombardi (2015) coded classroom interactions to research engagement within a science course. They utilized critical discourse analysis and social network analysis to measure engagement from a mixed methods approach, which they asserted to be an important tool for understanding engagement. They defined engagement as "meaningful changes in disciplinary discourse practice, which captures the dialectical relationship between the individual and collective" (Ryu & Lombardi, 2015, p. 70). Their focus was the students' position in the group and their use of language within their context, which created a sociocultural perspective. They discovered that evolving engagement occurs in four phases: discordant, sharing ideas, mutual, and distributed (Ryu & Lombardi, 2015). Their methodology successfully captured engagement over time and provided insights into how to code behavior. Their narrow sociocultural definition of learning as "changes in participation" (Ryu & Lombardi, 2015, p. 81) limited the utility of this study to the individual's interaction with group dynamics. However, the analytical frameworks

of critical discourse analysis and social network analysis provided a strong example of a mixed methods approach to engagement research.

Pressley and Allington (2014), in their work with literacy in kindergarten through eighth grade, advocated equipping teachers with skills that help students read for meaning. Examples of skills are summarization and "constructing mental images representing text content" (Pressley & Allington, 2014, p. 431). They concluded that teachers should balance a skills-emphasis approach with a meaning-emphasis approach, which results in increased literacy engagement. Though their work focused on kindergarten through eighth grade, the concepts apply to Shakespeare education in high school as well (Pressley & Allington, 2014). A combination of scaffolding and student-directed collaboration parallels the skills emphasis and meaning emphasis and has been shown to increase engagement in the Shakespeare study by Irish (2011). She found that the facilitators provided useful knowledge, but their main contribution was engendering a collaborative effort among students to find the meaning of the text. These engagement researchers suggested that active learning tools increase engagement, but they did not target specific tools, such as dialogic inquiry, as important.

Flow theory is based on the work of Csikszentmihalyi (2013), whose work in positive psychology led to the concept of flow as a state of focused concentration and enjoyment during a meaningful activity that results in an optimal experience. Shernoff, Csikszentmihalyi, Schneider, and Shernoff (2014) grounded their research in this concept by defining student engagement as interest, enjoyment, and concentration. Their concept of interest is similar to behavioral engagement because it is observed through behaviors that focus attention or continue the activity. Enjoyment is the positive aspect of emotional engagement and a cornerstone of flow theory, which connects enjoyment to optimism and hope (Csikszentmihalyi, 2013). Concentration is

defined by Shernoff et al. (2014) as the depth of cognitive processing, which demonstrates its connection to cognitive engagement.

In their study, Shernoff et al. (2014) used the experience sampling method (ESM) to gather engagement data during random moments and various activities from 526 high school students. The research was conducted over three years, and participants were geographically diverse. The ESM involved equipping students with a device that notified them of random moments to assess engagement and record what they were doing on the device. This approach provided data from a variety of activities throughout a typical school day. Shernoff et al. (2014) found that students perceived increased engagement when they felt in control, the instruction was relevant, and their personal skills and task challenge were high and in balance. Examples of engaging activities included individual and group tasks. Students perceived that listening to lectures and watching videos were low-engagement activities. Shernoff et al. (2014) concluded that learning activities, autonomy, and appropriate challenge are possible applications of their research. Shernoff et al. (2016) built on research with flow theory and developed a framework for evaluating learning environments and measuring engagement, which they characterized by "concentration, focus, enjoyment, interest, self-esteem, and intrinsic motivation" (p. 59). They concluded that environmental complexity, which is a combination of environmental support and challenge, is the most important factor to promote engagement.

Guthrie and Klauda (2014) also found that specific classroom practices such as collaborative tasks that help students find the meaning of the text led to increased engagement. Their work targeted literacy with secondary students, a population that has usually mastered basic skills but needs to grow in the comprehension of texts. Guthrie and Klauda (2014) utilized experimental design to investigate the impact of teacher support for motivation and engagement

in history classes for 615 seventh grade students. The students experienced traditional instruction during the school year with 4-week interventions introduced either at the beginning or end of the unit for two rounds of switched replications. The study applied the Concept Oriented Reading Instruction (CORI), which involved teachers providing the choice of texts, emphasizing the value of reading, designing collaborative tasks, and assuring students of competence. Teachers encouraged student perceptions of competence by providing skill-appropriate texts, setting realistic goals, and giving positive feedback (Guthrie & Klauda, 2014).

Teachers measured students' motivation and engagement with an instrument containing four positive constructs: intrinsic motivation for reading, student value that reading is important, perceptions of reading skill, and dedication to reading. Three negative constructs were an aversion to reading, the perception that reading is difficult, and the belief that reading is not important. They also measured text comprehension, perceptions of instruction, reading fluency, and inferencing. Guthrie and Klauda (2014) concluded that motivational and engagement supports increased text comprehension through "relevance, personal meaning, competence in handling complex text, and shared interpersonal relationships" (p. 405). The authors suggested that more research was needed regarding social goals, interest, and mastery goals. They attempted to control for reading level, and their switching replications design allowed students to be compared against themselves. Their example of controlling for reading level of the texts provided an example for the design of the current study. Their study also provided a strong example of an experimental design that compared student perceptions of engagement before and after an intervention.

Research on Methodology

Mixed Methods Approach

Due to the complexity of the learning environment, education research benefits from broadening the scope of inquiry to include qualitative and quantitative elements (Patton, 2014). Qualitative and quantitative methodologies derive from different theoretical paradigms resulting in different ontological, epistemological, axiological, and methodological assumptions that can enhance a study when used together (Creswell, 2013). In the realm of ontological assumptions, qualitative methods assume a plurality of truths that emerge through inquiry (Watt, 2007) while quantitative methods seek a unified truth through an experimental method (Creswell, 2013). With different ontological assumptions, interpretive outcomes may contribute to a richly textured study. As a result, the research questions for this study have led to the choice of a mixed methods approach.

Quantitative and qualitative approaches also use differing epistemological assumptions for acquiring knowledge (McPherson, 2018). Qualitative researchers attempt to minimize the distance between themselves and their subjects to gain intimate and subjective understandings (Creswell, 2013). For some studies, it may be useful for the researcher to be embedded in the learning environment. On the other hand, many quantitative researchers follow an objective paradigm for knowledge. They would not want to contaminate a study with subjective knowledge, and for this reason, they would attempt to maintain an objective distance or provide outside observers for data collection (Gliner et al., 2009). The advantage of the mixed methods approach is that while the quantitative research is designed to reveal objective patterns through distant observation, the qualitative research may reveal hidden details through both objective observations from an outside researcher and close contact of an embedded researcher.

In comparing qualitative and quantitative paradigms, axiological assumptions affect whether the researcher acknowledges the value-laden nature of the research. Qualitative researchers report their biases to bracket their opinions so that they can study the participants in the field as a new phenomenon (Patton, 2014). This element of qualitative study requires rigorous honesty and transparency from the researchers and the ability to present both their values and the values of the participants (Van Manen, 2016). Careful procedures must be applied to collect data with as little bias as possible (Gliner et al., 2009), and the researchers must bracket their experiences (Patton, 2014).

The methodological assumptions between qualitative and quantitative methods are demonstrated through differing processes and language. Qualitative researchers tend to use inductive logic in the context of the subject under study to develop an emerging design, whereas quantitative researchers tend to use deductive logic in natural or lab contexts with predetermined experimental hypotheses and designs (Creswell, 2013). The mixed methods approach combines the strengths of both quantitative and qualitative methodologies. Creswell and Clark (2018) consider the foundation to this mixed methods approach to be pragmatism, which acknowledges "singular and multiple realities" (p. 38), includes both "biased and unbiased perspectives" (p. 38) and combines quantitative and qualitative methods. Pragmatism means that the research questions guide the design of the study to use the elements best suited to answer each question.

Qualitative Research: A Phenomenological Approach

Creswell (2013) considers that phenomenology lies on the continuum between qualitative and quantitative methods because it queries both subjective and objective experiences that people share. Lincoln and Guba (1985) propose a naturalistic framework for inquiry that seeks to

uncover knowledge through trustworthy and authentic research that queries multiple perspectives in a balanced and conscientious approach. Phenomenology rests on the philosophical assumption that the essence of a phenomenon can be explored through the lived experience of several persons (Van Manen, 2016). The goal is to understand what was experienced and how it was experienced to create a composite description (Moustakas, 1994). Stewart and Mickunas (as cited in Creswell, 2013) state that phenomenological research is founded on the search for wisdom, rather than scientism, and for this reason, the researcher should attempt to suspend judgment and remain open to new knowledge. Also, according to Husserl (as cited in Creswell, 2013), the consciousness of the phenomenon is the topic of exploration, and the perception of participants is not separated from the object itself.

Quantitative Research

Quantitative research requires the evaluation of a measurement instrument for reliability and validity. Measurement reliability is the consistency of the instrument for a series of measurements, while measurement validity is the "degree to which a measure or test measures what it was intended to measure" (Gliner et al., 2009, p. 153). Fowler (2009) has developed a total survey design approach to developing a survey. He advocates taking into account how the sample will be determined, sample size, rate of response, the mode of collection, training of those who collect data, question design, the use of literature for reliability and validity, and the advice of experts. One of the most critical elements for this study was applying these concepts to the threat of social desirability bias. Crino, Svoboda, Rubenfeld, and White (1983) concluded in their study of the Edwards social desirability scale and the Marlowe–Crown social desirability scale that the rate of disavowing negative attributes is consistent with the rate of claiming

positive attributes. This aspect of social desirability bias is a serious threat for self-report surveys and should be addressed at the development stage according to Brace (2008). Several strategies may be used to lessen the bias. For example, the researcher may lower social desirability bias by using online or paper surveys to remove the interviewer from the environment (Bronner & Kuijlen, 2007). Also, "face-saving questions" (Brace, 2008, p. 202) can be utilized.

Lavrakas (2008) described four causes of social desirability bias: personality characteristics, cultural characteristics, the mode of administration, and item characteristics. Personality characteristics may be evaluated using a scale such as the Edwards social desirability scale. Cultural characteristics may also be reflected in this scale (Lavrakas, 2008). According to Lavrakas (2008), self-administered surveys may lessen social desirability bias. Also, item characteristics can be ameliorated through wording. For example, structuring the scale items with excuses, forgiving words, or assumptions that the behavior is common may mitigate the social desirability bias (Lavrakas, 2008). The research on the quantitative approach strengthened the planning and implementation stages of this study.

Summary

The emerging literature on Shakespeare education led to research on the development of the active learning pedagogy, which is characterized by student participation in learning through experience. The research questions concern the relationship between dialogic inquiry and engagement within the active learning environment. Dialogic inquiry is a tool that is increasingly utilized in active learning, though not all practitioners consider it essential. Engagement is one marker for learning in the education literature, and the three elements of behavioral, emotional, and cognitive engagement are considered part of the multidimensional construct of engagement.

The research on these three factors framed an understanding of how to delineate them for this study. Also, the most recent studies on elements that increase engagement provided possible approaches for the methodology. Based on the research questions and a literature review of methodology, a mixed methods approach seemed to address the particular requirements of this study.

CHAPTER III

METHODOLOGY

Introduction

This mixed methods study utilized the convergent design with quantitative and qualitative procedures developed before the data collection phase. Both types of data were collected during the same research period of the 1-week camp. For the survey and focus group elements, participants were asked questions that were based contextually in Shakespeare, which was the content taught to participants within the active learning modality. Observational data were collected in the context of the active learning approach for Shakespeare education. After data collection, the quantitative data were statistically analyzed, and the qualitative data were analyzed for themes. Pragmatism, as defined by Creswell and Clark (2018), was the rationale for this approach since the quantitative and qualitative data were needed for a rigorous investigation of the research questions.

One challenge for this research was how to measure engagement. Greene (2015) reviewed 20 years of experience with self-report scales and concluded that self-report data should be triangulated with other data. In this particular study, the self-report data were limited since it was collected from young participants, who may have been liable to social desirability bias or lack of understanding of survey procedures. For this reason, other sources of data included video data, focus group transcripts, and researcher field notes. Each of these methods

had some limitations, but the variety of approaches and attempts to mitigate weaknesses were designed to result in a study with rigor.

Since the goal of the study was to understand student engagement, the video observational protocols were utilized to identify student behaviors, and the focus groups provided insights into the perceptions of students. An outside observer independently described the video and facilitated focus groups: one from the control group and one from the dialogic inquiry group. The researcher hoped to learn how the students perceived active learning and any relevant aspects of dialogic inquiry. Another source of data was field notes to document student experience and the environment of the camp. The researcher bracketed her experience in line with a phenomenological methodology (Patton, 2014). This study used a variety of sources to triangulate between all quantitative and qualitative data to build a richly textured inquiry into the relationship between dialogic inquiry and engagement in the context of active learning in Shakespeare education.

Description of the Population and Sample

The population for this study was a group of approximately 90 homeschool students and their coaches, who participated in a summer Shakespeare camp. An availability sample of those cast in the two comedy plays formed the sample (Gliner et al., 2009). The plays were *The Comedy of Errors* and *Twelfth Night*, which both included 29 students who filled 11 large roles, seven medium roles, nine extra roles, and two stage manager roles. After casting, a coin toss was used to determine which comedy cast would be assigned to the control group and which cast would be assigned to the intervention group. Demographic data were assessed to understand whether the groups were homogenous for age, gender, and experience with Shakespeare. Due to

the traditional camp procedures for assigning leading roles to older, experienced students and smaller roles to newer students, the projected demographic composition was potentially similar. The students in these casts were invited to take engagement surveys on the first and last days of camp.

Some students from the same sample of students were invited to participate in focus groups on the last day of camp. The composition was representative of the camp participants with three students randomly invited from the group of new actors and three students randomly invited from the group of returning actors for each focus group. The students who accepted the invitation comprised the focus group sample. For the video recordings of rehearsals, the students and coaches who consented to participate comprised the sample. Most of the students were from the homeschool community, and the population ranged in age from 10 to 18 years old. This population included a variety of abilities among students. The camp procedures included arriving at camp with lines memorized, and not all students achieved this goal. Also, the students volunteered for camp, so the baseline interest level across the camp tended to be homogenous. The observation samples were videotaped for 8-minute intervals at randomly selected times throughout camp. This same population was the subject of field notes by the researcher during this study.

Identification of Core Variables

In the quantitative element of this study, core variables for the first three research questions were the independent variable of dialogic inquiry intervention and the dependent variables of change in the average scores on behavioral, emotional, and cognitive engagement. The dialogic inquiry variable was a nominal variable with two levels: the dialogic group and the

control group. The dependent variables of level of engagement were measured using a 7-point Likert-style survey administered to students, and scores on individual scale items were averaged for each type of engagement. For the fourth research question, the independent variables were the condition of pre- and post-test, and the dependent variable was the total engagement score. The process for testing validity is covered further in the Data Analysis Techniques section. Attribute variables for years of experience with Shakespeare camp, prior experience with Shakespeare literature, age, and gender were collected. See Research Question Analysis in Appendix C.

Data Collection

Quantitative Method

The engagement surveys were developed from extant interview data (McPherson, 2017), and the researcher followed the example of Fredricks, Wang, et al. (2016), who utilized interviews to create an engagement survey for math and science. In the study by Fredricks, Wang, et al. (2016), interviews with students and teachers supplied descriptions of engagement indicators in math and science. The researchers utilized this data to create an engagement survey, which they also validated in another study (M.-T. Wang, Fredricks, Ye, Hofkens, & Linn, 2016).

Following this model, data from interviews in an earlier study (McPherson, 2017) were used to make a list of possible engagement indicators for Shakespeare education, which was the context for this active learning experience. The list was refined to eliminate indicators that were not technically engagement, such as the statement: I understand some Shakespeare plays. This statement shows cognitive gain but does not indicate engagement during camp. The statements were then sorted based on the definitions for the three constructs of engagement in the research

literature (Fredricks, Filsecker, et al., 2016). Next, a literature review was performed to understand how to word engagement statements for secondary students (M.-T. Wang et al., 2016).

The survey was then reviewed by the methodologists, who suggested format changes to make it more useable in line with the standards outlined by Fowler (2009). The survey was deconstructed with the help of the dissertation chair and two methodologists to explore approaches to reduce social desirability bias. Several tactics were considered, including incorporating reverse-worded questions and employing words that were forgiving or provide an opportunity to protect from embarrassment (Lavrakas, 2008). A pilot group of 13 homeschool students in the same age range as the target population tested the new survey. These students were outside the population that attended Shakespeare Camp. The pilot data were utilized by the researcher and methodologist to evaluate the survey for content validity. The survey instructions and each scale item were checked for clarity of vocabulary and sentence structure as well as specificity of context. A few adjustments were made, and questions regarding the Likert scale were researched in relation to the findings.

According to Tastle and Wierman (2007), Likert scales may be used for parametric statistical analysis, but several considerations must be made at the development stage. First, the scale should be at least five points, though some researchers consider seven points optimal (Lantz, 2013). Also, semantics must be considered to craft a scale with the perception of ordinal points (Lantz, 2013). Based on the research question, a neutral point may be needed (Boone & Boone, 2012). The pilot study for the Shakespeare engagement survey indicated that students preferred a choice such as neither agree nor disagree or neutral to express the idea that they had

no prior experience with Shakespeare. Thus, the researcher chose to use an odd number of points based on feedback and the purpose of the engagement survey.

Also, point scales require careful wording to provide a spread of responses (Sullivan & Artino, 2013). The pilot survey offered only four points: strongly disagree, somewhat disagree, somewhat agree, and strongly agree. Some pilot participants requested an extra option of agree that would span the gap between the points. To create a perception of ordinal distance between the points, the researcher created categories for moderately disagree and moderately agree. Boone and Boone (2012) concluded that during the creation of the survey, the type of data would determine the appropriate analysis. The *t* -test may be used with Likert scale data if the composite sum or mean is calculated from four or more items (Boone & Boone, 2012). The pilot survey had five items for emotional and cognitive engagement, and a fifth item was added to the behavioral engagement composite. Also, the wording for one scale item was improved by specifying the context of reading during the participant's spare time. The analysis of the pilot study and the research literature resulted in a survey with stronger validity.

In the process, several important decisions were implemented to increase the rigor of the study based on principles from Fowler (2009). The survey was self-administered to reduce social desirability bias (Lavrakas, 2008). The populations for the control and intervention groups did not know about the dialogic intervention, and the groups were assigned by a coin toss for random assignment (Gliner et al., 2009). To control for possible extraneous factors (Trochim, 2015), both groups produced a comedy play so that the sophistication of the Shakespeare material was comparable. These plays were *Twelfth Night* and *Comedy of Errors*, and both plays portrayed issues of justice, disparities in social status, a similar mix of Shakespearean prose and iambic pentameter, and universal themes such as friendship and falling in love (Shakespeare, 2005).

Both plays also featured comedic elements and characters that young actors could effectively accentuate. Table 1 lists the scale items, which utilized a 7-point Likert rating from 1, strongly disagree to 7, strongly agree.

Table 1 Student Engagement Components and Scale Items

Behavioral	Emotional	Cognitive
(Reverse worded) I don't make a habit of watching Shakespeare plays.	*I would say that Shakespeare's plays are interesting.*	*(Reverse worded) I do not put in extra effort to create my Shakespeare character.*
(Reverse worded) I rarely read Shakespeare plays in my spare time.	*I would say that acting in a Shakespeare play is fun.*	*I practice to learn confidence in speaking in front of people.*
I will invite friends to participate in or watch a Shakespeare play.	*I think that watching a Shakespeare play is fun*	*I pursue learning about acting skills outside of camp.*
(Reverse worded) Shakespeare quotes rarely come to my mind in daily life.	*My opinion of Shakespeare's plays is positive.*	*(Reverse worded) I do not put in extra effort to understand Shakespearean language.*
I talk with others about Shakespeare plays or characters.	*(Reverse worded) The behaviors/emotions of Shakespeare's characters are confusing to me.*	*When I don't understand something in a Shakespeare play, I read about it later.*

Gunuc and Kuzu (2015) provided a model for developing an engagement scale through exploratory factor analysis, but this study did not have the minimum of 300 participants needed for this approach (Field, 2013). However, the data allowed for testing internal consistency with Cronbach's alpha in line with the process employed by Gunuc and Kuzu (2015), in which the Statistical Package for Social Sciences (SPSS) was utilized to calculate Cronbach's alpha.

Sinatra, Heddy, and Lombardi (2015) developed a "continuum of engagement measurement" (p. 9) that describes three focuses of measurement: person-oriented, person-in-context, and context-oriented. This study was a person-in-context measurement, and Sinatra et al. (2015) recommended triangulated self-report and observation of interactions for this type of study. For this reason, the study was designed to include surveys from students, focus groups with students, and observation of the active learning process.

The survey instruments were developed with questions indicative of the three types of engagement: behavioral, emotional, and cognitive. The precamp student survey began with questions to learn the background of the students, including gender, years of Shakespeare camp, age, and previous experience with Shakespeare. Next, engagement statements were listed for students to rate their perceptions before they attended Shakespeare camp. The postcamp survey queried responses to the identical engagement statements from the precamp survey to provide consistency and credibility.

The Likert scale for the survey was designed to create the weighted averages based on strongly agree (7), moderately agree (6), somewhat agree (5), neutral (4), somewhat disagree (3), moderately disagree (2), and strongly disagree (1) to create a means of comparing perceptions in line with the work of Sullivan and Artino (2013). In the postcamp survey, some additional questions covered perceptions of aspects of camp that were meaningful to the students, and another question covered areas that the student would like to study further. This section was separate from the scale items that were identical for the pretest and posttest, and it was designed to gather data for the fifth research question regarding elements that students found meaningful. Finally, a comment section was included. The drafts of surveys for students are in Appendix D.

Qualitative Method

The researcher explored emerging themes related to active learning and the dialogic inquiry methodology and its adoption in the humanities through a phenomenological approach. In using the phenomenological method, the researcher queried through observation and focus groups the experience of active learning and dialogic inquiry among the students in the sample. The data may contribute to understanding how students participate in dialogic inquiry and how their behavior changes within an active learning context. This study was based on the concept of *verstehen,* which *"*stresses understanding that focuses on the meaning-making capacity of humans" (Patton, 2014, p. 56). One focus of this research was the meaning that students ascribed to dialogic inquiry in the context of Shakespeare active learning.

The focus group questions were developed as open-ended questions, and the facilitator was trained to encourage students to explain their comments (Rossman & Rallis, 2017). They used concepts from Brinkmann and Kvale (2015), who provided examples of follow-up questions such as "Could you say something more about that?" (p. 132) or "Do you have further examples of this?" (p. 133). This approach aligned with the phenomenological principle of seeking emerging themes by querying perceptions and eliciting repsonses from particpants that are not coereced (Creswell & Creswell, 2017). In light of this conceptual framework, the data gleaned may contribute to a deeper understanding of dialogic inquiry and its place within active learning and the humanities.

The researcher created field notes throughout camp preparation and the active learning experience. Also, a camcorder was used to gather 10 random 8-minute samples of students and coaches during camp. The researcher used the video to describe participants, setting, behavior, and activities in a written document that was further analyzed. The researcher arranged for a

second observer to independently describe the video data. Table 2 lists possible engagement indicators that were utilized for the observational protocols. These indicators were determined through interviewing coaches during a previous study (McPherson, 2019) and then refining the list with the dissertation committee.

Table 2 List of Possible Engagement Indicators for Observational Protocol

Behavioral Engagement	Emotional Engagement	Cognitive Engagement
Positive Indicators	*Positive Indicators*	*Positive Indicators*
Making eye contact	Smiling	Going aside with a collaborator to plan a scene
Following along in the script	Clapping	Contributing ideas to the interpretation of the scene
Participating in discussion	Laughing	Sharing acting tips
A verbal statement indicating participation	Encouraging another member of the troupe	Responding to coaching with a positive response (e.g., trying a new skill)
Reciting scenes without the aid of the script	Bringing food to share with friends	Sharing information on the play or Shakespeare with the cast.
Wearing a costume at camp	Bringing gifts for friends	A verbal statement indicating cognitive engagement.
Active listening to others	Asking fellow actors to sign their copy of the script	Evidence of thinking about the play at home.
Good management of personal props	Singing with others during the break	Mentioning a discussion about the play outside of camp
Compromises with others when interpretations differ	Helping others memorize lines or find costumes and props	Seeking out a coach to discuss ideas
Trying again after a failure	Crying or laughing for characters in a scene.	Bringing drawings made at home to share ideas for camp.
Attending consistently	Trusting other actors in scenes that require coordination like fight scenes or fainting scenes.	Arriving at camp with ideas for how to act or interpret an assigned role.
Collaborating on blocking a scene	A verbal statement indicating emotion or emotional connection with a character	Following along in script or watching the rehearsal when offstage.
	Crying from anxiety or frustration during a creative process	Developing innovative and meaningful line readings

Table 2 List of Possible Engagement Indicators for Observational Protocol (continued)

Negative Indicators	***Negative Indicators***	***Negative Indicators***
Looking at a phone or device	Distracting with words or actions	A verbal statement indicating a lack of cognitive engagement
Looking elsewhere during a discussion	Looking into space	Not attempting to respond to coaching (e.g., not willing to try a new skill)
Playing games unrelated to camp	Appearance of stress	Not following along in script or watching the rehearsal when offstage
Needing the script when lines should be memorized	A verbal statement indicating negative emotions toward camp or the play.	Not taking responsibility for interpreting their role
Attending camp without a costume or props	Separating from others during break or lunch	Blaming others or circumstances for failure to memorize lines.
Reluctance to enter rehearsal room when camp begins	Criticizing others in a non-constructive manner for their choice of acting style, costume, etc.	Tuning out during experimentation with innovative line readings
Leaving the group during rehearsal without telling the coach.	Listening to music with headphones or earbuds	
Not listening to others with respect	Making comments designed to hurt the feelings of another person	
Poor management of personal props	Self-report indicating a lack of emotional engagement	
Failure to compromise with others when interpretations differ		
Giving up after a failure		
A verbal statement indicating a lack of participation		.
Sitting out during collaboration on blocking a scene		

The observational protocols for engagement with Shakespeare included 10 videos that were recorded for eight minutes at random times during camp. Independently, the researcher and an outside observer watched videos recursively to record observations until saturation of

observation was reached. Finally, scripts were analyzed for emerging themes to understand whether there were elements that participants indicated through behaviors or speech as meaningful. For this study, meaningful elements were identified as relevant, useful, or important to the participants during the focus groups or camp experience.

Research Design

This study was a mixed methods design that was conducted in the field with both participant report and researcher observation. Based on the mixed methods paradigm described by Creswell and Creswell (2017), concurrent collection of quantitative and qualitative data allows for the integration of the information during the analysis of the results. The quasi-experimental design utilized an engagement survey developed by the researcher to query the levels of three types of engagement through Likert-style questions for the control group and dialogic inquiry group on the first and last days of camp. At the same time, qualitative data were collected through observation of students and coaches at camp and focus groups with students. The researcher triangulated these sources of data to understand the relationship between dialogic inquiry and student engagement within an active learning environment.

Research Questions and Detailed Hypotheses

1. Is there a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)

2. Is there a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)
3. Is there a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry? (Quantitative research)
4. For the sample, is there a statistical difference in the perceptions of total engagement between the pretest before camp and the posttest after camp? (Quantitative research)
5. Are there elements in the active learning or dialogic inquiry process that students indicate through behavior or self-report as meaningful? (Qualitative research)

Hypothesis 1: There will be a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 2: There will be a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 3: There will be a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry.

Hypothesis 4: For the sample, there will be a statistical difference in the perceptions of total engagement between the pretest on the first day of camp and the posttest on the last day of camp.

Procedures

Approximately 90 secondary students participated in a week-long camp that culminated in the performances of three separate plays. Students performed or served in stage management in one play and had the opportunity to watch the other two plays. Shakespeare coaches guided students using the basic active learning methodology of embodying the text with voice and movement. One cast used this basic paradigm of active learning, while one cast added the dialogic inquiry approach to the active learning model to collaboratively create their understanding of a Shakespeare text (Irish, 2011). The dialogic scripts were used to conduct small group discussions each day for about 30 minutes for the experimental group, which included both actors and stage managers (The dialogic scripts are presented in Appendix E). The control group used this time for additional active learning activities. Both groups utilized theatre games and activities to develop skills such as projection, pausing, stage presence, and physical orientation to fellow cast members while on stage. This process built on the concept from Schön (1983) of reflection-in-action or improvisation in practice. Students in their roles as actors or stage managers learned by a cycle of doing and processing to construct understanding. The difference was that the dialogic group had a formalized discussion each day.

Several aspects of this camp provided context for the experience. First, the students performed and rehearsed on a professional stage, which enhanced the experience of performing. Second, students had personal scripts, which the students could annotate with their notes. Finally, the students had the responsibility of memorizing their parts and preparing their costumes and props before camp began. These elements contributed to the active learning experience.

Preparation

The researcher conducted an orientation for the coaches who led the dialogic inquiry sessions. They are referred to as facilitators for this study. The director chose a time to conduct discussions, and all students were divided into groups with about six to eight students per facilitator each day. The sessions lasted between 20-30 minutes. The facilitators encouraged all students to participate in discussion (Reznitskaya, 2012). The facilitators avoided answering questions (Lyle, 2008). Instead, they used dialogic bids such as asking: What do the rest of you think? It was acceptable for them to make encouraging statements or nod the head (Nystrand et al., 2003). It was also helpful for the facilitators to communicate to the students how important this discussion was to help them create the play together (Irish, 2011). Facilitators encouraged students to respond to one another and build on other students' ideas (Alexander et al., 2017). The facilitators also used pauses to allow students to think of responses (Wilkinson et al., 2017). The goal was for the facilitator to avoid maintaining control and authority in discussions (Wells, 2015). As a result, it was acceptable for the students to explore other threads of inquiry that were not stated in the questions. If a group finished the questions before the time allotted, the facilitators kept the discussion going by using the question hat, a hat that contained open-ended questions about the characters in the play.

During the casting process, the coaches did not know the nature of the intervention or which group was assigned the intervention. After the coaches assigned students to their roles, a coin toss determined which group was assigned the intervention. The control and intervention groups performed comedies to provide similar sophistication of the Shakespeare text. The consent form, cover letter, focus group questions, and surveys were developed for IRB approval before camp. The researcher consulted with the methodologists to construct a survey that

lessened the element of social desirability bias through self-administration, sensitive wording, and reverse worded statements.

When IRB approval was received, an email with the cover letter and consent form was sent to all participants' parents. The cover letter did not detail the intervention of dialogic inquiry, but the basic information about the surveys and video approval for the camp were communicated. Surveys were also attached so that parents could approve the content in advance. The forms had space for parental consent and student assent. Parents had the option to deliver consent forms at precamp meetings, send them by mail, or bring them the first day of camp.

During Camp

The first day of camp, the research assistant had a list of received consent forms and greeted those without consent forms to inquire if they would like to complete them. She had extra copies of blank forms. The students with consent forms were given paper surveys to fill out at the beginning of the first day of camp. Pencils were also provided, and the researcher was not in the room. For confidentiality, students created a code name that they used on the pre- and post-tests. Students were given time to fill out surveys, and then they were collected by a coach.

The last day of camp, surveys were again distributed along with pencils. The researcher was not present while students completed the surveys. Students with prior consent forms filled out the forms and a student coach collected them. The researcher entered the data into a spreadsheet to analyze it in SPSS. The surveys from the two comedy casts were utilized so that the sophistication level of the Shakespeare material would be consistent.

A volunteer videographer used a randomizer to identify a start time for the daily 8-minute recording for both the control group and the dialogic group. Video permissions were received in

advance from coaches, students, and parents. One video was collected from each group every day of camp for a total of 10 recordings. The video data were described independently by the researcher and an outside observer according to the observation protocols for engagement behaviors. The videotapes were kept secure on a password protected computer in a locked room and were converted to observational transcripts within 30 days of the recording. The videotapes will be destroyed by May 2020, and images from these tapes will not be used as part of research presentations in the future.

An independent interviewer conducted the focus groups, and the researcher was not present. The focus groups took place on the last day of camp. There was one focus group for the control group and one for the intervention group. The group size was six students, and they were invited by the volunteer in charge of randomization. This individual used a random number generator to assign three new students and three returning students to both the control focus group and to the intervention focus group. The inclusion of returning and new students was designed to understand a variety of perceptions in both groups. If a student declined to participate, the randomizer would assign the next student to be invited until the group was full.

The interviewer used the IRB approved questions, which included prompts for more information such as “Can you give an example?’ and “Anyone else have a comment?” Appendix F contains the focus group questions. The focus groups were videotaped with the camera behind the interviewer so that the wide angle would capture all six participants. The researcher transcribed the speech from the focus group videos and the interviewer checked the script for accuracy. Also, the researcher and the interviewer independently added observation notes. Procedures for confidentiality and security were followed in accordance with university policies and as approved by the IRB.

Details

An important detail regarded family members participating in the Shakespeare camp. The researcher had one son who acted in one of the plays and one daughter who was a coach for one of the plays. The researcher mitigated potential bias and limitations by assigning them to separate plays from the researcher and by ensuring that the one family member who volunteered as a coach was not assigned to the experimental group. Neither of these family members was involved in data collection, such as passing out paper surveys, conducting focus groups, or filming video samples.

Ethical considerations were carefully structured within the research study. The parents were given informed consent forms on behalf of their children before the students were given the informed assent form and survey. The informed assent form for students was written in language that was age-appropriate and was pilot-tested with participants in the age range from 10 to 18 years old. Finally, the parental informed consent form included information regarding foreseeable risks and direct benefits in this statement:

> There are no foreseeable risks, incentives, or discomforts associated with this survey, though the survey may impose a risk of boredom for some people. Although there may be no direct benefit to your child, the possible benefit of your child's participation is the opportunity to consider what has been learned at camp and to contribute to Shakespeare education research.

The care in planning the consent form and survey instruments contributed to the ethical aspect of this study (The full consent form is in Appendix A).

Several elements were incorporated to increase the rigor of the study. The control and intervention groups performed comedies to control for the sophistication of the Shakespeare material. According to the Lexile and Quantile Tools, Shakespearean comedies average 1000L while tragedies average 1300L (Metametrics, 2019). For this study, *Twelfth Night* was rated as

1040L, and *The Comedy of Errors* as 910L (Metametrics, 2019). After casting, a coin toss determined which group was assigned the intervention. The focus groups were conducted by an independent interviewer to mitigate the bias of the embedded researcher. Also, the researcher was not present. The researcher and a second outside observer independently recorded observation notes for the focus groups. For the survey instruments, the same wording for the factors that contributed to the composite score for the dependent variables were utilized before and after camp. Demographic information such as years attending camp and previous experience with reading and watching plays was collected to discern if there were extraneous variables from the students' past. The researcher attempted to increase the rigor of the study through careful attention to details throughout the research procedures.

Data Analysis Techniques

Creswell and Creswell (2017) described the concurrent approach to mixed methods research in which data are collected during the same period and analyzed for findings of convergence, divergence, or other connections. The quantitative insights were enhanced through careful analysis of the qualitative data. Appendix G provides a triangulation matrix of the data.

Analysis of Quantitative Data

The survey data were entered into SPSS with the intervention group coded as 1 and the control group coded as 2. A missing value analysis was run in SPSS. Incomplete data were eliminated, with the result that of the 29 students in the control sample, two did not finish the survey, and three individuals did not hand in either the pre- or post-survey. For the dialogic intervention sample, 28 individuals participated, but four participants did not hand in either the

pre- or post-survey. As a result, each group contained 24 participants. Next, values for reverse worded statements were recoded using the transform function in SPSS to recode into the same variable.

The demographics for the control and intervention groups were aggregated to understand how the groups were similar or dissimilar in composition in regards to age, gender, and experience with Shakespeare's works and camp. Also, SPSS was utilized to evaluate Cronbach's alpha for the scale items for each of the three types of engagement, in line with the methodology of Gliner et al. (2009). Field (2013) suggests that alpha should be above .70 or .80 and recommends including the command "scale if item deleted" (p. 711). A reliable questionnaire would not demonstrate a substantial change in Cronbach's alpha for any particular scale item; however, if one item does affect reliability, the researcher should consider eliminating it from the survey (Field, 2013). After internal consistency reliability was established with Cronbach's alpha, the scale items assigned to each construct were used.

Sullivan and Artino (2013) concluded that parametric statistics are valid for Likert scale data, and Tastle and Wierman (2007) specified that the Likert scale should have at least five values if used for parametric statistics. These concepts were applied for the data from the surveys. The data were first evaluated to determine that the assumptions of the *t*-test were satisfied. One requirement for the independent-samples *t*-test is that the dependent variable has a normal distribution (Gliner et al., 2009). Field (2013) recommends the Shapiro-Wilk test for checking the normality for samples less than 100. Another assumption for the *t*-test is that the scores on the dependent variable are independent of each other. The design of this study kept the control and intervention groups separate since they were rehearsing separate plays. The participants also did not know that dialogic inquiry was the intervention between the two groups.

Finally, the *t*-test assumes homoscedasticity or that the variances for the groups are equal (Field, 2013). This assumption was evaluated with Levene's test for equality of variances in SPSS (Field, 2013). If the variance was not equal, the Levene's test for equality would be significant (*p* is less than or equal to .05), and the assumption necessary for the *t*-test would be violated. In this case, a nonparametric test would be used (Field, 2013).

Next, the means of the scale items for each construct were calculated for each participant, and the appropriate independent samples *t*-test compared the change in pre- and post-test constructs between the control and intervention groups for the first three research questions. Research question four, regarding whether the entire population had experienced a change in total engagement, was considered useful to give context to the findings. For this query, a paired samples *t*-test was run. Field (2013) also recommends robust methods of analysis, such as bootstrapping to reduce the impact of bias. Bootstrapping "estimates the properties of the sampling distribution from the sample data" (Field, 2013, p. 199). The standard deviation, standard error mean, and 95% confidence interval of the difference were calculated and reported. The standard error indicated how much the sample mean deviated from the population mean. A large standard error would indicate that the differences between the means of the samples could be due to chance rather than the experimental condition. The Bonferonni correction was applied to the data (Field, 2013). The researcher worked closely with the methodologists to determine the correct order for these analyses.

Analysis of Qualitative Data

Based on the research questions, a phenomenological approach seemed to provide the best paradigm for qualitative analysis. The analysis provided a deeper understanding of the

experience of students with dialogic inquiry within an active learning context. This approach presupposed the validity of perceptions (Patton, 2014) and the value of the complexity of many views (Creswell & Creswell, 2017). The thick description of the process provided an audit trail for qualitative research to enhance credibility.

Focus Group Data

The videos of the focus groups were transcribed verbatim with indications of pauses and other sounds such as laughter. This process required four repetitions of transcription to ensure that details were correct. The transcript and a copy of the video were given to the outside observer for transcript checking and the addition of observations. Observations included smiles, shaking or nodding the head, making eye contact, and other subtle indications of agreement or disagreement. The two transcripts were combined to create a full transcript of observations.

Next, the transcript was coded using Qualitative Data Analysis (QDA) Miner for significant statements and observations. The process required repetition in reading and coding with each successive reading given to a different purpose. The first two readings were for general notation of significant statements, which were defined as phrases that gave insights into student perceptions. These statements helped the researcher to identify a metanarrative or storyline (Stuckey, 2015). The storyline attempted to answer the fifth research question regarding the elements that students identified through behavior or self-report as meaningful. Through several successive readings, 15 codes were identified: teamwork, time with co-learners, discussing scenes and characters, studying their role, learning to act, being on stage, wearing costumes, using props, having a script, memorizing lines, performing for others, feeling ownership for their characters and scenes, understanding the motivations of the characters, watching co-learners

perform, and growing as a Shakespearean actor over time. The transcripts were coded with these codes in QDA Miner. Next the codes were further refined to identify the emerging themes, which were then clustered into groups in QDA Miner.

Video data

The ten short videotapes were described by the researcher. The observation process required several repetitions of observation in order to capture the variety of behaviors found in the videos. The context was also described to provide thick description. Some of the randomly chosen footage captured students performing on stage, and the interjections from coaches were noted to indicate interactions. One of the segments captured a dialogic session in the experimental group, and the transcript was useful in describing the experimental intervention.

In addition to the researcher describing the video data, the outside observer made independent descriptions. Next, the researcher and independent observer used the observational protocols to list behaviors. The results were uploaded to QDA Miner and coded for significant observations with the same coding and repetitions utilized for the focus group transcripts. The researcher attempted to identify indicators of meaningful elements.

Field Notes

Finally, the field notes made by the researcher were uploaded to QDA Miner and coded using the successive readings utilized for the focus groups. The same codes were used so that themes became more apparent and data were able to be compared across groups and across data types. The researcher employed bracketing, which is an explanation of personal bias so that preconceived ideas could be suspended and the data analyzed for its meaning. The field notes

tended to fill in the gaps of observation left by the 8-minute video samples. The video samples captured examples of almost all types of activity at camp, such as warm-ups, exercises, work shops, rehearsal, blocking, and discussion. The one missing activity was the coaches' talks, which were given before the performance to remind students that their show is a gift to their audiences. These talks were a means of communicating the purpose of the active learning experience and the ethos of the troupe. Memos from the researcher on clarification and interpretation were also used in creating the audit trail.

Rigor in Analysis

Several types of triangulation were used in this study. Video data were triangulated from different times, spaces, and participants. Triangulation of investigators was accomplished through employing several researchers to gather and analyze data including the videographer, focus group leader, outside observer, and the researcher. Multiple methods of data collection also provided triangulation through survey instruments, focus groups, field notes, and videotaping. The use of SPSS and QDA Miner provided an audit trail for the research. Also, the researcher narrated the steps from the start of the research project through the development and reporting of the findings.

The narrative was useful for bracketing the researcher's experience during the discussion phase of the research. For example, decisions on how to describe focus group and video data required concentration on the purpose of the study to examine the elements that students found meaningful. The field notes provided valuable reflexivity on the conceptual lens of the researcher and the explicit and implicit assumptions made during the research process. The sections on conceptual and theoretical frameworks, as well as the resulting section on methodology,

attempted to distill this information in the dissertation. Representative quotes and observations were chosen to explain the findings in the context of dialogic inquiry and active learning with Shakespeare. The qualitative analysis of the data of elements students found meaningful was merged with the quantitative analysis of the three constructs of behavioral, emotional, and cognitive engagement for the discussion (Creswell & Creswell, 2017). This analytical approach was chosen for its fit to the research problem, and in turn, this framework impacted the analysis and continuing literature review for this study.

Summary

This mixed methods study triangulated all quantitative and qualitative data for a deeper understanding of dialogic inquiry in the context of active learning. The constructs of behavioral, emotional, and cognitive engagement were compared between the control and experimental groups using survey data. Qualitative data from focus groups, video recordings, and field notes regarding elements students found meaningful were merged with the findings. Careful planning of the research design included taking into account ethical concerns for a student population, a pilot of the survey instrument for validity, and procedures to increase rigor. The credibility of the findings was enhanced by triangulating sources, an outside observer for member checking and independent coding, and oversight by the dissertation committee.

CHAPTER IV

RESULTS

The results from this study comprise descriptive statistics of demographics, analysis of construct validity, and analysis of the five research questions. The demographic data and history with Shakespeare's plays revealed the similarities and differences between the two groups, which will be further discussed in the limitations in Chapter V. Before the research questions were evaluated, the data analysis for internal validity for the three engagement constructs was described. The survey instrument queried the dependent variables of change in behavioral, emotional, and cognitive engagement for possible relationship to the independent variable of control or dialogic groups for the first three research questions. The fourth question queried whether a change in total engagement was perceived by participants between the first and last days of camp. The fourth question provided context for the findings of the first three questions. As applicable for each research question, the Shapiro-Wilk test for normality and the Levene's test for equality of variances for the data set were evaluated to determine whether the data qualified for parametric testing. Based on this analysis, the appropriate *t*-test for each research question was performed.

For the fifth research question about elements that students found meaningful, the transcripts from the focus groups and video observational data were described and coded independently by the researcher and an outside observer using the observational protocols. The researcher recursively analyzed the data in QDA Miner until no new significant statements were

found. The emerging themes regarding elements that students found meaningful were refined and sorted by clusters, and the implications of the data will be discussed in the final chapter.

Descriptive Statistics

Data were collected from two groups of students at a Shakespeare camp, who were performing comedy plays. The total number of survey participants was 57. The responses of nine survey participants were removed from the data set due to incomplete survey forms or lack of either the pre- or post-survey. The number of remaining responses was 48 (N=48) with 24 participants for each group: control (n=24) and dialogic intervention (n=24).

The sample comprised 33 female students and 15 male students with an uneven distribution between the two groups. The control group had 20 female students and four male students, while the dialogic group had 13 female students and 11 male students. Table 3 lists the statistics for age, years at camp, number of Shakespeare plays read, number of Shakespeare plays watched, and number of Shakespeare plays performed. Except for gender, the two groups displayed similar attributes. This set of statistics provided background information on the two groups.

Table 3 Descriptive Statistics

Parameter	Group*	N	Mean	Std. Deviation	Std. Error Mean
Age	1	24	14.9583	2.69426	0.54996
	2	24	13.7083	2.44023	0.49811
Number of years at camp	1	24	2.4583	2.39527	0.48893
	2	24	2.2083	2.51913	0.51422
Number of plays read	1	24	2.7917	1.50302	0.30680
	2	24	2.1667	1.78561	0.36449
Number of plays watched	1	24	3.5000	1.41421	0.28868
	2	24	2.7917	1.50302	0.30680
Number of plays performed	1	24	2.6250	2.08123	0.42483
	2	24	1.7500	1.70038	0.34709

Internal Validity of Engagement Constructs

The analysis of Cronbach's alpha (*a*) for each engagement construct is included in Appendix H. The analysis was conducted on the data set (*N*=48) for the precamp survey. Field (2013) recommends "values in the region of about .7 to .8" (p. 712), though strict adherence to certain values may not be warranted if the number of scale items is small. For this Shakespeare study, each construct had five scale items, which is considered a small number.

The Cronbach's alpha for the behavioral engagement construct was .830, which fell in the recommended region. The emotional engagement construct was .685, and the analysis revealed that the Cronbach's alpha for the emotional engagement construct might rise to .713 based on standardized items, which allowed this construct to maintain these five scale items. The cognitive engagement construct was .589, which is below the recommended region. However, the Cronbach's alpha for the cognitive engagement construct indicated a rise in *a* if the reversed scale item "I do not put in extra effort to understand Shakespearean language" was removed. After removing this scale item, the researcher ran a Cronbach's alpha for the four scale items,

and *a* rose to .656, which is considered in the acceptable region according to Field (2013). As a result, the Shakespearean language scale item was removed from the cognitive engagement construct.

Research Question 1

Is there a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

First, the data were evaluated to test whether the assumptions of the *t*-test were met. The independent-samples *t*-test assumes that the dependent variable has a normal distribution in both groups (Gliner et al., 2009). Field (2013) recommends the Shapiro-Wilk test for checking normality for sample sizes less than 100. If the significance is below .05, then nonparametric analysis should be used. Table 4 presents the Shapiro-Wilk test of normality for the behavioral change average. Based on the analysis, the behavioral change average may qualify for parametric analysis since $p = .661$.

Table 4 Behavioral Change Average Shapiro-Wilk Test of Normality

	Statistic	**df**	**Sig.**
Behavioral Change Average	.982	48	.661

Second, the *t*-test assumes homoscedasticity or that the variances for the groups are equal (Field, 2013). This assumption was evaluated with Levene's test for equality of variances in SPSS (Field, 2013). If the variance were not equal, the Levene's test for equality would be significant (*p* is less than or equal to .05), and the assumption necessary for the *t*-test would be

violated. In this case, the researcher would use a nonparametric test such as the Mann-Whitney *U* (Field, 2013). Table 5 presents the Levene's test for equality of variances for the behavioral change average. For the behavioral engagement construct, the variances were equal for the control and dialogic groups, $F(1, 46) = .81$, $p = .37$. Since it did not fail the test for equality of variances, a parametric analysis may be utilized.

Table 5 Behavioral Change Average Levene's Test for Equality of Variances

		Levene Statistic	**df1**	**df2**	**Sig.**
Behavioral Change Average	Based on Mean	.812	1	46	.372
	Based on Median	.663	1	46	.420
	Based on Median and with adjusted df	.663	1	44.989	.420
	Based on trimmed mean	.797	1	46	.377

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry. The results of the test were not significant. On average, participants in the dialogic group perceived larger increases in behavioral engagement ($M = .65$, $SE = .24$) than those in the control group ($M = .25$, $SE = .20$). This difference, .40, was not significant $t(46) = 1.28$, $p = .21$. Tables 6 and 7 show the statistics and independent samples *t*-test for behavioral change between the two groups.

Table 6 Behavioral Change Average Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
Behavioral Change Ave.	Dialogic	24	.6500	1.18432	.24175
	Control	24	.2458	.99825	.20377

Table 7 Behavioral Change Average Independent Samples Test

	t	df	Sig. (2-tailed)	Mean difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Behavioral Change Average	1.278	46	.208	.40417	.31617	-.23225	1.04058

Research Question 2

Is there a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

First, the data were evaluated to test whether the assumptions of the *t*-test were met. Table 8 presents the Shapiro-Wilk test of normality for the emotional change average. The emotional change average failed the test of normality since the significance $p = .022$.

Table 8 Emotional Change Average Shapiro-Wilk Test of Normality

	Statistic	df	Sig.
Emotional Change Ave.	.943	48	.022

Second, the *t*-test assumes homoscedasticity or that the variances for the groups are equal (Field, 2013). This assumption was evaluated with Levene's test for equality of variances in SPSS (Field, 2013). Table 9 presents the emotional change average using Levene's test for equality of variances for the data set, which revealed that the construct for change in emotional engagement did not fail the test for equality of variances, $F(1, 46) = .73$, $p = .40$. Thus, a parametric analysis may be utilized.

Table 9 Emotional Change Average Levene's Test for Equality of Variances

		Levene Statistic	**df1**	**df2**	**Sig.**
Emotional Change Average	Based on Mean	.727	1	46	.398
	Based on Median	.795	1	46	.377
	Based on Median and with adjusted df	.795	1	45.155	.377
	Based on trimmed mean	.740	1	46	.394

However, since the emotional change data failed the test for normality, a Mann-Whitney *U* test was conducted to evaluate the hypothesis that there would be a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry. The results of the test were not significant, $p = .24$, $p < .05$. On average, participants in the dialogic group perceived smaller increases in emotional engagement ($M = .03$, $SE = .12$) than those in the control group ($M = .22$, $SE = .13$). This difference, -.19, was not significant, $p = .24$. Tables 10 and 11 show the statistics and Mann-Whitney *U* test for the emotional change between the two groups.

Table 10 Emotional Change Average Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
Emotional Change Ave.	Dialogic	24	.0333	.59466	.12138
	Control	24	.2250	.63605	.12983

Table 11 Mann-Whitney *U* Test Hypothesis Test Summary

Null Hypothesis	Test	Sig.	Decision
The distribution of EmoChangeAve is the same across categories of play	Independent Samples Mann-Whitney *U* Test	.242	Retain the null hypothesis

Note. Asymptotic significances are displayed. The significance level is .05.

Research Question 3

Is there a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

First, the data were evaluated to test whether the assumptions of the *t*-test were met. Table 12 presents the Shapiro-Wilk test of normality for the cognitive change average. The cognitive change average may qualify for parametric analysis since $p = .17$.

Table 12 Cognitive Change Avearage Shapiro-Wilk Test of Normality

	Statistic	df	Sig.
Cognitive Change Average	.966	48	.172

Second, the *t*-test assumes homoscedasticity or that the variances for the groups are equal (Field, 2013). This assumption was evaluated with Levene's test for equality of variances in SPSS (Field, 2013). Table 13 shows the Levene's test for equality of variances for the total change average. The total engagement construct did not fail the test for equality of variances, $F(1,46) = .68$, $p = 41$. Thus, a parametric analysis may be utilized.

Table 13 Cognitive Change Average Levene's Test for Equality of Variances

		Levene Statistic	**df1**	**df2**	**Sig.**
Cognitive Change Average	Based on Mean	.680	1	46	.414
	Based on Median	.714	1	46	.403
	Based on Median and with adjusted df	.714	1	42.509	.403
	Based on trimmed mean	.557	1	46	.459

An independent samples *t*-test was conducted to evaluate the hypothesis that there would be a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry. The results of the test were not significant, $p = .89$, $p < .05$. On average, participants in the dialogic group perceived smaller increases in cognitive engagement ($M = .20$, $SE = .14$) than those in the control group ($M = .23$, $SE = .18$). This difference, - 0.03, was not significant $t(46) = -1.36$, $p = .89$. Tables 14 and 15 show the statistics and independent samples *t*-test for cognitive change between the two groups.

Table 14 Cognitive Change Average Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
Cognitive Change Average	Dialogic	24	.1979	.68358	.13953
	Comtrol	24	.2292	.89660	.18302

Table 15 Cognitive Change Average Independent Samples Test

	t	df	Sig. (2-tailed)	Mean difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Cognitive Change Average	-.136	46	.893	-.03125	.23014	-.49450	.43200

Research Question 4

For the sample, is there a statistical difference in the perceptions of total engagement between the pretest before camp and the posttest after camp?

First, the data were evaluated to determine that the assumptions for the paired samples *t*-test were met. The difference scores were independent of each other (Gliner et al., 2009), and normal distribution in the population was evaluated using the Shapiro-Wilk test (Field, 2013). Table 16 presents the Shapiro-Wilk test of normality for the total change average. The total change average may qualify for parametric analysis since $p = .649$.

Table 16 Total Change Avearage Shapiro-Wilk Test of Normality

	Statistic	df	Sig.
Total Change Average	.982	48	.649

A paired samples *t*-test was conducted to evaluate the hypothesis that there would be a statistical difference in the perceptions of total engagement between the first and last days of camp. The results of the test were significant, p =.002., $p < .05$. Considering the Bonferroni adjustment for 14 scale items, significance should be less than .003, which this significance satisfied. On average, participants after camp perceived larger total engagement ($M = 5.59$, $SE = .09$) than their perceived total engagement before camp ($M = 5.32$, $SE = .13$). This difference, .27, BCa 95% CI [.122, .426], was significant, $t(47) = 3.29$, $p = .002$, and represented a medium-sized effect, $d = .43$. This last finding of d was calculated with Cohen's d and evaluated for effect size based on the principles of Field (2013). Tables 17, 18, and 19 show the statistics and paired samples *t*-test for total perception of engagement between the pretests and posttests.

Table 17 Total Engagement Average Statistics

	Time	N	Mean	Std. Deviation	Std. Error Mean
Total Engagement Average	Before	48	5.3233	.92237	.13313
	After	48	5.5933	.62801	.09065

Table 18 Total Engagement Average Paired Samples Test

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
TotPostAVE - TotPreAVE	.27000	.56897	.08212	.10479	.43521	3.288	47	.002

Table 19 Bootstrap for Paired Samples Test

	Mean	Bootstrap[a]				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
TotPostAVE - TotPreAVE	.27000	.00105	.08024	.001	.12170	.42644

Note. a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Research Question 5

Are there elements in the active learning or dialogic inquiry process that students indicate through behavior or self-report as meaningful?

The qualitative data were analyzed using the phenomenological approach, a framework that queries multiple perspectives to create a composite description (Van Manen, 2016). This process required the researcher to bracket her preconceived ideas about the phenomenon in order to view the data with a fresh perspective (Creswell, 2013). The perceptions of the participants were gathered through focus groups, observational data, and the researcher's field notes.

The transcripts of the focus groups for the control and dialogic groups were member checked by the outside observer and uploaded to Qualitative Data Analysis (QDA) Miner. The video data were described independently by the researcher and an outside observer using the observational protocols. The transcripts for the 10 video clips were then combined and uploaded to QDA Miner. Finally, the researcher's field notes were uploaded to QDA Miner. The transcripts in QDA Miner were first read holistically for meaning. Next, the transcripts were read iteratively to identify important statements until no new statements were identified and saturation was achieved. The important statements were then studied to identify a list of preliminary emerging themes. At this juncture, the researcher worked with the methodologist to refine the list both in wording and in description. As a result, some of the emerging themes were combined or deleted. The researcher refined the data in QDA Miner with the list of emerging themes.

The emerging themes began to provide insights into the research question as the researcher identified clusters of emerging themes. This process required repeated review of the data, and time away from the project to allow the ideas to consolidate. The first iteration described an excess of emerging themes and clusters in 24 pages, which were finally condensed to six pages. The resulting description answered the research question.

The following observations and quotes from focus groups, video data, and field notes provide examples of the elements that students indicated through behavior or self-report as meaningful. For this study, meaningful elements were identified as relevant, useful, or important to the participants during the focus groups or camp experience. The emerging themes were grouped into three clusters: social interaction, physicality, and responsibility. Table 20 provides an overview of the emerging themes associated with each cluster. Some emerging themes contribute to more than one cluster.

Table 20 Emerging Themes in Clusters: Social Interaction

Emerging Theme	**Observational Data**	**Focus Group Data**
Teamwork	Blocking scenes together Moving synchronously Negotiating interactions Timing speech and actions with other actors	**Control**: Student C: Yeah, it's just trying to figure out how we're doing it together. **Intervention**: I would say yeah, definitely. Probably like all the officers and everyone -- because they were my partners-- arresting several people. And that's, a big team effort.
Performing for Others	Rehearsing on stage for performance Following rules for backstage positions Blocking to fill stage Accentuating movements to communicate with future audience	**Control**: So this is my first time actually being someone that I'm not. Tonight I'm excited to be someone that I'm not… not just be like I am. **Intervention**: It's different… You actually feel like you're part of the story rather than just waiting and witnessing
Learning to Act	Practicing embodying a character Practicing using voice to express character Practicing using body to express character Practicing projection Practicing adjusting position on stage as others move Practicing timing lines Workshops such as lovers' boot camp	**Control:** Student: A: We did workshops Focus Group Facilitator: Be specific. Student A: Workshop that was like, practice being boys. Student C: Speaking slowly. **Intervention**: Student D: Well, yeah, I kind of wish that I mean, that we can just focus on projecting and say, yeah. When you're in the scene, it's like, everything needs to go fast. And it doesn't. Student A: Yeah, so it's like, yeah, yeah. And waiting till the laughter stops is like a big part of that. I've had many funny lines missed because of that.

Table 20 Emerging Themes in Clusters: Social Interaction (continued)

Emerging Theme	Observational Data	Focus Group Data
Discussing the Scenes and Characters	Formal discussions in dialogic group Spontaneous discussions Non-verbal negotiation with movement	Control: Focus Group Facilitator: What helps you most in developing your characters and scenes? Can you give examples? Student A: It was fun working with other people to talk it out with the storyline, you know, to the analysis…, you know, analyze the script. Intervention: Student A: I just like the little groups that we broke off into to ask questions. Yeah, like one morning, like this kind of group. Student B: Yes. Student C: Yeah. Student F: Like that helped me find out about my character. Student A: We would break off into different groups. And we wouldn't necessarily be with the same people every day. And we were with different coaches, so they would have their different takes. And then all the different people have their different takes.
Spending Time with Co-learners	Attending camp with friends Congratulating another actor as they came off the stage Greeting co-learners Talking together when not onstage Complaining when no longer had lunch with all casts together Introducing self to new people during dialogic inquiry groups or workshops	**Control**: I think connections have been made because of the friends that are made in this play. Like the family, that we're putting together this play together. **Intervention**: Focus Group Facilitator: What helped you most in developing your characters and the scenes? Student A: Being with everyone else.

Table 20 Emerging Themes in Clusters: Physicality (continued)

Emerging Theme	Observational Data	Focus Group Data
Teamwork	Blocking scenes together Moving synchronously Negotiating interactions Timing speech and actions with other actors	**Control**: So they have groups who come together and intersect me, and eventually I get pushed from here in the stage to here in the stage. And so I discussed with them how they should push me in order to not hurt me. **Intervention**: And that's, a big team effort. Because, yeah, one of the Antipholuses put up a good fight. … They're awesome. And we're all just like, it's just an awesome scene as everybody is so good at that part.
Being on Stage	Adjusting voice to stage acoustics Adjusting actions to stage lights Blocking to allow for large space on stage Blocking to orient toward audience Appearance of increased excitement on stage	**Control:** Student E: Yeah. And I was like, the first person on stage Student F: That's the best thing ever. Focus Group Facilitator: You were going somewhere with that? Student E: Yeah, essentially, it just made me feel a lot more important. **Intervention: …**especially with the scenes, because everybody knows their lines. And it's the actual person who's gonna be playing on stage in the performance tonight.
Learning to Act	Practicing embodying a character Practicing using voice to express character Practicing using body to express character Practicing adjusting position on stage as others move Workshops such as lovers' boot camp and stagefights	**Control:** Lover's boot camp was me, Orsino, Sebastian, and Viola. But yes, we had to learn to actually hold each other. **Intervention**: But one thing when I got to camp, I started more like developing character, like kind of getting into character. Like when you're on stage, you're really reacting. It's like you're actually in that situation

Table 20 Emerging Themes in Clusters: Physicality (continued)

Emerging Theme	Observational Data	Focus Group Data
Costumes & Props	Wearing costumes every day of camp Verbal expression of admiration for the costumes and props of others Dying hair or wearing wigs Having extra costume pieces for different scenes Borrowing authentic costume pieces from family members Holding props even when not on the stage Bringing new props to camp Students developing ideas for new props Appearance of excitement when unpacking props for first day of camp	**Control:** Student A**:** One of the cool things is we have to stay in costume all day. During lunch break, it was amazing to just go around after you had like digested some food. Go around and like admire other people's costumes. Student B: I liked it when the third officer and I discussed how brother Joshie [a nickname they created for the priest role] would bring a basket of bread, and how I would take a piece and just be about to pop it in my mouth when I was arrested-- to explain why I'm not here for the rest of the play. **Intervention:** Yes. In the opening scene, just trying to figure it out because she was originally supposed to sell fruit. And then it just got changed to flowers which changed the entire way I thought about it. **(Field Note) Intervention:** One coach asked whether the witches were real children, and the actors said that they were actually figments of Antipholus's imagination. The coach suggested we needed to communicate this somehow, and the students decided to bring black cloaks or pieces of cloth to suggest they were different characters.
Performing for Others	Rehearsing on stage for performance Following rules for backstage positions Blocking to fill stage Accentuating movements to communicate with future audience	**Control**: So this is my first time actually being someone that I'm not. Tonight I'm excited to be someone that I'm not… not just be like I am. **Intervention**: It's different. So you can read the plays. I mean, you can read, but when you're actually in it, it comes to life. The characters are actually around you and reacting, and you react to them, and it makes a real difference than just reading it.

Table 20 Emerging Themes in Clusters: Responsibility (continued)

Emerging Theme	Observational Data	Focus Group Data
Studying their Role	Asking a dance teacher how to portray physical aspects of character Using outside source material to understand a role or monologue Practicing at home Studying script at home Thinking about interpretation at home	**Control**: Focus Group Facilitator: what helps you most in developing your character and scenes? Student C: I think like, also like looking up the character like, and then thinking about what their motivations would be to say this. And then like, if you will look in the script and see if like, someone says something about you, you know more about your character, from what other people say about you. **Intervention**: Well, I don't have a certain character. So it was kind of interesting, just starting from scratch.
Feeling Ownership for Characters and Scenes	Initiating discussion with co-learners to decide interactions of characters Developing costume and props Creating a backstory for their character Creating an explanation for behavior during rehearsal of scenes Creating voice or movement to express their understanding Discussing motivations of characters either formally or informally Reacting during scenes in line with their understanding of their character	**Control:** I had to think, what was the personality that I created? What would they do and how would they think and it definitely affected a lot of my thought process. **Intervention:** Like on the first day when they're asking for a back story, where it's like, I kind of came from a poor family never really got formal education. So I became a jailer, or because I was more calm with a lower job. I made the most of my position and worked my way up to the head jailer. But I'm very committed and hardworking. And I also take my job very seriously, like when arresting people. I take my job very seriously, and I will do my best to restrain them. So yeah, it was kind of nice developing character. Student A; Whenever you're standing there, and you're just thinking of random other thoughts, you don't need to think like yourself. You think like your character.

Table 20 Emerging Themes in Clusters: Responsibility (continued)

Emerging Theme	Observational Data	Focus Group Data
Memorizing Lines	Having lines memorized from first day of camp Memorizing lines during camp Quoting lines to explain interpretation during discussions Evidence of thinking about meaning of words	**Control:** Student: We were driving here on the way in the car, and I had my first sister help me with my lines. That has been very helpful, but what really got me is when my sister, my little sister, who's about eight in the back, she said, "in his bosom!" That was so funny. She knew all my lines because she's listening. Yeah, I think for me, that's the best thing about Shakespeare camp. You have these little eight and 7-year-olds learning how to act and learning Shakespeare from an early age. So that was the best thing ever. **Intervention:** Student D. The lines eventually just get stuck in your head sometimes. And I hear it in their voice now when I read it. Student E: Yeah, the same thing, when I read the duchess, I'm like imagining your voice (points to actor playing the duchess) Student A: imagining her voice years later… Student D: If I ever see *The Comedy of Errors* again, I'll think of her as the duchess.
Learning to Act	Practicing using voice to express character Practicing using body to express character Practicing projection Practicing adjusting position on stage as others move Practicing timing lines Older students sharing stories to teach lessons to younger students	**Control:** Yeah, so I actually saw *Twelfth Night* years ago [at camp]….Yeah, I was one of the attendants, and now I am the lady of those attendants. I actually used to serve myself. Yes, watching that play… kind of helped shape characters. **Intervention:** The thing is, um, I think people told me over the years what that kind of stuff is. If you're not speaking so slowly that it's uncomfortable, you're still talking too fast.

Summary

For the first three research questions, the null hypothesis was sustained for the differences between the control and intervention groups on the dependent variables of the amount of perceived change in behavioral, emotional, and cognitive engagement. The fourth research question revealed a significant difference in perceived engagement between the first and last days of camp, which provides context for the first three research questions. For the fifth research question of elements that students perceived as meaningful, three clusters of emerging themes identified social interaction, physicality, and responsibility. These findings will be further discussed in the next chapter.

CHAPTER V

CONCLUSION

Introduction

This study queried whether dialogic inquiry within an active learning model had a relationship with the change in secondary students' perceptions of behavioral, emotional, and cognitive engagement during a 1-week Shakespeare camp. The convergent mixed-methods approach was designed to collect data during camp through self-administered student surveys, student focus groups, observational video data, and field notes. The control group utilized the active learning model practiced by this camp for the previous 17 years, while the intervention group had the addition of approximately 30 minutes of dialogic inquiry each day. The first four research questions required analyzing quantitative data. For these data, though both groups documented significant increases in total engagement during camp, the independent samples *t*-test and the Mann-Whitney *U* test demonstrated no significant difference in the increase in engagement between the two groups for behavioral, emotional, or cognitive engagement. The fifth research question required analysis of the qualitative data. The data from focus group transcripts, observational video data, and field notes were coded for emerging themes of active learning and dialogic inquiry that students found meaningful.

This chapter will begin with a discussion of the finding that there was not a significant difference in the amount of engagement change between the control and dialogic groups in the quantitative data. The researcher will then discuss the significance of the findings in the context

of the research literature. Next, the elements that students found meaningful in dialogic inquiry and active learning will be discussed. Finally, implications for practice and conclusions will close the chapter.

No Significant Difference between Control and Dialogic Groups

The findings of no significant difference between the two groups in behavioral, emotional, and cognitive engagement change were important. In a previous, unpublished study of active learning in Shakespeare education, there was a significant positive difference in engagement between the first and last days of camp (McPherson, 2017), and this finding was corroborated by the data from this study with significance of .002 (p = .002). However, the amount of increase in the three types of engagement between the control and dialogic groups was not significantly different. One possible explanation is that engagement increases with active learning in Shakespeare education, whether dialogic inquiry is added or not. Students become engaged through a variety of mediums that do not require dialogic inquiry to process.

The overview of active learning in Appendix B lists several attributes commonly applied in this pedagogy such as activities that are student-centered, self-regulated, experiential, social, collaborative, inductive, inclusive of all students, relevant, reflecting real-life tasks, negotiated, complex, and supportive of learning from errors. Since all of these characteristics were already embedded in the Shakespeare Camp process, perhaps the addition of dialogic inquiry did not make a difference. Dialogic inquiry shares many of these attributes, though the focus is on verbal exchange (Alexander, 2010). Also, the finding of no significant difference in the amount of change in engagement between the two groups may demonstrate that the dialogic component

works in harmony with the other active learning components, and its addition does not shift the impact of the active learning model.

Another possibility is that dialogic inquiry has the same or smaller relationship to engagement as the basic active learning model used for this Shakespeare pedagogy due to the phenomenon of flow. Csikszentmihalyi (2013) described the phenomenon of flow, in which learners become immersed in the activity as a way of learning. He posited that this immersion creates engagement. This study of students at Shakespeare camp documented flow in both the control and dialogic groups during video sampling. At times, the flow was a type of focused concentration, as when students followed the play from the wings and were ready to go on stage at the right moment. In other video clips, students reached a state of flow as they practiced a new skill such as swing dancing or sword fighting that involved both concentration and enjoyment.

The concept of flow from the research of Shernoff et al. (2014) included a depth of cognitive processing, which was also observed in video clips as students discussed ideas or rehearsed a scene repeatedly to add elements or correct mistakes. Shernoff et al. (2014) also found that engagement increased when personal skills and task challenge were high and in balance, which allowed flow to develop. In both focus groups, students shared challenges such as learning to act drunk or timing a speech with the tolling of a bell. They reported satisfaction with overcoming the challenge and described their process of rehearsing and experimenting to achieve their results. The phenomenon of flow may explain why there was no significant difference between changes in engagement between the control and dialogic groups.

Another possible reason for the finding of no significant difference may be that dialogic inquiry was initiated in the control group independently of the coach facilitators. Focus groups from both casts described discussion as one of the most meaningful aspects of camp. The

observations from field notes and video data indicated that students discussed ideas among themselves without the intervention of a facilitator, and it may be that this discussion produced the same change as the formalized dialogic inquiry. To understand this phenomenon, reference to Vygotsky in the literature review was useful. Vygotsky (1978) developed the concept of the zone of proximal development, in which students interact with others who know more than they do and learn through the ensuing discourse and interactions. For the newer students at camp, their peers were consistently exchanging ideas with them as they worked on producing scenes together. Natural dialogue often occurred among students at a variety of maturity and knowledge levels.

A simple example from stagecraft illustrates this phenomenon. Every student who performs on a stage must learn about avoiding sightlines, which means that they must avoid standing backstage in a position that could be seen from the audience. The coach can communicate this rule verbally, but often younger students do not understand. During one rehearsal, an older student pointed out the chairs in the audience to a younger student to explain that he was standing in a sightline. The younger student changed his position and now knew how to monitor his placement backstage. This self-monitoring is the goal of cognitive engagement, but it happened through peer interaction rather than facilitated discussion.

Dramatic Inquiry in the Physical Realm

The qualitative data from this study provided context for the findings of no significant difference in the amount of increased engagement between the control and the dialogic active learning groups. One of the emerging themes was physicality, which inspired the question of whether there was dialogue taking place beyond the spoken word. In the phenomenological

approach to research, the researcher returns to the literature to understand emerging themes. The concept of physicality was identified by Edmiston (2015), who coined the term, dramatic inquiry, for this phenomenon. A study of the research literature in youth theatre that pertained to negotiating space and physical interactions revealed a body of knowledge that could inform some of the findings in this study. Burton (2002) suggested that in youth theatre, physical movement and coordination with others allowed students to stage their transition through adolescence. Their physical acting became a type of dialogue among the actors that did not require words. These findings were supported by Hughes and Wilson (2004), who documented personal and social development among secondary students in youth theatre. They suggested that engagement organically occurs as students work together in a physical space to negotiate how they will act and move. Tuisku (2010) emphasized that the physicality of theatre is the critical element of the learning process due to negotiating space. Tuisku (2015) later developed this idea further to parse the difference between conventional acting and embodied acting, which is a type of cognitive engagement through movement. These concepts suggest that physical dialogue may be created as students relate to one another as they act.

McCammon and Østerlind (2011) attributed some of the engagement to students' perceptions that they had won acceptance as actors in a theatre space. This is a more subtle type of communication among students. As one student observed in a focus group, "These kinds of people like me. They are people that are like me... I get to be around people that are quirky." Such social engagement may impact all three types of engagement: behavioral, emotional, and cognitive. McCammon et al. (2012) queried over 250 adults for their perceptions of the impact of high school theatre or speech participation, and concluded that "Quality high school theatre and speech experiences can not only influence but even accelerate adolescent development and

provide residual, positive, lifelong impacts throughout adulthood" (p. 2). They listed results such as increasing self-confidence, learning to overcome challenges, becoming more empathetic, creating friendships, learning teamwork skills, and experiencing accomplishment or validation (McCammon et al., 2012). These results have a social component, and the study suggests that the physical and experiential elements of theatre were different from cognitive gains in courses oriented around intellectual transfer of knowledge through text or lecture.

In addition to physical movement and relationship to other actors, space has also been studied for its impact on youth education. Hart (2015) documented that for secondary students, engagement increased with increasing access to a professional stage. Hart (2015) posited that the meaning-making process was enriched by the time on the stage. Perry (2011) also considered that the interaction of space, audience, and students creates "limens in education" (p. 73) or threshold spaces for creating knowledge. As Perry (2011) explained, "In performance, the artists play out and play with these elements as opportunities with which spectators engage" (p. 73). This raises the question of whether a type of dialogue takes place between the actors and the space in which they move and experiment. It is possible that a type of inquiry takes place informally as students inhabit their space.

Edmiston and McKibben (2011) also make a case for the physicality of rehearsal approaches in inspiring dramatic inquiry that results in the ability to analyze texts in other situations. Edmiston (2015) elaborated on his theoretical model in a qualitative study of an elementary school class reading *The Tempest*. He incorporated Vygotsky's (1978) concept that play and imagination are connected and that students learn by physical collaboration. His idea of dramatic inquiry adds the physical negotiation that takes place in creating a scene. This dramatic inquiry may be wordless, but it accomplishes a similar function to dialogic inquiry. It is social,

which means it occurs between two or more people, and it is exploratory within the bounds of the literary text. Edmiston (2015) also observed the importance of sharing the physical performance among students and for their audience. Edmiston (2015) applied Bakhtin's (2013) teaching that dialogue involves the positioning of inquirers who respond to one another, and this phenomenon may explain how students without the formalized dialogic inquiry still experienced dialogue through physical negotiation in space as well as spontaneous verbal interchanges as they worked. In theatre especially, physical positioning becomes another type of dialogue as actors respond to one another in a scene.

Thompson and Turchi (2016) support Edmiston's (2015) conclusions with their research and writing on "theatre-based classroom techniques" (p. 52) to teach literacy and skills in interpretation. They observed that kinesthetic learning is an important element that includes movement, feeling, speaking, and hearing words and rhythms. In a collaborative classroom, enacting a play means that students experience the text physically and socially. Thompson and Turchi (2016) make a case for student ownership of the text, which they define as "the confidence that comes from making sense of specific complex texts…when [students] decode, puzzle, and grapple with 400-year old texts and the layers of meaning they have accrued over time" (p. 56). They also believe that the physicality of producing a Shakespeare text provides students with the ability to experience the aesthetics such as "wordplay, repetition, allusion, unexpected images, extended metaphors, etc." (p. 57). Their specific findings within Shakespeare education confirm many of the findings in this study.

Pelias (2018) wrote, "performance itself is a way of knowing" (p. 21) and that this claim "rests upon a faith in embodiment, in the power of giving voice and physicality to words, in the body as a site of knowledge" (p. 21). His definition of embodiment included participation and

empathy. This phenomenon has been observed in Shakespeare Camp as the week progressed and students enhanced their scenes with empathetic interpretations using their bodies. Pelias (2018) considers this process to be understood as "performers expand[ing] their procedural repertoire as they develop as artists" (p. 22). Some of the restrictions for this phenomenon are limited abilities and limited maturity as can be seen in the range of students at camp: some with various levels of fitness and some with various levels of life experience. Pelias (2018) includes vocal behaviors in his concept of embodiment, and this is useful for understanding the type of dialogue that occurs when students repeat scenes without discussing how they will adapt to one another; yet it is clear that they are changing vocal and physical elements. This dramatic inquiry may explain why the addition of formal dialogic inquiry had no discernible impact.

Clusters of Emerging Themes

From the qualitative portion of this study, the emerging themes were grouped into three clusters: social interaction, physicality, and responsibility. The first cluster of emerging themes shared a verbal or social component, which is considered the goal of dialogic inquiry (Alexander et al., 2017; Haneda, 2017; Reznitskaya, 2012; Wells, 2015; Wilkinson et al., 2017). Students from the control and dialogic groups considered these verbal and social aspects of camp to be important, whether or not dialogic inquiry was formally added to their learning experience. The observational data revealed that discussion was incorporated organically in both groups, and this phenomenon aligns with active learning theory that learning is a social and collaborative process (Brame, 2016; Chi & Wylie, 2014; Frost, Levitt, & Kosslyn, 2017). The students had to work together to create the production. Whether through formal dialogic inquiry or informal collaboration, the students discussed the meaning and themes of the scenes they portrayed. They

embodied these scenes together, using voice and action to craft the play. These team skills translated into connections among students that enhanced the experience of the Shakespeare play. The teamwork also resulted in dedication to the process, which may explain similar increases in behavioral, emotional, and cognitive engagement in the data. Thus, the cluster of social interaction was comprised of teamwork, discussing scenes and characters, spending time with co-learners, learning to act, and performing for others.

Another cluster of emerging themes shares the aspect of physicality, which may be understood in active learning as experiential (Baepler et al., 2016; McConnell et al., 2017; Scherr & Hammer, 2009) and reflective of real-life tasks (Barnes, 1989; Bonwell & Eison, 1991). In a theatre environment, there is physical presence with other actors and objects in space (Hart, 2015; Perry, 2011; Tuisku, 2010). This means that students find meaning in the active learning model in elements such as working as a team, being on a stage, using props and costumes, performing for others, and learning to act. This cluster may have the largest impact on behavioral engagement, though the focus groups indicated that physical participation also led to emotional and cognitive engagement. One new student explained, “There's a lot of action going on. And I just like seeing it all put into action. I really liked this play. It's really good. I liked it more than I thought I would.” This student’s favorite part of her role was arresting and tying up two characters. In another scene she ran away from them because they had swords, and she had invented a backstory to account for this behavior. As a new student, her experience showed that behavioral engagement stimulated emotional and cognitive engagement.

Finally, a cluster of elements was indicative of responsibility. These behaviors took place before and during camp because they could be experienced independently. Active learning theorists consider student autonomy and self-regulation to be a defining characteristic of the

pedagogy (Brame, 2016; Page, 1990; Prince, 2004). These independent behaviors may also lead to reflection and metacognition, another goal of active learning (Frost et al., 2017; McConnell et al., 2017; Weltman, 2008). The elements that formed this cluster were studying their own role, feeling ownership for their characters and scenes, learning to act, and memorizing lines. Learning to act could be accomplished with other people and thus appears with the other clusters; however, these four emerging themes share the concept of student-centered learning in which responsibility is required. This element of responsibility provides a framework to understand the quantitative data of increased behavioral, emotional, and cognitive engagement.

Stefansson et al. (2016) considered engagement to be a multifaceted construct in which behavioral, emotional, and cognitive engagement combined. The study of the meaningful elements of Shakespeare camp with dialogic inquiry and active learning indicates that the three types of engagement increase together and are often stimulated by the same type of activities. Students identified elements that involved social interaction, physicality, and responsibility to be the most meaningful aspects of the learning experience. These findings have implications for educators.

Implications for Practice

Based on this study and the research of other educators, active learning and dialogic inquiry have a positive relationship with behavioral, emotional, and cognitive engagement (Alexander et al., 2017; Alles, Seidel, & Gröschner, 2018; Bass, 2018; Freeman et al., 2014; Frost et al., 2017; Garcia-Carrion, Gomez, Molina, & Ionescu, 2017; Haneda, 2017; Haneda, Teemant, & Sherman, 2017; McConnell et al., 2017; Reznitskaya, 2012; Wells, 2015; Wilkinson et al., 2017). This experience with active learning and dialogic inquiry can be applied in

education endeavors in a variety of disciplines. Educators already use these approaches in team-based learning, peer-led learning, problem-based learning, and flipped classrooms. Brame (2016) suggests that educators can also integrate basic activities into their classes to increase active learning by starting with a few ideas. Applications from this experience with secondary students include promoting student-led discussion, encouraging experimentation, leveraging dual coding, applying real-life tasks, and preparing space for learning.

Student-led Discussion

In active learning, discussion is designed to transfer ownership for ideas from the teacher to the students (Barnes, 1989; Kyriacou & Marshall, 1989). Student-led discussion is a useful strategy to help students develop their viewpoints (Ford, 2010). This student-led discussion is taught through dialogic inquiry, which is defined as a tool for stimulating collaboration among learners to discuss complex ideas and build on basic concepts, or "the tool-kit of discourse in the activity of learning" (Wells, 1999, p. vii). As an example, the dialogic group at Shakespeare camp was performing *The Comedy of Errors*, which concludes with all the actors on stage to witness the unraveling of the mistaken identities for the two sets of identical twins. One of the coaches asked the students, "how would your character react to this scene?" One student looked at the actor playing Antipholus of Ephesus and asked what he thought of his wife. A discussion developed that led to the group deciding that he should show that he loved her, which was a satisfying contrast to his twin brother's treatment of her throughout the play. This student-led discussion took the cast into deeper cognitive and artistic levels in the creation of their scenes.

This element of student-led discussion grew over the week of camp. Students progressively learned how to share their ideas and listen and respond to others without the

intervention of the discussion facilitator. Student-led discussion seems to be a skill that students develop, and the educator must help students learn this skill (Alexander, 2010). Coaches had to learn to turn questions back to the students and give them time to think (Wilkinson et al., 2017). The coaches helped students respond to their peers' comments by asking, "What do the rest of you think about this comment?" One challenge for this approach at times was the phenomenon of students wandering from the topic. The coach had to help students return to the question, but with the purpose of drawing students back into the conversation. As the students worked together to explore ideas, they developed the skill of discourse and confidence in their ideas. The coaches from both groups also observed that the process of student-led discussion encouraged students to trust one another. From an earlier unpublished Shakespeare study, one student explained, "It is a judgment-free zone because we are all acting" (McPherson, 2017, p. 23). This concept applies to all learning environments, where students can experiment, debate, change their ideas, and put forward untried ideas without fear of judgment. Their roles as inquirers mean that they lead the discussion.

Christoph and Nystrand (2001) described the development of a dialogic classroom in an English course, which had the goal of students responding to one another rather than waiting for teacher affirmation. Teachers utilized dialogic bids, such as reacting to student statements with authentic questions or taking up student ideas and observations to encourage student responses (Nystrand et al., 2003). Similarly, Shakespeare coaches observed that participation and confidence developed with the active learning approach of discussion, whether formalized or spontaneous. In the process of negotiating their ideas, students developed self-efficacy in discussion.

Active learning requires educators to give up control of the discussion as students reflect and dialogue (Brame, 2016). One of the foundational ideas of active learning is transferring responsibility to the students, which can be both a risky and rewarding endeavor. Teachers have expectations for the content or skills that students will learn, and often the most direct approach is the transfer of information from the teacher to the students through lecture. However, research is increasingly demonstrating that this approach achieves cognitive gains for only some of the students (Cherney, 2008), while, as Freeman et al. (2014) showed in a meta-analysis of 225 STEM studies, the slower experiential approach achieves gains for all students. In this work with Shakespeare students, the researchers have seen growth in critical thinking as students discussed questions that had become important to them as they performed a play. Encouraging student-led discussion added a cognitive connection for the students.

Experimentation

Experimentation is another useful strategy of active learning, in which students try new ideas and learn from both successes and errors. Eddy et al. (2015), who worked with STEM students, considered learning from failure an essential element of active learning. They found that students were more successful when teachers encouraged them to keep trying and to learn from their mistakes, a technique called error framing. Since students learn inductively in the active learning model, teachers encourage progressive trials, exploration, and adaptation (B. S. Bell & Kozlowski, 2008). For the Shakespeare students, this concept meant repetition in rehearsing scenes and encouraging the students to try new ideas. When students encountered failure, the coaches encouraged them to keep trying. This process taught them that they could succeed after failures. Many of the coaches observed an increase in confidence to experiment

among their students. One coach told the story of a young actor who began camp without the ability to move from her spot on stage. Despite the coach's encouragement to move around, she was the only one of the dozen actors in the scene who was immobile. The second day, the students were encouraged to create their backstories, and this actor was invited to be part of a mime with three other actors. They created a subplot that occurred in the background of the village scene. As the week progressed, the actor began moving naturally around the stage in other scenes as well. By the fourth day, a decision had to be made as to which side the group would exit toward when they were frightened. They decided to exit stage left because it would give them more time on stage to express their fear as they ran. This development reflected the growth in confidence to experiment, which the actor and her group felt.

Challenging students to create their own stories for their characters and to consider how they will react to the events on stage were strategies consistent with the student-centered approach that encourages autonomy (Prince, 2004). In *Twelfth Night,* an actor had a small servant role but developed it beyond the typical scope of this character. When she learned that she was supposed to spy on a prank, she developed a comic attempt to hide behind a broom while slowly drawing closer to watch. This actor's role came alive, and at the performance, the laughter of the audience affirmed her creativity and experimentation with her role. Experimentation seemed to be an important aspect of active learning.

Dual Coding

Dual coding is the idea that people learn in separate cognitive centers through separate verbal and nonverbal processes (Kosslyn & Nelson, 2017). This concept is applied across disciplines as more media are incorporated in the learning environment so that students learn

through listening, reading, studying images, and verbalizing what they understand. In active learning with Shakespeare's plays, students understand the text through spoken words, movement, and visual scenes. Educators have a wide range of possibilities for adding dual coding to their pedagogy. In the humanities, for example, poems may be read aloud, art may be viewed, and music may be heard. McConnell et al. (2017) described dual coding activities such as students creating concept maps and concept sketches to illustrate what they are learning. Active learning researchers suggest that dual coding may be one reason that this pedagogy increases understanding (Frost et al., 2017). The layers of knowledge derived from various sources of sensory information strengthen this model.

Another element of dual coding is the impact of active learning on connecting students with emotions. The process of learning to portray another character enables students to express emotion, and it results in personal progress in dealing with their feelings, another type of learning. Emotional understanding is a different type of dual coding, but one that educators understand when they observe a student connecting deeply with the material. In the focus group, one student spoke of "developing my character to where I feel like I'm actually kind of like a part of this story." The dual coding of emotional cognition has potential value in active learning.

Real-life Tasks

The active learning model requires activities that reflect real-life tasks (Kyriacou & Marshall, 1989). In one of the earliest definitions of active learning, Barnes (1989) described real-life tasks to mean that activities had a purpose. In performing Shakespeare's plays, these tasks include learning to enunciate clearly, to memorize, and to have confidence speaking in front of people. In this study, the element of having an audience was important to give the

activity a purpose. Students described how they found meaning in creating the play for others. An audience required consideration of how to communicate and portray complex ideas. This requirement challenged students to grow and learn in the process of studying Shakespeare's plays. Not only were students learning to perform, but they also were studying Shakespeare's work for subtext and nuances that could be communicated to their audience. Students grew through discussing the scenes and characters as an ensemble, and the audience was their motivation to probe more deeply into the craft of producing Shakespeare's plays. Another aspect of active learning is that it reflects the complexity of the real world. Shakespeare's plays remain a standard component of secondary education as noted by Turchi and Thompson (2013) in their study of the Common Core. One possible reason for the continued inclusion of Shakespeare may be the potential of his literature to teach students about the complexity of the real world and the critical thinking needed to address it. Argumentation, experimentation, questioning, and emotions are all elements of the real world.

One factor in active learning that strongly reflects real-life tasks is the concept that learning is a social process. Many active learning activities, such as peer instruction, role play, and think-pair-share, require collaboration and social interaction (McConnell et al., 2017). Active learning researchers consider that all students must participate for a successful learning experience (Frost et al., 2017). The researcher observed that the aspect of teamwork was an important cognitive gain for secondary students. The goal of producing a play together meant that they had to coordinate and negotiate how they would interpret each scene. Neelands (2009), in his work with Shakespeare in secondary schools, confirmed the foundational significance of active learning. He concluded that active learning promotes a model of democracy, and for this reason, the process of negotiating to create meaning was more important than the performance of

the play (Neelands, 2009). Working together to interpret a play taught students and their facilitators that knowledge is attainable when it is socially constructed and negotiated. This is a real-life lesson that could apply in any field.

Spaces for Learning

A final lesson from this active learning experience was that spaces matter (Baepler et al., 2016). This idea applies for scientific lab work, discussions that involve clustering in groups, or endeavors that require floor space (Bass, 2018; Frost et al., 2017; McConnell et al., 2017). In this research study, students pushed back desks to create a stage space so that they could begin moving around for all scenes. Since the active learning approach is inductive, students experienced the play in order to learn about it. The play required movement, but it did not prevent students from pausing mid-scene to ask questions and discuss what was happening.

When the students produced *The Comedy of Errors*, the first reading surprised many of them. The script contains some of the most slapstick humor of all Shakespeare's plays, and one character tends to push and hit his servant. At the first run-through, the students used the entire cleared space to exaggerate the servant's reactions, which included backward rolls and dramatic lunges. The space allowed them to experiment with their interpretations of the characters and scenes in a way that a simple reading at a desk would not allow. One coach concluded that "the students are understanding the play more through the action of doing it" (S. E. Wade, personal communication, May 17, 2019). This type of action requires space. Also, the tech week and performances were on an auditorium stage with lights, and the coaches observed a dramatic sharpening in the performance when the actors performed on the formal stage. Educators in a variety of disciplines have noticed this sharpening when students present at a podium, have

access to a real lab, or present a project at a history fair. It is useful for educators to consider how spaces can be utilized to increase learning.

Summary for Implications

The active learning approach is a valuable pedagogy for education endeavors. Significant concepts from this research with secondary students included encouraging student-led discussion, providing for experimentation, utilizing dual coding, reflecting real-life tasks, and coordinating space for learning. One of the most powerful observations was the evolution of students from simple consumers of a text to an identity as creators with Shakespeare to produce a full play. By the day of their performances, students no longer viewed their play as a simple literary text. It had become a living story. When students took on the role of creators, they viewed Shakespearean text differently. The goal for all educators is to leave students with a vital connection to their subject matter. Though Shakespeare education is a specific discipline, the observations from this active learning study reveal lessons that could be effective for all educators. Especially in the humanities, educators can consider how students could experience text beyond individualized reading and whether a text benefits from being spoken or heard. Educators can ask whether dialogic inquiry and teamwork help students master complex texts, and in this context, whether space or the set-up of the classroom matters. As part of a continuing stream of research in active learning, the findings of this study may encourage educators to implement active and dialogic elements into their classrooms and stimulate independent dialogue, both verbal and nonverbal, among students.

Recommendations for Future Research

Future research could expand this study with a larger sample. With attrition, the two groups contained 24 students each, and an increased sample size would make a stronger analysis feasible. Also, one data point that showed a significant difference between the groups was from a background question regarding student perception of how much they understood Shakespearean language before and after camp. The dialogic inquiry group recorded significantly higher perceptions of increase in understanding than the control group. Though this data point was not the focus of this study, it would be interesting to design a study of whether students perceived an increase in understanding Shakespearean language when dialogic inquiry is added to active learning. Another topic for future study would be to investigate with the same methodology two large groups of students who have never participated in Shakespeare camp. It would be interesting to query whether those who had not been exposed to active learning would perceive a higher increase in the three types of engagement if they had formalized dialogic inquiry.

Another needed area for future research involves active learning in specific disciplines, especially the humanities. Most active learning research focuses on STEM fields (Educause, 2017), but as this study illustrated, active learning is a useful pedagogy for Shakespeare education. Bass (2018) has conducted research in secondary social studies classrooms, and Irish (2016) has conducted research in English classrooms, but these humanities studies are rare. The fields in secondary education of language arts, history, political science, and economics need active learning applications and research. In higher education, researchers are studying active learning as a replacement to lectures (McConnell et al., 2017; Read, Barnes, Harrison, Koramoah, & Ivanova, 2017; Roberts, 2016; Wiggins et al., 2017), and this would be a fruitful field for continued inquiry.

The query of what is meaningful to students generates a possible future research question as to why social interaction elements were so highly regarded. Many active learning practitioners understand the strength of the pedagogy as harnessing social elements (Frost et al., 2017); however, more research needs to be done to understand why this is meaningful and whether it is effective. The finding of physical dialogue as a type of dialogue or negotiation that is not considered under a dialogic inquiry framework might be an interesting study. Instructors in lab sciences, physical education, and theatre, for example, use experiments and exercises that require physical as well as verbal dialogue (Kimmel, Hristova, & Kussmaul, 2018; Strandberg-Long, 2018). In active learning, the concept of dual coding means that students learn through accessing a variety of centers in the brain through many senses and types of learning tasks. The specific learning tasks related to physicality would be a useful topic for research.

This study began with a literature review of over thirty years of active learning research and an attempt to understand what was essential to the model. The literature review revealed a wide disparity in interpretations of the active learning model, and this study only began to query the dialogic inquiry element within active learning. The findings of no significant difference between the control and intervention groups may mean that dialogic inquiry is a natural result of active learning. More analysis of this idea would contribute to active learning research. Also, among the research literature, several disparities in interpretation could be queried such as whether the process of learning should be negotiated between the teacher and students, and whether active learning can be wholly inductive or whether some scaffolding is needed. This dissertation only began the conversation of the place of dialogic inquiry within the active learning model. The growing support for increasing active learning across classrooms and

disciplines means that this pedagogy merits future study in a variety of specific courses at a variety of levels of education.

Limitations

There were several limitations that became clear as the study progressed. The camp was comprised of about 66% returning students and 34% new students, which could skew the results. In addition, most years at camp, there has been an approximately equal number of male and female students; however, this year the third play (*King Lear*) drew a disproportionate number of male students, which meant that the two comedy plays utilized for this study had a lower and uneven distribution of male actors. Also, the quantitative study was based on student perceptions, which may not be accurate due to social desirability bias or a sincere belief in inaccurate levels of engagement. Finally, observational data revealed that the control group experienced spontaneous dialogic inquiry so that the intervention could not be added with a clean division of groups with and without dialogic inquiry.

Conclusion

The population of 48 students experienced a significant increase in engagement between the first and last days of camp; however, the amounts of change in behavioral, emotional, and cognitive engagement were not significantly different between the control active learning group and the active learning group with dialogic inquiry added. The observational and focus group data revealed three clusters of emerging themes that students found meaningful. The social interaction cluster included teamwork, discussing scenes and characters, spending time with co-learners, learning to act, and performing for others. The physicality cluster comprised working as

a team, being on a stage, using props and costumes, performing for others, and learning to act. Third, the elements that formed the responsibility cluster were studying their own role, feeling ownership for their characters and scenes, learning to act, and memorizing lines. These clusters of emerging themes led to implications for practice that included encouraging student-led discussion, providing for experimentation, utilizing dual coding, reflecting real-life tasks, and coordinating space for learning. Future research will hopefully add to knowledge about the elements of active learning that comprise best practices in education.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL FORM AND INFORMED CONSENT FORM FOR SHAKESPEARE ENGAGEMENT SURVEYS

TO: Joyce McPherson, Dr. David Rausch IRB # 19-089

FROM: Lindsay Pardue, Director of Research Integrity

Dr. Amy Doolittle, IRB Committee Chair

DATE: 7/24/2019

SUBJECT: IRB #:19-089: A Mixed Methods Study of the Relationship Between Dialogic Inquiry and Engagement in Active Learning Shakespeare Education

Thank you for submitting your application for research involving human subjects to The University of Tennessee at Chattanooga Institutional Review Board. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects and approved via the expedited review procedure authorized by 45 CFR 46.110 and 21 CFR 56.110.

You must include the following approval statement on research materials seen by participants and used in research reports:

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 19-089.

Please keep in mind that all research must be conducted according to the proposal submitted to the UTC IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an Application for Changes, Annual Review, or Project Termination/Completion form to the UTC IRB. Please bear in mind that significant changes could result in having to develop a new application for submission and approval. Your protocol will be automatically closed at the end of the proposed research period unless a change request application is submitted. No research may take place under a closed or expired protocol.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the UTC IRB as soon as possible. Once notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval.

For additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu.

Best wishes for a successful research project.

The University of Tennessee at Chattanooga is a comprehensive, community-engaged campus of the University of Tennessee System.

Dear Parent:

I am a doctoral student at the University of Tennessee at Chattanooga, and I am researching the impact of active learning on Shakespeare education. Your children's participation will involve answering questions on either a print survey or online survey about their experience with Shakespeare before and after camp. The survey will take 5-10 minutes, and you are welcome to view the survey before your child in order to understand the nature of the questions. Your child's participation is voluntary, and all responses will be confidential. Your child may choose not to participate or to stop the survey at any time. If your child decides to stop participation early, any information already collected will be discarded.

The study will also collect video samples during camp, which will be analyzed. The videos will be destroyed by May 12, 2020, and the videos will not be used for research presentations. All data from the study will be kept secure in line with university policies. The results from this study may be published, but no participant names will be used. The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 19-089.

There are no foreseeable risks, incentives, or discomforts associated with this survey, though the survey may impose a risk of boredom for some people. Although there may be no direct benefit to your child, one possible benefit is the opportunity to consider what has been learned at camp and to contribute to Shakespeare education research. If you have any questions concerning this research study or your child's participation in the study, please call me at 423-825-1415 or email me at mcpclan@epbfi.com.

Sincerely,
Joyce McPherson
357 Magnolia Vale Dr.
Chattanooga, TN 37419

I have read the above information, and I give consent for my child(ren)_____ to participate in this study.
Parent's Name (print): _____
Parent's Signature _____ (Date) _____

Student's Assent Form
I have been told that my mom or dad has given permission for me to participate, if I want to, in a project about Shakespeare Camp, and I have read the information above. I know that I can stop at any time I want to, and it will be okay if I want to stop.

If I participate in the focus group, I understand that it will be recorded using video recording. I understand that I have the right to refuse the video recording.
Please select one of the following options: I consent to video recording: Yes _____No_____

Signature and Date: _____: _____
Signature and Date: _____: _____

Volunteer Consent Form

I am a volunteer at Shakespeare Camp, and I agree to participate in the above study. I understand that I may be in sample videotapes that are taken during camp. I understand that the video data will only be used to describe camp, and the videotapes will be destroyed after they are transcribed. All participants' names will be confidential and no video images will be used for research presentations.
Name (print): _____
Signature and Date: _____: _____

If you have any questions about your rights as a subject/participant in this research, or if you feel you or your child has been placed at risk, you can contact Dr. Amy Doolittle, the Chair of the Human Subjects Committee, Institutional Review Board at 423-425- 5563. Additional contact information is available at www.utc.edu/irb.

APPENDIX B

ACTIVE LEARNING RESEARCH WITH DIALOGIC INQUIRY

AS A POTENTIAL ADDITION

ACTIVE LEARNING RESEARCH WITH DIALOGIC INQUIRY
AS A POTENTIAL ADDITION

Attribute	Research	Applied in Shakespeare Camp
Student-centered	Bonwell and Eison (1991), Prince (2004), Cooperstein and Kocevar-Weidinger (2004), Roberts (2016), King (1993), Kyriacou and Marshall (1989), Carr et al. (2015), Page (1990) According to Frost et al. (2017), student-centered is not utilized in all active learning (e.g. when a curriculum is pre-designed.)	Students interpret Shakespeare's plays and create a production together. **For the dialogic group, students discuss the interpretation and share their thoughts.**
Student-autonomy and self-regulation	Page (1990), Brame (2016), Prince (2004), Carr et al. (2015)	Students are responsible to develop their roles, costumes, props, etc.
Experiential	Page (1990); Revans (1981), Prince (2004), Kyriacou and Marshall (1989), Barnes (1989), Cooperstein and Kocevar-Weidinger (2004), Carr et al. (2015), R. Bell (2018), Weltman (2008), Goldstein et al. (2005), Cooper et al. (2017), Freeman et al. (2014)	Students experience the play through action and invention and use body and voice to create characters. **For the dialogic group, students discuss body position, gesture, and movement for scenes to negotiate blocking.**
Not passive/lecture/ Transfer	Revans (1981), Page (1990), King (1993), Cooperstein and Kocevar-Weidinger (2004), B. S. Bell and Kozlowski (2008), Carr et al. (2015), Scherr and Hammer (2009), Weltman (2008), Goldstein, Leisten, Stark, and Tickle (2005), Cooper et al. (2017), McConnell et al. (2017), Freeman et al. (2014)	Coaches do not lecture on Shakespeare.
Social	Bonwell and Eison (1991), Anthony (1996), Bass (2018), Baepler et al. (2016), Prince (2004), King (1993), Carr et al. (2015), Scherr and Hammer (2009), Cooper et al. (2017)	Students experience interaction through the social nature of producing a play together. **For the dialogic group, discussion of how to produce the play (for both actors and stage crew) is part of the process.**

Active Learning Research with Dialogic Inquiry as a Potential Addition (continued)

Collaborative	Page (1990), Bonwell and Eison (1991), Cavanagh (2011), Carr et al. (2015), Scherr and Hammer (2009), Cooper et al. (2017), McConnell et al. (2017) According to Frost et al. (2017), collaboration is not utilized in all active learning.	Students move and speak to create scenes together through successive trials**. For the dialogic inquiry group, students also negotiate meaning and expression of their ideas through discussion.**
Inductive (action or discussion precedes concept)	Cooperstein and Kocevar-Weidinger (2004), B. S. Bell and Kozlowski (2008), Scherr and Hammer (2009) In contrast, several researchers advocate guided learning over pure discovery learning: Kirschner et al. (2006), Klahr and Nigam (2004), Mayer (2004)	Students often enact scenes before they understand them. **The dialogic group reflects on what they are learning and creating through discussion.**
All must participate	Bonwell and Eison (1991), King (1993), Cavanagh (2011), McConnell et al. (2017) According to Frost et al. (2017), participation is defined as 75% of class time that every student is actively learning.	All students participate in the play. **For the dialogic group, facilitators encourage all students to participate in discussion.**
Reflective/ Metacognition	Page (1990), Bonwell and Eison (1991), Kosslyn and Nelson (2017), King (1993), Barnes (1989), Carr et al. (2015), Weltman (2008), McConnell et al. (2017)	Students have personal reflection and casual discussions during camp, carpools, and after-camp activities. **For the dialogic group, discussions include sharing reflections and metacognition in facilitated discussion or small groups.**
Purposive/ relevant to students	Revans (1981), Bonwell and Eison (1991), Wiggins et al. (2017), Cavanagh (2011), Barnes (1989)	Students make goals to grow in acting ability, projection, and other related skills to producing the play. **For the dialogic group, students discuss these ideas.**
Reflects real-life tasks	Revans (1981), Bonwell and Eison (1991), Barnes (1989)	Themes in Shakespeare relate to personal lives and emotions that students experience, and **the dialogic group discusses this.**

Active Learning Research with Dialogic Inquiry as a Potential Addition (continued)

Students and teachers negotiate methods and goals	Page (1990), Bonwell and Eison (1991), Kyriacou and Marshall (1989), Barnes (1989) According to Frost et al. (2017), negotiation between teacher and students is not utilized in all active learning.	Coaches and students negotiate how they will produce the play and how they will achieve their performance through successive practice sessions of the play. **For the dialogic group, control shifts toward students and away from the coach as these issues are discussed. The coach reminds students that the process is more important than the final product.**
Constructivist	Page (1990), Bonwell and Eison (1991), Anthony (1996), Carr et al. (2015), Cooperstein and Kocevar-Weidinger (2004), King (1993), Carr et al. (2015), Scherr and Hammer (2009), R. Bell (2018), Weltman (2008), Cooper et al. (2017), Freeman et al. (2014)	Students act together to create the production and its interpretation. **For the dialogic inquiry group, an important part of the process is the discussion of ideas, listening to one another, negotiation between students, and acting based on ideas.**
Authentic knowledge acquisition	Page (1990), Bonwell and Eison (1991), Freeman et al. (2014), Cherney (2008), Cooperstein and Kocevar-Weidinger (2004), Goldstein, Leisten, Stark, and Tickle (2005), McConnell et al. (2017)	Students work through understanding the text through progressive trials of the scenes. **For the dialogic inquiry group, constructivist discussion may contribute to authentic knowledge acquisition.**
Complexity	Bonwell and Eison (1991), Grabinger and Dunlap (1995), Barnes (1989)	Shakespeare's works contain complex texts and themes that mirror real life. **For the dialogic group, students discuss these ideas.**
Experimentation and questioning	Page (1990), Bonwell and Eison (1991), Grabinger and Dunlap (1995), Ford (2010), Prince (2004), Kyriacou and Marshall (1989), Barnes (1989), Carr et al. (2015), Scherr and Hammer (2009), Cooperstein and Kocevar-Weidinger (2004), McConnell et al. (2017)	Students use their imaginations to act the play. They have repeated trials to experiment with different effects and meanings. **For the dialogic group, questioning may take place during discussions.**

Active Learning Research with Dialogic Inquiry as a Potential Addition (continued)

Deep processing through making connections, interpreting information, and referencing to the self	Page (1990), Cherney (2008), Kosslyn and Nelson (2017), King (1993), Goldstein, Leisten, Stark, and Tickle (2005), McConnell et al. (2017)	Students use role-playing, hypothesizing, and creating the meaning for their characters. **For the dialogic inquiry group, discussion accomplishes some of this goal, as opposed to independent processing.**
Cognitive conflict	Ford (2010), King (1993), Carr et al. (2015)	Coaches encourage students to question interpretations, whether traditional or new versions. **For the dialogic group, students discuss these ideas.**
Learn from errors and failure	Kosslyn and Nelson (2017), Eddy et al. (2015), B. S. Bell and Kozlowski (2008), Cooperstein and Kocevar-Weidinger (2004), Goldstein et al. (2005)	Coaches encourage students to learn from failure and to keep trying. **For the dialogic group, students discuss these ideas.**
Dual coding (e.g., verbal and visual)	Kosslyn and Nelson (2017)	Students experience Shakespeare's work as text, movement, spoken words, and visual scenes. **For the dialogic group, students discuss these ideas.**
Teachers as facilitators	Page (1990), Zepke (2013), Eddy et al. (2015), Wiggins et al. (2017), Read et al. (2017), King (1993), Carr et al. (2015), Scherr and Hammer (2009), Cooperstein and Kocevar-Weidinger (2004), Cooper et al. (2017)	Coaches challenge students to interpret scenes and characters. **For the dialogic inquiry group, coaches also challenge students to respond to one another and build on others' ideas. Teachers avoid maintaining control and authority in discussions.**
Student performance is effort rather than intelligence	Eddy et al. (2015), Wiggins et al. (2017)	Coaches communicate encouragement for effort.
Error framing for emotion control	B. S. Bell and Kozlowski (2008)	Coaches explain the idea of experimenting and the value of learning from mistakes and successes.

APPENDIX C

IDENTIFICATION AND ANALYSIS OF RESEARCH QUESTIONS

Identification and Analysis of Research Questions

THE RELATIONSHIP BETWEEN DIALOGIC INQUIRY AND ENGAGEMENT IN ACTIVE LEARNING SHAKESPEARE EDUCATION

In a study to query the relationship between dialogic inquiry and three types of engagement, the levels of engagement were measured using a specialized survey developed by the researcher for Shakespeare engagement. The survey was administered to students before and after camp. Scores ranged from one to seven, based on the Likert scale used in the survey. Qualitative data were also collected through focus groups and observations of camp.

Quantitative

1. **RQ #1:** Is there a statistical difference in the change in perceptions of behavioral engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

	Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Dependent Variable(s)	Behavioral engagement	Survey: Likert (1-7)	ordinal
Independent Variables	Dialogic Inquiry	1= Dialogic group 2=Control=Non-dialogic group	nominal

RQ #2: Is there a statistical difference in the change in perceptions of emotional engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

	Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Dependent Variable(s)	Emotional engagement	Survey: Likert (1-7)	ordinal
Independent Variables	Dialogic Inquiry	1= Dialogic group 2=Control=Non-dialogic group	nominal

RQ #3: Is there a statistical difference in the change in perceptions of cognitive engagement between the active learning group that used dialogic inquiry and the control group that did not use dialogic inquiry?

	Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Dependent Variable(s)	Cognitive engagement	Survey: Likert (1-7)	ordinal
Independent Variables	Dialogic Inquiry	1= Dialogic group 2=Control=Non-dialogic group	nominal

RQ #4: For the sample, is there a statistical difference in the perceptions of total engagement between the pretest before camp and the posttest after camp?

	Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Dependent Variable(s)	Total engagement	Survey: Likert (1-7)	ordinal
Independent Variables	Condition of before or after camp	1= Pretest 2=Posttest	nominal

Qualitative

RQ #5: Are there elements in the active learning or dialogic inquiry process that participants indicate through behavior or self-report as meaningful?

Data Point/Element	Source for Data	Data Gathering Method	Data Analysis Method
Focus group: Were there specific aspects of camp that enhanced your learning experience?	Focus groups with students	Focus groups	Coding for emerging themes using a qualitative coding program
Observations of student behavior	Videos of camp Fieldnotes	10 randomly selected 8-minute intervals of video throughout the week of camp	Coding for emerging themes using a qualitative coding program

Attribute Variables:

	Variable Labels	**Levels of the Variable**	**Scale of Measurement**
Students	Age	(10-18)	scale
	Number of years attending camp	(0-8)	scale
	Gender	2	nominal
	Experience with Shakespeare through number of plays read or watched	5	ordinal

APPENDIX D

SHAKESPEARE ENGAGEMENT SURVEY INSTRUMENTS

Before Camp: Shakespeare Engagement Survey for Students

I give permission for my answers to be used in Shakespeare research, and I know my answers will be confidential. I understand I am not required to participate.

☐ Yes ☐ No

1. As of today, I am _____ years old.

2. My code name for this study is: _____ (Remember your code name for the after camp survey.)

3. I am: ☐ Female ☐ Male

4. I am a member of the cast for _____ (Name of play.)

5. How many years have you participated in Shakespeare Camp (not including this year)? ___ year(s)

6. As of today, I have...

	No Shakespeare plays	1 Shakespeare play	2 Shakespeare plays	3 Shakespeare plays	4 + Shakespeare plays
Read…					
Watched…					
Acted in…					

7. How would you rate these statements today?

	Strongly disagree	Moderately disagree	Somewhat disagree	Neutral	Somewhat agree	Moderately agree	Strongly agree
I have heard of William Shakespeare.							
I understand some of Shakespeare's plays.							
I understand Shakespearean language.							
I understand how to perform.							
I am comfortable speaking in front of people.							
I am confident in general.							

(More questions are on the back.)

8. How would you rate these statements today?

	Strongly disagree	Moderately disagree	Somewhat disagree	Neutral	Somewhat agree	Moderately agree	Strongly agree
I rarely read Shakespeare's plays in my spare time.							
I would say that acting in Shakespeare's plays is fun.							
I do not put in extra effort to understand Shakespearean language							
I will invite friends to participate in or watch a Shakespeare play.							
I pursue learning about acting skills outside of camp.							
I think that watching Shakespeare's plays is fun.							
The behaviors/emotions of Shakespeare's characters are confusing to me.							
I don't put in extra effort to create a Shakespeare character.							
I don't make a habit of watching Shakespeare plays.							
Shakespeare quotes rarely come to my mind in daily life.							
I practice to learn confidence in speaking in front of people.							
I would say that Shakespeare's plays are interesting.							
When I don't understand something in a Shakespeare play, I read about it later.							
I talk with others about Shakespeare plays or characters.							
My opinion of Shakespeare's plays is positive.							

After Camp: Shakespeare Engagement Survey for Students

I give permission for my answers to be used in Shakespeare research, and I know my answers will be confidential. I understand I am not required to participate. ☐ Yes ☐ No

1. My code name for this study is: _____
2. **After** Shakespeare Camp...

	Strongly disagree	Moderately disagree	Somewhat disagree	Neutral	Somewhat agree	Moderately agree	Strongly agree
I understand some of Shakespeare's plays.							
I understand Shakespearean language.							
I understand how to perform.							
I am comfortable speaking in front of people.							
I am confident in general.							

3. My experience with Shakespeare was enhanced by...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Being on a stage.					
Wearing costumes.					
Using props.					
Discussing the scenes and characters.					
Studying my own role.					
Learning to act.					
Having my own script.					
Spending time with friends and making new friends.					
Memorizing my lines.					
Performing for others.					
Feeling ownership for my character and scenes.					
Understanding the motivations of my character.					
Watching friends or family perform in Shakespeare plays.					
Growing as a Shakespearean actor over time					
Working as a team to produce a play.					

4. After participating in Shakespeare Camp, I would like to learn more about... (Check all that apply.)

__ Shakespeare
__ Acting
__ Costumes
__ Sword Fighting
__ Dancing
__ Singing
__ Shakespeare's Plays
__ How to speak clearly and project

5. How would you rate these statements **after** Shakespeare Camp?

	Strongly disagree	Moderately disagree	Somewhat disagree	Neutral	Somewhat agree	Moderately agree	Strongly agree
I rarely read Shakespeare's plays in my spare time.							
I would say that acting in Shakespeare's plays is fun.							
I do not put in extra effort to understand Shakespearean language							
I will invite friends to participate in or watch a Shakespeare play.							
I pursue learning about acting skills outside of camp.							
I think that watching Shakespeare's plays is fun.							
The behaviors/emotions of Shakespeare's characters are confusing to me.							
I don't put in extra effort to create a Shakespeare character.							
I don't make a habit of watching Shakespeare plays.							
Shakespeare quotes rarely come to my mind in daily life.							
I practice to learn confidence in speaking in front of people.							
I would say that Shakespeare's plays are interesting.							
When I don't understand something in a Shakespeare play, I read about it later.							
I talk with others about Shakespeare plays or characters.							
My opinion of Shakespeare's plays is positive.							

6. How many of your lines did you memorize before camp?
   ☐ All lines ☐ 3/4 ☐ 1/2 ☐ none
7. How many pre-rehearsals did you attend?
   ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ none
8. Did you have your costume the first day of camp? ☐yes ☐no
9. Did you read or view your play before the first day of camp? ☐yes ☐no
10. Please add your comments here. Was there any part of camp that was especially meaningful to you? Thank you again for your help!

APPENDIX E

DIALOGIC INQUIRY PROTOCOL AND SCRIPTS

DIALOGIC INQUIRY PROTOCOL AND SCRIPTS

The researcher will conduct an orientation for the coaches who will lead dialogic inquiry sessions. They will be referred to as facilitators for this study. The director will choose a time when all students will divide into groups with about 4-8 students per facilitator and conduct discussions simultaneously. The dialogue will take between 15-20 minutes. The facilitators will encourage all students to participate in discussion. The facilitators will avoid answering questions. Instead, they will ask, "What do the rest of you think?" It is acceptable to make encouraging statements such as "good idea!" or nod the head and say "mmm." It is also helpful to communicate to the students how important this discussion is to help them create the play together. Facilitators will challenge students to respond to one another and build on other students' ideas. The facilitator should also use pauses to allow students to think of responses. The goal is for the facilitator to avoid maintaining control and authority in discussions. As a result, it is acceptable for the students to explore other threads of inquiry that are not stated in the questions. If a group finishes the questions before the time allotted, the facilitators will use the "question hat" to keep discussion going.

Dialogic Inquiry 1 (First day)

1. Tell us about your character and any back story you have made up for them. (*Ask each person to share*.)
2. How did you prepare your costumes and props? (*Volunteers may answer for the rest of the questions. Every student does not have to answer every question, but if one student is quiet, ask them to respond to an easy question.*)
3. When you memorized your lines, did you learn anything about your character?

4. Do you have a goal for yourself of something you would like to learn or something you would like to do in one of your scenes?
5. What kinds of questions do you have about the play? (*Encourage students to answer each other's questions. Give time for students to talk back and forth.*)
6. If you finish before the 15 minutes allotted, use the "question hat."

Dialogic Inquiry 2 (Second and fourth day)

If students answer with a very short answer on these questions, ask them to explain more. Encourage other people to answer by asking "anyone else?" or by repeating the question. Pause to allow students to think.

1. Since we started rehearsing, have you changed or added ideas about your character?
2. When you started working with others, did it change the way you move or speak on stage?
3. Do any of you have new ideas about your lines and their meaning?
4. Do you have new ideas about the lines of other actors?
5. Has your understanding of the play or a certain scene changed? If so, how?
6. What questions do you have about the play or characters? (*Encourage students to answer each other's questions. Give time for students to talk back and forth.*)
7. If you finish before the 15 minutes allotted, use the "question hat."

Dialogic Inquiry 3 (Third and fifth day)

Tell students that you will ask questions about a scene they are about to watch.

1. What do you think is happening in the scene we just watched and why?
2. Does anything in the scene relate to real life?
3. How would your character react to what happened?
4. Does the scene seem different from when you first read it?
5. Do voice, action, costumes or props make a difference?
6. If you could add something, what would it be?
7. Do you have questions for one another about the scene?
8. If you finish before the 15 minutes allotted, use the "question hat."

Questions in the Discussion Hat

Students may pick a question and read it for the whole group to answer.

- News has just arrived that (*choose a character name*) has run away with 100 ducats. How would your character react and what would they say?
- The Duchess is organizing two baseball teams. Which character would be your first pick for your team and why?
- Which character would your character go into business with and what would your business be?
- Who do you think is the real villain in your play and why?
- If there was a character in your play who was a "secret Santa," who would it be and why?
- If you could elect one character from your play to be the editor of the town newspaper, who would it be and why?
- What would your character keep in their backpack if they had one?

- What is the secret yearning of your character?
- Which character would you vote “most likely to succeed” and why?
- What do you think is your character’s secret fear?
- Make up a detail from your character’s back story that we would not know from the play.

APPENDIX F

FOCUS GROUP QUESTIONS

FOCUS GROUP QUESTIONS

Facilitator may introduce herself and pass out copies of the questions while the recording is set up. Though consent is already received in writing, we will also get a verbal consent. After video begins, say, "Thank you for helping with this group. Is it okay to record this session? If you agree, I'll start on the right, and you may say 'yes.'" [Point to each person in turn. If a student or students are uncomfortable being recorded, they may be excused without making them feel bad.] Next, say, "I'm going to ask you questions, and it's okay to take your time to answer."

1. What helped you most in developing your characters and scenes? [*Follow-up*: Can you give examples? Anyone else have comments? (*You may want to repeat the question.)]*
2. Since we started rehearsing, have you changed or added ideas about your character?" [*Follow-up*: What do you think caused you to change? Anyone else have comments?]
3. Were there parts of Shakespeare Camp that made a difference in how you thought about the play? [*Follow-up*: Can you give examples? Anyone else have comments?]
4. When you started working with others, did it change the way you move or speak on stage? [*Follow-up*: Can you give examples? Anyone else have comments? (*You may want to repeat the question.)*]
5. Do you feel a connection with your play, and if so, what do you think helped you make this connection? [*Follow-up*: Can you give examples? Anyone else have comments? (*You may want to repeat the question.)*]
6. Did discussion with others make a difference? [*Follow-up*: Can you give examples? Anyone else have comments? (*You may want to repeat the question*.)]
7. What kinds of things did you discuss with other actors? [*Follow-up*: Anyone else have comments? (*You may want to repeat the question*.)]

8. Do you have anything else you would like to add?

9. Thank you for sharing your insights.

APPENDIX G

TRIANGULATION MATRIX OF SURVEY SCALE ITEMS

AND QUALITATIVE OBSERVATIONS

Triangulation Matrix Of Survey Scale Items and Qualitative Observations

(Text in italics indicates scale items, and findings from focus groups and observation are not italicized.)

Behavioral Engagement	Emotional Engagement	Cognitive Engagement
(Reverse worded) I don't make a habit of watching Shakespeare plays.	*I would say that Shakespeare's plays are interesting.*	*(Reverse worded) I do not put in extra effort to create my Shakespeare character.*
(Reverse worded) I rarely read from Shakespeare plays.	*I would say that acting in a Shakespeare play is fun.*	*I practice to learn confidence in speaking in front of people.*
I will invite friends to participate in or watch a Shakespeare play.	*I think that watching a Shakespeare play is fun*	*I pursue learning about acting skills outside of camp.*
(Reverse worded) Shakespeare quotes rarely come to my mind in daily life.	*My opinion of Shakespeare's plays is positive.*	*(Reverse worded) I do not put in extra effort to understand Shakespearean language.*
I talk with others about Shakespeare plays or characters.	*(Reverse worded) The behaviors/emotions of Shakespeare's characters are confusing to me.*	*When I don't understand something in a Shakespeare play, I read about it later.*
Positive Observation Indicators	**Positive Observation Indicators**	**Positive Observation Indicators**
Making eye contact	Smiling	Going aside with a collaborator to plan a scene
Following along in the script	Clapping	Contributing ideas to the interpretation of the scene
Participating in discussion	Laughing	Sharing acting tips
A verbal statement indicating participation	Encouraging another member of the troupe	Responding to coaching with a positive response (e.g. trying a new skill)
Reciting scenes without the aid of the script	Bringing food to share with friends	Sharing information on the play or Shakespeare with the cast.
Wearing a costume at camp	Bringing gifts for friends	A verbal statement indicating cognitive engagement.

Triangulation Matrix Of Survey Scale Items and Qualitative Observations (continued)

Active listening to others	Asking fellow actors to sign their copy of the script	Evidence of thinking about the play at home.
Good management of personal props	Singing with others during break	Mentioning a discussion about the play outside of camp
Compromises with others when interpretations differ	Helping others memorize lines or find costumes and props	Seeking out a coach to discuss ideas
Trying again after a failure	Crying or laughing for characters in a scene.	Bringing drawings made at home to share ideas for camp.
Attending consistently	Trusting other actors in scenes that require coordination like fight scenes or fainting scenes.	Arriving at camp with ideas for how to act or interpret an assigned role.
Collaborating on blocking a scene	A verbal statement indicating emotion or emotional connection with a character	Following along in script or watching the rehearsal when offstage.
	Crying from anxiety or frustration during a creative process	Developing innovative and meaningful line readings
Negative Indicators	**Negative Indicators**	**Negative Indicators**
Looking at a phone or device	Distracting with words or actions	A verbal statement indicating a lack of cognitive engagement
Looking elsewhere during discussion	Looking into space	Not attempting to respond to coaching (e.g. not willing to try a new skill)
Playing games unrelated to camp	Appearance of stress	Not following along in script or watching the rehearsal when offstage
Needing the script when lines should be memorized	A verbal statement indicating negative emotions toward camp or the play.	Not taking responsibility for interpreting their role
Attending camp without a costume or props	Separating from others during break or lunch	Blaming others or circumstances for failure to memorize lines.

Triangulation Matrix Of Survey Scale Items and Qualitative Observations (continued)

Reluctance to enter rehearsal room when camp begins	Criticizing others in a non-constructive manner for their choice of acting style, costume, etc.	Tuning out during experimentation with innovative line readings
Leaving the group during rehearsal without telling the coach.	Listening to music with headphones or earbuds	
Not listening to others with respect	Making comments designed to hurt the feelings of another person	
Poor management of personal props	Self-report indicating a lack of emotional engagement	
Failure to compromise with others when interpretations differ		
Giving up after a failure		
A verbal statement indicating a lack of participation		.
Sitting out during collaboration on blocking a scene		

APPENDIX H

CRONBACH'S ALPHA FOR THREE CONSTRUCTS

Cronbach’s Alpha for Three Constructs

Construct	N of cases	Cronbach’s Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Behavioral Engagement	48	.830	.833	5
Emotional Engagement	48	.685	.713	5
Cognitive Engagement	48	.656	.664	4

VITA

Joyce Bryson McPherson earned a Masters of Fine Arts in creative writing and has taught English composition for Belhaven University and the University of Tennessee at Chattanooga. She has written over a dozen biographies and fiction novels for children. She has also served as the director of a theatre camp that has introduced the works of Shakespeare to hundreds of young people over the last 17 years. As a result of her work with Shakespeare, she has published 14 abridged plays for student theatre productions. Her work with young people led to the development of her doctoral dissertation. She serves as a teaching artist for Tennessee public schools, where she continues to encourage active learning to help students become cocreators with William Shakespeare as they produce his plays.

Joyce is also the mother of nine children, whom she home educated for 30 years. Their interests and enthusiasm for trying new ideas were the inspiration for her research into active learning.